



BHARATI VIDYAPEETH'S

COLLEGE OF ENGINEERING FOR WOMEN

CONTINUOUS ASSESSMENT RECORD FOR PROJECT/SEMINAR/DISSERTATION

Department: E & TC

Class: BE · 2 Year: 2022 - 23 Project group No.: 29

Name of the Students: 1. Tabbasum Rabban pathan (41235) 2. Bhagyashri Sambhaji Vannale (41245)
(with Roll No.) 3. Vaibhavi Mahadev Haghmade (41244) 4. _____
5. _____ 6. _____

Title of the project/Dissertation: Smart Attendance System

Objective of Project: To mark the Attendance of Student Which is based on face recognition

Sponsored: Yes/No Name of Sponsor: _____ Ph. No.: _____

Name of the External guide: _____ Ph. No.: _____

Name of the Internal guide: Prof. Dr. Sampada Dhole Ph. No.: 9168690952

Sr. No.	Date	Task Assigned & performed	Remark	Sign of Guide	
				Int.	Ext.
1	27/7/22	Instructed to all Formed group	group are formed	SD	
2	30/7/22	Searching for Project topic	3 Project topic Selected	SD	
3	4/8/22	3 project topic name Selected	out of three one Project one finalized.	SD	
4	20/8/22	literature Survey	Done the literature Survey.	SD	
5	27/8/22	Finalization of the Problem Statement	Problem Statement finalized.	SD	
6	3/9/22	Preparation of synopsis & Database.	Preparation of the Synopsis & Database.	SD	
7	10/9/22	Block dia. Development	Finalized block diagram.	SD	
8	17/9/22	Discussing app development Process	discuss about the app development.	SD	
9	15/10/22	Selecting hardware & Software as per project requirement	Select hardware and software as per	SD	
10		requirement	Project requirement.	SD	
11	7/11/22	preparation of ppt	Finalise ppt	SD	
12	12/11/22	Preparation of Report	Report Checking	SD	
13	19/11/22	Finalization Report	Report is finalized.	SD	

14	4/1/23	Select project software	Final software system	✓
15	11/2/23	third presentation ready	Presentation done	✓
16	18/2/23	fourth presentation done	Final presentation done	✓
17	25/2/23	change the code	change code done	✓
18	4/3/23	done the code.	Final the code done	✓
19	9/3/23	Implementation system	Implementation done	✓
20	18/3/23	Analyse the project system	Analysing project done	✓
21	25/3/23	preparation bindll ppt	Final ppt is done	✓
22	2/4/23	project ready.	project ready done	✓
23	10/5/23	journal paper written	journal paper final	✓
24	21/5/23	paper publication	paper publication done	✓
25	31/5/23	project report ready	project report final	✓
26	1/6/23	log book filled	log book done.	✓
27				
28				

Paper Presentation on given project topic :

Journal For Basic Science

Project Exhibition Participation :

1] Impetus and concepts 2023

2] IITTE pune centre.

Award / Prize if any :

—
—

External

Internal

H.O.D.

Principal

Project Guide

✓

BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING FOR WOMEN, PUNE

B.E. PROJECT WORK BOOK

Academic Year 2022-23



Under Graduate

Project Group No:-

Roll No

Student Name

41235

Tabbasum Rabban Pathan
Vaibhavi Mahadeo Waghmode
Bhagyashri Sambhuji Vannale.

Project Title:- smart Attendance system .

Guide Name: prof. dr. Sampada Dhole.

Area of Project smart attendance system

Sponsored By:

Department of Electronics & Telecommunication Engineering

BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING FOR
WOMEN, PUNE-SATARA ROAD, PUNE

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Participation in project competition

Paper publication/Presentation

GROUP DETAILS

Group No.

Sr.No	Name of student	PRN No.	Exam.No.	Mobile No.	T.E. Result%	Email ID	Placement Details
1	Tabbasum Rabbani Pathan	721645180	B190343055	9579409225	9.52 SGPA	tabassu- rabbani- 0523@ gmail. com	-
2	Vaibhavi Mahadeo Waghmode	7202170262	B190343089	957938165	9.10 SGPA.	Vaibhavi- waghmode- 0523@ gmail. com	-
3	Bhagyashri Sambhaji Vannale	71819519K	B190343008	903082715		Vannale- bhagyashri- 142@gmail. com	-
4							

Details of Internal Guide

Name: prof. dr. sampa Dhole

Mobile No. 9168690952

E-Mail: sampda-bvcoew@bvp.edu.in

Details of External Guide:

Name:

Mobile No.

E-mail :

Rules & Regulations

Undertaking by Student

We, the students of B. E. (Electronics & Tele-Communication) hereby assure that we will follow all the rules and regulations related to the BE project activity for the academic year 2022- 2023 The Project entitled -

smart attendance system.

will be fully designed/developed by us and no part of the project Hardware & Software will be readymade purchase from outside parties. If found by External Examiner, we are responsible for further consequences.

Name of the student Signature

Signature

1. Tabbasum. R. Pathan

Tabbasum

2. Vaiibhavi. M. Waghmode

Waghmode

3. Bhagyashri. s. Vannale

Bhagyashri

Rules & Regulations

- All students must enter the correct information in the log book.
- All the entries in the project log book must be verified by the concerned project guide.
- Student must report to their respective guide on project day as per the time table.
- Activity planned should be completed as per the schedule only.
- Submit soft and hard copies of the Synopsis, Project Phase-I(Seminar) &Phase-II report in the prescribed format.
- Student must present paper on their project in at least two National/International Conferences/Journals along with guide Name and participate at least in one project competition organized by IEEE/IETE/IIT/NIT/ any other Engineering College to become eligible to appear for final project exam.
- Students must maintain Logbook, Workbook and File(containing all the documents related to the project like, IEEE papers, datasheets, reference material etc.) and must be brought at the time of meeting with guide, project reviews and examination.
- Changes, if any, must be counter signed by the concerned project guide.
- For any queries please contact to your project guide/ project coordinator.
- This log book must be submitted to Guide/Coordinator/Committee or the Head of Dept. at the time of final submission of the project.
- Synopsis has to be submitted in the prescribed format.
- It is mandatory to test and assemble the circuit in the college lab before finalizing the artwork and layout of the PCB.

BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING FOR WOMEN, PUNE

- Fabricated hardware should be enclosed in a proper enclosure designed by the students
- Plagiarism is a very serious offence and, where proven against a student, may result in disqualification from the examination of the project.
- The final project reports are to be uploaded to AICTE portal.
- The project report must be checked by their respective guide before printing the final copy.
- The system should be 100 % working as per their specification and objectives
- Sponsorship letter of company is compulsory and is to be submitted to project coordinator and project-guide.
- University project examination may be conducted on any day including Saturday, Sunday and any other holiday.

Details of Meeting between Project Team and Guide

Semester I

Sr.No	Date	Points discussed	Sign of Guide	External Guide Signature in case of sponsored project
1	27/7/22	Formed project group	SD	
2	30/7/22	searched project topic	SD	
3	4/8/22	Topic finalized- smart attendance system.	SD	
4	20/8/22	power point presentation on topic	SD	
5	27/8/22	detailed study on project	SD	
6	31/8/22	preparation synopsis	SD	
7	10/9/22	searched reference paper related to topic	SD	
8	17/9/22	synopsis prepared & submitted	SD	
9	1/10/22	Selecting programming	SD	
10	15/10/22	Selecting discussed project requirement	SD	
11	5/11/22	Discuss .python code	SD	
12	7/11/22	Whole python code & runit	SD	
13	12/11/22	Corrected errors in code	SD	
14	19/11/22	seminar Report submitted.	SD	

Note: It is expected that students meet their guide at least once a week. This is a record of these meetings

Details of Meeting between Project Team and Guide

Semester II

Sr.No	Date	Points discussed	Sign of Guide	External Guide Signature in case of sponsored project
1	4/1/23	select project software	SD	
2	11/1/23	third presentation ready.	SD	
3	18/1/23	Fourth presentation done	SD	
4	25/1/23	change the code	SD	
5	4/3/23	Done the code	SD	
6	11/3/23	Implementation system	SD	
7	18/3/23	Analyse the system	SD	
8	25/3/23	preparation final ppt	SD	
9	21/4/23	project ready	SD	
10	20/5/23	Journal paper written	SD	
11	21/5/23	paper publication	SD	
12	31/5/23	project report ready.	SD	
13	1/6/23	log book filled	SD	
14				

Note: It is expected that students meet their guide at least once a week. This is a record of these meetings

Weekly Activity Chart

Month: July

Week No.	Activity Planed	Activity completed	Sign of Student	Sign of Guide
1	searching for project	Researching for the project	<u>Fathima</u> <u>Waghela</u> <u>Bhagyashri</u>	<u>SD</u>
2	Reading the reputed journal papers for topic of interested	Reputed journal paper survey is done	<u>Fathima</u> <u>Waghela</u> <u>Bhagyashri</u>	<u>SD</u>
3	3 topic are finalized & related papers are surveyed	3 project topics finalised power point	<u>Fathima</u> <u>Waghela</u> <u>Bhagyashri</u>	<u>SD</u>
4	comparision of existing methodology is done & presentation prepared	Presentation of the topics is done.	<u>Fathima</u> <u>Waghela</u> <u>Bhagyashri</u>	<u>SD</u>

Weekly Activity Chart
Month: August

Week No.	Activity Planed	Activity completed	Sign of Student	Sign of Guide
1	Finalization of topic under guidance of experts	project topic finalized	Pethkar Balaghi Bhagavat	SD
2	Literature survey from reputed journal papers on project topic finalized	Reputed journal literature paper survey done	Pethkar Balaghi Bhagavat	SD
3	Finalization problem statement & block diagram for project	problem statement & block diagram finalized	Pethkar Balaghi Bhagavat	SD
4	preparation of synopsis	synopsis is completed & submitted.	Pethkar Balaghi Bhagavat	SD

Weekly Activity Chart

Month: September

Week No.	Activity Planed	Activity completed	Sign of Student	Sign of Guide
1	search for required component block diagram	searching for required component is done	Patties. Bhagade Bhagyashri	✓
2	block diagram development process	Finalized block app development diagram	Patties. Bhagade Bhagyashri	✓
3	Discussing app development process	Discuss about app development	Patties. Bhagade Bhagyashri	✓
4	final discussion about app process	Finalization app process discussion.	Patties. Bhagade Bhagyashri	✓

Weekly Activity Chart

Month: October

Week No.	Activity Planed	Activity completed	Sign of Student	Sign of Guide
1	read & learned programming language	search language platform	Patil Abagule Bhagyaashri	SD
2	selecting programming language for project	selected programming language	Patil Abagule Bhagyaashri	SD
3	selecting program python for project	Finalize programming language python	Patil Abagule Bhagyaashri	SD
4	selecting hardware & software project requirement	finalized hardware & software requirement	Patil Abagule Bhagyaashri	SD

Weekly Activity Chart

Month: November

Week No.	Activity Planed	Activity completed	Sign of Student	Sign of Guide
1	written python code	Final python code for face recognition	Geetika Abaghus Bhagyashri	✓
2	Discussion about ppt	Finalized ppt	Parvesh Abaghus Bhagyashri	✓
3	preparation of report	Report checking	Parvesh Abaghus Bhagyashri	✓
4	preparation of Report	Report is finalized.	Parvesh Abaghus Bhagyashri	✓

Weekly Activity Chart

Weekly Activity Chart
Month: December

Week No.	Activity Planed	Activity completed	Sign of Student	Sign of Guide
1	Find different software	Find different software done	Tathm. Ankush	RD
2	watched video tor appcode	watched video.	Tathm. Ankush	RD
3	Reading book on web development	taken book from library	Tathm. Ankush	RD
4	Experiment on APP development	done the experiment	Tathm. Ankush	RD

Weekly Activity Chart

Month: January

Week No.	Activity Planed	Activity completed	Sign of Student	Sign of Guide
1	started the survey	the visit different places	Fathau. Ashwini	✓
2	stude of different software tools	studied the about software tools	Fathau. Ashwini	✓✓
3	visit different website to search more information	done searching about App development	Fathau. Ashwini	✓✓
4	Analysis of working of APP is proper	done analysing the project	Fathau. Ashwini	✓✓

Weekly Activity Chart

Month: February

Week No.	Activity Planed	Activity completed	Sign of Student	Sign of Guide
1	third presentation ready	Done the presentation	Fathay. Aukyaa	SD
2	fourth presentation is done	fourth presentation is final	Fathay. Aukyaa	SD
3	change the code	final the code	Fathay. Aukyaa	SD
4	Implementation & analyse the system	Implementation & analyse system done	Fathay. Aukyaa	SD

Weekly Activity Chart

Month: March

Week No.	Activity Planed	Activity completed	Sign of Student	Sign of Guide
1	started preparing for paper	Discussed about the paper	Patil Swagat	92
2	Attend project exhibition at pict pune	Got many advised from expert	Patil Swagat	92
3	Attend project exhibition at BUCGEN	Got good complement & appreciation	Patil Swagat	92
4	preparation final PPT	Done PPT	Patil Swagat	92

BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING FOR WOMEN, PUNE

Replace this page with respective
SYNOPSIS
In a given format

Synopsis Report

"Smart Attendance system"

For Partial fulfillment of Bachelor of Engineering

(Electronics & Telecommunication Engineering)

Academic Year

2022-2023

Submitted by

Tejaswini R. Patil (41233)

Varshavi M. Waghmode (41244)

Submitted to

Prof. Dr. Shampa Dhole



**BHARTI VIDYAPEETH'S COLLEGE OF ENGINEERING FOR WOMEN
PUNE-43**

**A
Synopsis Report
On**

“Smart Attendance system”

For Partial fulfillment of Bachelor of Engineering
(Electronics & Telecommunication Engineering)

**Academic Year
(2022-2023)**

Submitted by

Tabbasum R Pathan (41235)
Vaibhavi M Waghmode (41244)
Bhagyashri S Vannale (41245)

Submitted to

Prof.Dr.Sampada Dhole

INTRODUCTION:

Attendance monitoring and working hour calculation is very essential for almost every institution or organization. Typically, there are two types of attendance system available, i) Manual and ii) Automated. Manual system involves the use of sheets of paper or books in taking attendance where students fill out and institute oversee for accuracy. This method could be erroneous because sheets could be lost or damaged. Also, the extraction of relevant data and the manual computation of working time is very time consuming in these aforementioned techniques, students detect their live face and location in order to provide their identification and also the entering time. The provided information is recorded and automatically transferred to a computer for processing. Using an automated system for time and attendance monitoring reduces the errors of manual system and conserve optimal amount of time. But these automated systems require heterogeneous devices need to be located in the organization which is costly. In this paper, considering the wide popularity of smartphones, we introduce the use of smartphone for this time and attendance tracking purpose. We have proposed a location based smart time and attendance tracking system based on the concept of web services which is implemented as an Android mobile application.

LITERATURE SURVEY:

In most schools and universities in India, a minimum attendance requirement is present and the teacher manually records the attendance of the students present in the class. This wastes valuable time and energy. There are various ways to automate the process of taking attendance such as fingerprint recognition, identity card scanner, Bluetooth sensors, bar code readers for identity cards and so on. This paper is aimed at implementing a Bluetooth low energy-based attendance management system. It uses the Bluetooth Low Energy technology of beacons which communicate with an android application. The application is used to collect the data from the sensors and store it according to the dates. This provides a way for the teacher to instantly record and analyze the attendance of all the students. Methods of avoiding proxies or false attendances have also been incorporated.

Abstract: Aiming at the disadvantages of traditional manual attendance, this paper proposes a face recognition-based attendance scheme. Through mobile platform and face recognition technology to optimize the manual attendance process. This design divides into the face recognition system of check on work attendance information input, attendance sign-in and attendance record three function module, and introduces a principle of face detection and classification, analyses the process of the construction of the face recognition classifier, the last on the Android platform design and implement a face recognition system of check on work attendance, by comparing the experiment results of face recognition accuracy, verify the feasibility of this scheme.

Abstract: Until today, most lecturers in universities are found still using the conventional methods of taking students' attendance either by calling out the student names or by passing

around an attendance sheet for students to sign confirming their presence. In addition to the time-consuming issue, such method is also at higher risk of having students cheating about their attendance, especially in a large classroom. Therefore a method of taking attendance by employing an application running on the Android platform is proposed in this paper. This application, once installed can be used to download the students list from a designated web server. Based on the downloaded list of students, the device will then act like a scanner to scan each of the student cards one by one to confirm and verify the student's presence. The device's camera will be used as a sensor that will read the barcode printed on the students' cards. The updated attendance list is then uploaded to an online database and can also be saved as a file to be transferred to a PC later on. This system will help to eliminate the current problems, while also promoting a paperless environment at the same time. Since this application can be deployed on lecturers' own existing Android devices, no additional hardware cost is required.

PROJECT TITLE

Smart Attendance system

PROBLEM STATEMENT:

To implement a system " Attendance system using Android Mobile GPS and face Recognition" that can detect the face liveness from image or video and compare the image with student database images and by using GPS track the live location of the student.

OBJECTIVES:

The main objective of system is to mark the attendance of student which is based on Face recognition technology and by using GPS of smartphone.

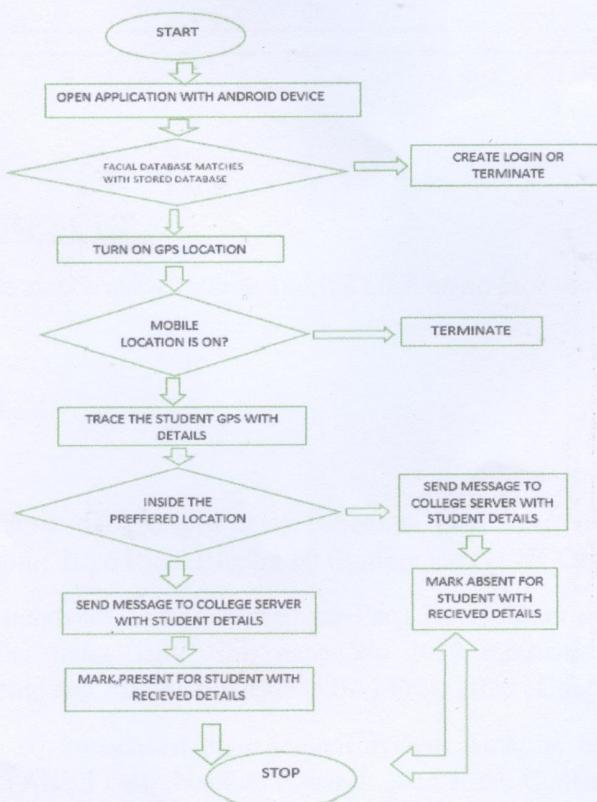
By the use of latitude and longitudes of mobile phone and by android built in algorithm, we are finding the distance of employee or student with respect longitude and latitude of the college campus.

Face Recognition is the recognition system which recognize facial properties and verify the users on the basis of stored facial values in the database.

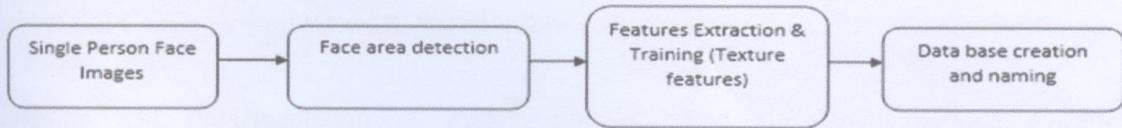
METHODOLOGY:

User authentication is one of the major factors in the proposed system. Every employee is authenticated based on his/her unique user identification number. This unique identification number is the number which is given by the office. The identification number along with other information is also saved in the employee device. At first employee has to install the required system APK files into their android device. Mobile location service has to be on when the system was running. If mobile location service is off then the whole process will not go further. Mobile location service helps to trace the employee location. When the employee enters the office area, android device of the employee is automatically connected to the office internet and a message is sent to the office sever with the employee id and local time of the device which is counted as login time of that employee. When employee leaves the office area, a message is sent to the office server with employee id and local time which is counted as logout time.

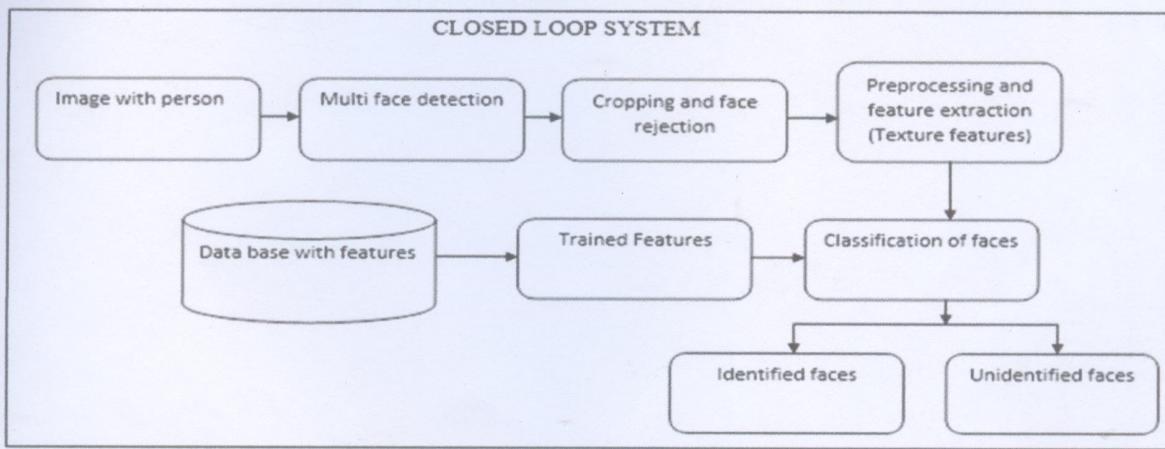
FLOWCHART:



BLOCK DIAGRAM:



ATTENDANCE MARKING SYSTEM:



EXPECTED RESULT:

We will mark attendance using mobile android GPS using face recognition.

REFERENCES:

1. Smart attendance management using Bluetooth Low Energy and Android Authors: Raghav Apoorv;Puja Mathur 2016 IEEE Region 10 Conference (TENCON)
2. Design of Attendance System Based on Face Recognition and Android Platform Authors: Xiaojun Bai;Feihu Jiang;Tianyi Shi;Yuang Wu 2020 International Conference on Computer Network, Electronic and Automation (ICCNEA) Year: 2020 | Conference Paper | Publisher: IEEE
3. Android-based attendance management system Authors: Siti Aisah Mohd Noor;Norliza Zaini;Mohd Fuad Abdul Latip;Nabilah Hamzah 2015 IEEE Conference on Systems, Process and Control (ICSPC) Year: 2015 | Conference Paper | Publisher: IEEE

4. Student Attendance Management System with Bluetooth Low Energy Beacon and Android Devices Authors: Shota Noguchi;Michitoshi Niibori;Erjing Zhou;Masaru Kamada 2015 18th International Conference on Network-Based Information Systems Year: 2015 | Conference Paper | Publisher: IEEE

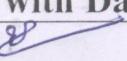
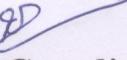
5. Design and implementation of mobile phones based attendance marking system Authors: Mohammad Ausaf Anwar;Durgaprasad Gangodkar 2015 Communication, Control and Intelligent Systems (CCIS) Year: 2015 | Conference Paper | Publisher: IEEE

Continuous Evaluations Sheet: Presentation No.1

To be filled by student

B.E.Project(Part-I)Progress Report	Academic Year:2022-23
Date of Presentation	Group No.: 29
Project Title	SMART ATTENDANCE SYSTEM
Name of sponsored Industry	
Present Work(200 words)	<p>- literature survey</p> <p>From all the literature survey we got to know various method of recognizing face & algorithm which are used we have used another method to recognize face which make the attendance</p>

To be filled by Committee Member

Student Name	Is Log Book maintained and verified by Guide	1.Innovative Idea 2.Application 3.Work Completion	Is presentation conducted on or before due date	Individual Presentation skill and Depth of Understanding
1. Tabbasum Pathan	Yes/No	A / B / C	Yes/No	A / B / C
2. Vaibhavi Waghmode	Yes/No	A / B / C		A / B / C
3. Ghayashri Vannale	Yes/No	A / B / C		A / B / C
4.	Yes/No	A / B / C		A / B / C
A:Good		B:Satisfactory		C:Not Satisfactory
Feasibility of project for UG Final Year	Is the project work undertaken by this group is acceptable for award of Bachelor Degree in Engineering If No, Mention the action taken:			
Name of Committee Members		Sign with Date		
1 prof. Dr. S. A. Dhole.				
2				
3				
 H.O.D.		 Project Coordinator		

Continuous Evaluations Sheet: Presentation No.2

To be filled by student

B.E.Project(Part-I)Progress Report	Academic Year:2022-23
Date of Presentation	Group No.: - 2g
Project Title - smart attendance System	
Name of sponsored Industry -	
Present Work(200 words) - Block diagram shows the face detection system through image processing methods in first image a training and testing methods in first image processing methods.	

To be filled by Committee Member

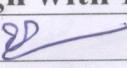
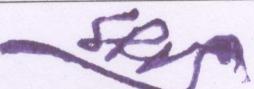
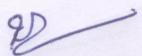
Student Name	Is Log Book maintained and verified by Guide	1.Innovative Idea 2.Application 3.Work Completion	Is presentation conducted on or before due date	Individual Presentation skill and Depth of Understanding
1.Tabbasum pathan	Yes/No	A / B / C		A / B / C
2.Vaibhavi waghmode	Yes/No	A / B / C		A / B / C
3.Bhagyashri vannale	Yes/No	A / B / C		A / B / C
4.	Yes/No	A / B / C		A / B / C

A:Good

B:Satisfactory

C:Not Satisfactory

Feasibility of project for UG Final Year	Is the project work undertaken by this group is acceptable for award of Bachelor Degree in Engineering
	If No, Mention the action taken:

Name of Committee Members	Sign with Date
1 prof. Dr. S. A. Dhole .	
2	
3	
 H.O.D.	 Project Coordinator

Continuous Evaluations Sheet: Presentation No.3

To be filled by student

B.E.Project(Part-II)Progress Report	Academic Year:2022-23
Date of Presentation	Group No.: - 29
Project Title - <i>Smart Attendance system.</i>	
Name of sponsored Industry -	
Present Work(200 words) - <i>synopsis stimulaneously it plot many vector on user face. It will check the these vector & their pattern from image database Accuracy of machine learning</i>	

To be filled by Committee Member

Student Name	Is Log Book maintained and verified by Guide	1.Innovative Idea 2.Application 3.Work Completion	Is presentation conducted on or before due date	Individual Presentation skill and Depth of Understanding
1. <i>Tabbasum pathan</i>	Yes/No	A / B / C		A / B / C
2. <i>Vaibhavi Waghmode</i>	Yes/No	A / B / C		A / B / C
3. <i>Bhagushri vannale</i>	Yes/No	A / B / C		A / B / C
4.	Yes/No	A / B / C		A / B / C

A:Good

B:Satisfactory

C:Not Satisfactory

Feasibility of project for UG Final Year

Is the project work undertaken by this group is acceptable for award of Bachelor Degree in Engineering

If No, Mention the action taken:

Name of Committee Members	Sign with Date
1 prof. Dr. S.A. Dhole.	
2 Prof. Dr. S.S. Salunkhe	
3	
H.O.D.	 Project Coordinator

Continuous Evaluations Sheet: Presentation No.4

To be filled by student

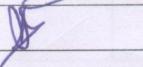
B.E.Project(Part-II)Progress Report	Academic Year:2022-23
Date of Presentation	Group No.: 29
Project Title - Smart attendance system.	
Name of sponsored Industry -	
Present Work(200 words) - scope of face recognition attendance system is vast. They offer reliable, efficient, & secure the method for attendance tracking across various industries including education, healthcare, government & business.	

To be filled by Committee Member

Student Name	Is Log Book maintained and verified by Guide	1. Innovative Idea 2. Application 3. Work Completion	Is presentation conducted on or before due date	Individual Presentation skill and Depth of Understanding
1. Tabbasum Pathan	Yes/No	A / B / C		A / B / C
2. Vaibhavi Waghmode	Yes/No	A / B / C	Yes/No	A / B / C
3. Bhagwathi Vannale	Yes/No	A / B / C		A / B / C
4.	Yes/No	A / B / C		A / B / C

A:Good B:Satisfactory C:Not Satisfactory

Feasibility of project for UG Final Year	Is the project work undertaken by this group is acceptable for award of Bachelor Degree in Engineering			
	If No, Mention the action taken:			

Name of Committee Members	Sign with Date
1 Prof. Dr. S.A. Dhole.	
2 Prof. Dr. S.S. Salunkhe	
3	
H.O.D.	 Project Coordinator

Details of Meeting between Internal guide and External Guide

Sem-I

Sr. No	Date	Location	Discussion Details	Signature
1				
2				
3				
4				

Sem-II

Sr. No	Date	Location	Discussion Details	Signature
1				
2				
3				
4				

B.E. Project Phase- II submission

Check List

- 1) All project groups should complete the project in all respect i.e. Hardware and software.
- 2) All groups should prepare the soft copy of the project report and get the report checked from the internal guide and then print the hardcopy .
- 3) All groups should prepare the hard copy of the project report in the hardbound form. Each group should prepare 3 hardcopies for submission in the department + each individual student copy +Guide Copy.
- 4) Prepare the CD of the project. It should include the following,
 - Audio-Video recording of complete demo of the project
 - Final Project report
 - PPT of the final project
 - Software code
 - PCB layout design
 - Important ICs Datasheets
 - Paper presented
 - Scan copy of Certificates
 - Scan copy of Sponsorship letter & Completion letter
 - Content beyond syllabus in given format
 - Three page abstract of the project in given format for project manual
- 5) You should submit both, hardcopy of the project report and above mentioned CD.

BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING FOR WOMEN, PUNE

6) All students should submit the xerox copies of the certificates and the hard copy of the paper presented at the time of submission.

(Note: changes if any in submission will be informed by the notice).

(Attach xerox of certificate's)

Participation in Project competition

Sr.No	Name & Place of project competition / Exhibition	Date	Certificate/Prizes won (if any)
1	Impetus & concept '23' PICT	22/4/23	participation
2	IETE pune centre BVCoEW.	27/4/23	participation.

(Attach xerox of certificate/s)

Paper Publications/Presentations

Sr.No	Name of the organizing society	Date	Certificate/Prizes won (if any)
1	Journal basic science	21/5/2023	Participation Certificate

(Attach xerox of certificate/s)

Contact Number

Email address

BE Project Synopsis Format

(Synopsis, preferably, should be of about 3-4 pages. The content should be as brief as is sufficient enough to explain the objective and implementation of the project that the candidate is going to take up. The write up must adhere to the guidelines.)

Title of the Project:

Area of Project:

Sponsored/ In-house: (If sponsored write company name)

Internal Guide Name:

External Guide Name (if sponsored project):

Name Of Student:

Roll Number:

Contact Number

Email_address

Goal is something you intend to achieve

Goal is something specific you expect to deliver

Problem Statement

What is the issue that you want to address?

What is the need to address this issue?

➤ Format of Synopsis

- Introduction
- Brief Literature Survey
- Problem Statement
- Objectives
- Methodology
- Block Diagram
- Expected Results
- References (at least 5-6 references)
- Signature of Student and Guide
- Maximum Number of pages for synopsis=6

How to Write Introduction

- General Information of system on which you going to work.
- Outline the problem you are working on.
- Why it is significant and what are the challenges?
- List your aims and goals.
- Aim is something you intend to achieve.
- Goal is something specific you expect to deliver

Problem Statement

- What is the issue that you want to address?
- What is the need to address this issue?

- How your project can solve this issue?
- Who will get benefits from the project?

Methodology

- Method adopted to solve the problem.
- Give an overview of how can you carry out the project.
- Step-wise approach to the solution

Abstract Page

Acknowledgements

Table of Tables

Table of Figures

List of Abbreviations

Introduction (2-4 pages)

Structure Survey

Problem Statement

Objectives

Methodology

Specifications of the System

Block diagram of the System and its explanation

Flowchart & Algorithms

Software Design (any)

Summary

Guideline for writing Seminar report

Format for the Seminar Report

1. Title Page
2. Certificate Page
3. Certificate from Company (if Sponsored)
4. Abstract
5. Index Page
6. Acknowledgements
7. List of Tables
8. List of Figures
9. List of Abbreviations
10. Introduction (2-4 pages)
11. Literature Survey
12. Problem Statement
13. Objectives
14. Methodology
15. Specifications of the System
16. Block diagram of the System and its explanation
17. Flow chart & Algorithms
18. Hardware Design (if any)
19. Software Design (if any)
20. Summary

PROJECT REPORT FORMAT

Instructions:

It is important that the procedures listed below be carefully followed.

1. Prepare 2 + No. of project members copies of your manuscript (I-CD for college).
2. Limit your project report to preferably 60-70 (30-40 in case of seminar report) manuscript pages.
3. The footer "BVCOEW, ELECTRONICS & TELECOMMUNICATION ENGINEERING" should be included. It should be TIMES NEW ROMAN 10pt and centrally justified.
4. Print the manuscript using letter quality computer printing. The main part of manuscript should be TIMES NEW ROMAN 12pt and justified. Use I.5 line spacing
5. Use paper size A-4 (210x297mm). Please follow following margins

Margin Location	Paper	A4 (210 x 297mm)
Top		25.4mm
Left		37mm
Right		25.4mm
Bottom		32mm

6. All paragraphs will be I.5 line spaced and a double space between each paragraph. Each paragraph will begin with a five space indentation.

7. Chapter titles should be bold with 14pt typed in all capital letters and should be aligned at the center of the page. Section heading should be aligned at the left with 12pt and bold and capitalized. Section subheading should be aligned at the left with title case (the first letter of each word is to be capitalized).

Leave two spaces between section headings and one space between two section subheadings.

8. Illustrations (charts, drawings, photographs, figures) are to be in the text. Use only illustrations really pertinent to the text. Illustrations must be sharp, clear, black and white.

Illustrations downloaded from internet are not acceptable.

a. Illustrations should not be more than two per page. One could be ideal.

b. Figure No. and Title at bottom with 12pt.

c. Legends below the title in 10 pt.

d. Proper margin in all sides.

e. Illustrations as far as possible should not be Xeroxed (photo copy)

9. Photographs, if any , should be glossy prints.

10. Please use SI system for units.

11. Please number the pages centrally below the footer.

12. References should be either in order as they appear in the paper or in alphabetical order by last name of first author .

13 Symbols and notations if any , should be included in nomenclature section only

14. Following will be the order of the report.

- a. Cover page and front page as per specimen on separate sheet,
- b. Certificate from institute as per specimen on separate sheet,

1. Title Page

2. Certificate Page

3. Certificate from Company if any

4. Abstract

5. Index Page

6. Acknowledgements

7. List of Tables

8. List of Figures

9. List of Abbreviations

10. Introduction (2-4 pages)

11. Literature Survey

12. Problem Statement

13. Objectives

14. Methodology

15. Specifications of the system

16. Block diagram of the system and its explanation

17. Hardware Design (if any)

18. Software Design (if any)

19. Experimental Result and its Analysis

Guideline for writing project report

Format for the Project Report

1. Title Page
2. Certificate Page
3. Certificate from Company (if Sponsored)
4. Abstract
5. Index Page
6. Acknowledgements
7. List of Tables
8. List of Figures
9. List of Abbreviations
10. Introduction (2-4 pages)
11. Literature Survey
12. Problem Statement
13. Objectives
14. Methodology
15. Specifications of the System
16. Block diagram of the System and its explanation
17. Hardware Design (if any)
18. Software Design (if any)
19. Experimental Result and Its Analysis

20. Conclusion
21. References
22. Summary of project participation and paper publications.
23. Hard copy of published paper at International Journal and Certificates.
24. Appendix I, II
25. CD must attached at the end of the report.

Abstract Contents

- Abstract is brief summary of your work.
- It should be of maximum half-page.
- It should include the following points:
 - Write your work-What has been done? (One sentence only)
 - Significance/importance (one/two sentences only)
 - Methods and Materials: How you carried out the project? What work it involved? (Three-Five sentences only)
 - Quantitative Results: What happened? (One sentence only)
 - Achievements: (one-two sentences only)

How to Write Introduction

1. Outline the problem you are working on.
2. Why it is interesting and what are the challenges?
3. List your aims and goals.

- Aim is something you intend to achieve.
- Goal is something specific you expect to deliver.

4. Give an overview of how you carried out the project

How to Write Literature Survey

- Literature Survey
- Problem Statement (As Discussed)

Literature Survey

Find the latest material relevant to the project topic which is being explored.

1. Identify the “big names or researchers” and best publications in your working area.
2. Collect the most recent books, most popular publications from IEEE Transactions, Elsevier, Springer.
(papers or thesis will be most helpful for developing the project.)
3. The minimum number of the papers to be collected between Ten (10) to Twenty (20) papers.

Literature Survey

- Explain each paper in one paragraph that should include following points:
 1. Summarize all the major points of your selected paper i.e. what kind of new work, results, its conclusion (Findings and conclusion)

2. Write the strengths and limitations of your selected paper.
3. Cite this paper by numbering inside the square bracket [].
 - Make comparisons of the selected papers and give technical comments.
 - Summary of comparison is to be given in a tabulated form in the last page.

Problem Statement

- What is the issue that you want to address?
- Why it is need to address this issue?
- How your project can solve this issue?
- Who gets benefits from the project?

Hardware/Software Design

- Describe the design of what you have created.
- Start with application block diagram and the components that make the block diagram.
- Give a description of the design of the component that make up the block diagram.
- Provide the implementation detail as necessary.
- Necessary to write the Algorithm of the Project.

How to Write Experimental Result and Analysis

- Include the Experimental Setup used for testing the system.
- Include the tables and graphs that shows your quantitative results.
- Write in sentences the thorough evaluation of the result being presented.
- Next, write the analysis on your obtained results.

How to Write Conclusion

- Summary of what the project has been achieved.
- Must include your quantitative results and logical analysis of the result presented in the project report.

Project Management

- Include Yellow card signed by project guide.
- Meeting dates with guides.
- Bill of Material

How to Write Reference

- Number all the references.
- References has to be written in IEEE Transactions format.
- Use a chronological bibliography.
- Each listed reference in the bibliography must be cited in the text of the report.

- For a book, give the name(s) of author(s), title of the book, edition, chapter number, page number, publisher, location and year of publication.

For ex. [3] Author 1, Author 2, "wavelet based feature extraction Schemes", Edition 1, Ch. 1-4, pp. 120-126, Springer, New York, 2015.

- For a journal/conference paper, give the name(s) of authors, "title of paper", name of journal/conference, volume and issue number (for journal), page numbers, month and year of publication.

Example:

Author 1, Author 2, "wavelet based cancer feature extraction and recognition", IEEE Transactions on Information forensic and security, vol. 4, No. 6, pp.240-250, February, 2015.

- For World Wide Web page, give the author or company's name and the URL.

A SEMINAR REPORT

ON

Smart Attendance system

Submitted by

Tabbasum Pathan (Roll No. : 41235)

Vaibhavi Waghmode (Roll No. : 41244)

Bhagyashri Vannale (Roll No.:41245)

Under the Guidance of

Prof. Dr. S. A. Dhole



**DEPARTMENT OF ELECTRONICS AND
TELECOMMUNICATION ENGINEERING**

**BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING
FOR WOMEN, PUNE-43**

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

YEAR 2022-23



CERTIFICATE

This is to certify that the Project titled

“Smart Attendance system

Submitted By,

Tabbasum Pathan(41235)

Vaibhavi Waghmode (41244)

Bhaghyashri Vannale (41245)

Of BE (Electronics & Telecommunication) is a bonafide work carried out by them under the guidance of **Prof. Dr. S. A. Dhole** and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University for the award of **bachelor's** degree of **engineering** in **Electronics & Telecommunication** of Savitribai Phule Pune University at Bharati Vidyapeeth's College of Engineering for Women Dhankawadi , Pune-43.

Prof. Dr. S. A. Dhole

Prof. Dr. S. A. Dhole

Prof. Dr. S. R. Patil

Guide

Project Co-ordinator

Principal, H.O.D E&TC

Place: Pune

Date:



CERTIFICATE

This is to certify that the BE Seminar report of
Smart Attendance System

Submitted by,

Tabbasum Pathan(41235)

Vaibhavi Waghmode (41244)

Bhagyashri Vannale (41245)

Of BE (Electronics & Telecommunication) is a bonafide work carried out by them under the guidance of Prof. **Dr. S. A. Dhole** and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University for the award of Bachelor's degree of **Engineering In Electronics & Telecommunication** of Savitribai Phule Pune University at BharatiVidyapeeth's College of Engineering for Women, Dhankawadi, Pune-43

Prof. Dr. S. A. Dhole

Prof. Dr. S. A. Dhole

Prof. Dr. S. R. Patil

Guide

Project Co-ordinator

Principal, H.O.D E&TC

A BE PROJECT REPORT Of

Smart Attendance System

Submitted By

Tabbasum Pathan(41235)

Vaibhavi Waghmode (41244)

Bhaghyashri Vannale (41245)

Under the Guidance of

Prof. Dr. S. A. Dhole



**DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING
BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING
FOR WOMEN, Pune-43
(Savitribai Phule Pune University, Pune)**

YEAR 2022-23

" Social Transformation Through Dynamic Education "



BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING FOR WOMEN

Affiliated to Savitribai Phule Pune University
Pune - Satara Road, Pune - 411 043.



PROJECT WORKBOOK

Academic Year : 20 - 20

Term : I / II

Department : BE [Computer Engineering]

Group Id : 20

Name : Rakshanda Borse, Tajal Gadekar, Ankita Tiletar,
Anuradha Biraj Dar,

Guide Name : Prof. A.P. Kadamb

Project Work Book

(Guidelines and Log)

Course Code: 410248 & 410256

(2019 Course)

Fourth Year of Computer Engineering

Year 2022 - 2023

Group/ProjectID	20
Project Title	EcRD : Edge Cloud Computing Framework For Smart Road Damage Detection
Group members	<ol style="list-style-type: none">1. Kajal D. Gadekar (3218)2. Ankita C. Talekar (3250)3. Ratshanda Borse (3253)4. Anuradha Birajdar (3273)
Project Guide	Prof. A. P. Kadams
	
<p>Computer Engineering Bharati Vidyapeeth's College of Engineering for Women, Pune-43 Savitribai Phule Pune University</p>	

Preamble

Project work is one of the most important components of the curriculum for an Engineering Graduate. Right from conceiving the idea to its materialization, is a journey that has to be systematized, well defined and well documented to enjoy the full benefits of the efforts undertaken.

Every activity of the project development has its own importance. Team formation, conceiving the idea, preparing the hypothesis, reporting the progress and development to the guide(/mentor), interactions, suggestions and improvements, relevant documentations in proper format, schedule plans and visit logs are some of the typical activities involved in project development.

Every institute is following their own best methods and techniques as per the guidelines and curriculum of the affiliated university. To bring uniformity for the project work there is a need to come together and prepare comprehensive guidelines and to standardize the process.

This project work book will serve the purpose and facilitate the job of students, guide and project coordinator. This document will reflect accountability, punctuality, technical writing ability and work flow of the work undertaken.

This document will definitely support the work undertaken.

Dr. Varsha H. Patil
Coordinator, Board of Studies, Computer Engineering
Savitribai Phule Pune University
June 2018

General Instructions

1. Students should enter correct information in the work book.
2. Get all entries verified by respective project guide. No changes are to be made without project guide's permission.
3. Students should report to their respective guides as per the schedule and its log is to be maintained in the work book.
4. Follow all deadlines and submit all documents strictly as per prescribed formats.
5. The work book should be produced at the time of all discussions, presentations and examinations.
6. The work book must be submitted to project coordinator/ guide/ department / College after successful examination at the end of year.
7. All documents and reports are to be prepared in Latex only (All the formats specifications provided adheres to MS Word but consequently applicable to finalized project report published using Latex)
8. Submit hard as well as soft copy and maintain copy with each member.

This booklet is supportive document to rules and regulations enforced by affiliated university. This booklet provides recommendations, guidelines and is record of all related activities associated with project work. This booklet is provided with a genuine intent to bring uniformity, to systematize the project work and to keep audit of work undergone by team members.

Work Book Development Project

Project Institution	Department of Computer Engineering Matoshri College of Engineering and Research Centre, Nashik
Support & Guidance	Dr. Gajanan K. Kharate, Principal, Matoshri College of Engineering and Research Centre, Nashik
Concept and Design	Dr. Varsha. H. Patil BoS Coordinator Computer Engineering , SPPU, Pune Vice Principal, Matoshri College of Engineering and Research Centre, Nashik
Project coordinator	Mrs. Swati A. Bhavsar Assistant Professor, Matoshri College of Engineering and Research Centre, Nashik
Technical Committee Members	<ol style="list-style-type: none"> 1. Dr. Goraksh V. Garje 2. Dr. Parikshit Mahalle 3. Mr. Niranjan L. Bhale 4. Dr. Sunil R. Dhore 5. Dr. Nuzhat Shaikh 6. Dr. Sudeep Thepade 7. Dr. Mangesh Bedekar 8. Ms. Swapnaja Hiray 9. Mr. Ranjeet Gawande
Date	5 th January 2017
Version No. & Revision Date	3.0 (Revised on 10 th June 2018)
Copyright (All rights reserved)	Registration Number: L-66962/2017 (Copyright document excludes Sr. No. 2-University Syllabus, Annexure- SE Code of Ethics and Professional Practices)

(For circulation at BoS Computer Engineering, Savitribai Phule Pune University only)

Savitribai Phule Pune University

Computer Engineering

Program Educational Objectives

PEO1. To prepare globally competent graduates having strong fundamentals, domain knowledge, updated with modern technology to provide the effective solutions for engineering problems.

PEO2. To prepare the graduates to work as a committed professional with strong professional ethics and values, sense of responsibilities, understanding of legal, safety, health, societal, cultural and environmental issues.

PEO3. To prepare committed and motivated graduates with research attitude, lifelong learning, investigative approach, and multidisciplinary thinking.

PEO4. To prepare the graduates with strong managerial and communication skills to work effectively as an individual as well as in teams.

Program Outcomes

Students are expected to know and be able -

PO1. To apply knowledge of mathematics, science, engineering fundamentals, problem solving skills, algorithmic analysis and mathematical modeling to the solution of complex engineering problems.

PO2. To analyze the problem by finding its domain and applying domain specific skills

PO3. To understand the design issues of the product/software and develop effective solutions with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PO4. To find solutions of complex problems by conducting investigations applying suitable techniques.

PO5. To adapt the usage of modern tools and recent software.

PO6. To contribute towards the society by understanding the impact of Engineering on global aspect.

PO7. To understand environment issues and design a sustainable system.

PO8. To understand and follow professional ethics.

PO9. To function effectively as an individual and as member or leader in diverse teams and interdisciplinary settings.

PO10. To demonstrate effective communication at various levels.

PO11. To apply the knowledge of Computer Engineering for development of projects, and its finance and management.

PO12. To keep in touch with current technologies and inculcate the practice of lifelong learning.

Program Specific Outcomes (PSO)

A graduate of the Computer Engineering Program will demonstrate-

PSO1: Professional Skills-The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying.

PSO2: Problem-Solving Skills- The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.

PSO3: Successful Career and Entrepreneurship- The ability to employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, and a zest for higher studies.

I. Format for Project Proposal	22	
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III. Format for Partial Project Report (Semester I)	24	
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IX. Copy of Project Proposal	37 onwards	

1. Project Work

The word *project* comes from the Latin word *projectum* from the Latin verb *proicere*, "to throw something forwards" which in turn comes from *pro-*, which denotes something that precedes the action of the next part of the word in time (paralleling the Greek πρό) and *iacere*, "to throw". The word "project" thus actually originally meant "something that comes before anything else happens".

(Curtsey Ref- <http://en.wikipedia.org/>)

The intention of Project work is to conceive an idea and to implement it systematically by using knowledge derived during the course of education mainly to innovate or facilitate.

A group of Under Graduate students at Final Year will undertake project over academic year. Work involves study of feasibility of the project, planning of project, studying existing systems, tools available to implement the project and state of art software testing procedures and technology with use of case tools, design is to be implemented into a working model (software or hardware or both) with necessary software interface as an executable package.

1.1 Project Audit Committee (PAC):

It is recommended to form a departmental "Project Audit Committee" to monitor project activities comprising of Head, Project Coordinator, Industry Expert(s), External Expert(s), Department Academic Coordinator and few senior guides.

1.2. Course Objectives:

- To Apply the knowledge for solving realistic problem
- To develop problem solving ability
- To Organize, sustain and report on a substantial piece of team work over a period of several months
- To Evaluate alternative approaches, justify the use of selected tools and methods
- To Reflect upon the experience gained and lessons learned
- To Consider relevant social, ethical and legal issues,
- To find information for yourself from appropriate sources such as manuals, books, research journals and from other sources, and in turn increase analytical skills.
- To Work in TEAM and learn professionalism.

1.2 Course Outcomes:

Students are expected to know and be able to-

CO1. Knowledge Application & Independent Learning: Solve real life problems by applying knowledge and skills keeping eye on current technologies and inculcating the practice of lifelong learning

CO2. Problem Solving Skills: Analyze alternative approaches, apply and use most appropriate one for feasible solution exhibiting project management skills

CO3. Communication: Demonstrate effective communication at various levels and write precise reports and technical documents in a nutshell

CO4. Collaboration: Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work, Inter-personal relationships, conflict management and leadership quality

CO5. Ethics: Provide solution to problems considering social, safety, environmental, ethical and legal issues

1.3 Mapping of Course Outcomes (CO) of Project Work and Program Outcomes (PO):

The proper assessment of the COs and POs is one of the most important processes and it is to be done with precision and planning. It is recommended to assess the students continuously as they progress through the program. It is collectively one or more processes that define, collect, and prepare data to evaluate the achievement of Program Outcomes. Every COs are to be mapped to different POs based on their influence of COs on them. Sample mapping of PO and CO for project work is given in table 1.

Table 1: Mapping of CO and PO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	√	√	√		√	√						√
CO2	√	√	√	√							√	
CO3											√	
CO4									√	√		
CO5						√	√	√				

1.4 Guidelines for Project Work Selection, Finalization and Guide Allotment:

Project is one of the significant contributory team works that has to be completed with distinct impression. It is necessary to explore the domain of interest / research/ thirst area/ society needs. In Toto one cannot figuratively define best project but still there are certain parameters on which we can gauge the quality of project work done. It will be better suited to go for well-defined and relatively safe projects that provide scope for demonstrating proficiency with a low risk of failure especially at Under Graduate level.

Process in General:

1. Project teams and their areas of interest is to be registered with project Coordinator preferably in second semester of third year.
2. Students are provided with list of guides & their domain of expertise, list of earlier three years projects, constitution of PAC and copy of logbook giving all guidelines.

3. Considering registered teams area of interest/domain and expertise of guide, the Project coordinator in consultation with PAC tentatively allots Project guides.
4. Team may come up with sponsored project (Title suggestion and associated guidance by external institute/Company).
5. Teams in consultation with guide prepare project proposal(s)
6. Project Proposal must include project title, group members, sponsorship details (if any), detailed problem definition, area, Type of Project [Sponsored/Non Sponsored, AND viz- 1. Framework, 2. System as - Application/ Systems Software with or without Hardware 3. Research, 4. Survey], abstract, details of existing similar systems if any, scope of the project and software-hardware requirements. [Sponsorship details include name of sponsoring authority, address, name of guide, sponsorship terms and conditions and respective documents certifying the same from authorities].
7. A Panel of experts will approve the project group and title. Discussion / presentation may be arranged covering topics listed in the proposal.
8. Once project titles are finalized by PAC, guides are reallocated/ changed, if required.
9. It is recommended to seek guidance from PG students and/or alumini and assistance from third year students.
10. It is recommended to maintain record of all meetings, discussions, suggestions, contributions and roles played by each member of the team.

Dos and Don'ts:

- Project work is expected to involve a combination of study (literature study/ line of investigation), and methodical implementation.
- Instead of fancied and driven behind the gaudy and ostentatious ideas, utility needs to be emphasized. It is also acceptable to identify the discrepancies/ flaws an existing system and work accordingly to rectify or improve.
- It is irrational to select the IDE and the software/ tools before the idea is not yet finalized.
- Identify domain, feasibility and usability of work.
- Understand the way project will materialize and progress is of at most importance.

1.5 General Project Evaluation Parameters:

Project work is to be evaluated jointly by both Internal and External examiners, unanimously agreeing upon the following parameters amongst many others.

1. Problem definition and scope of the project.
2. Thorough literature survey done.
3. Exhaustive and rational requirement analysis.
4. Appropriate software engineering approach followed.
5. Use of project management tools.
6. Comprehensive implementation

7. Optimization considerations(memory, time, resources, costing).
8. Use of parallel/multi-core, embedded, distributed computing approach.
9. Thorough testing of all modules and integration of modules done.
10. Project presentation and demonstration.
11. User interface, ease of use, usability and GUI.
12. Understanding individual capacity, role and involvement in the project.
13. Team work (roles defined, distribution of work, intra-team communication and togetherness).
14. Participation in various contests, publications and IPR.
15. Presentation of work in the form of project report(s). Documents /manuals - project report, quick reference, system, installation guide etc
16. Outcomes / usability/ commercial value/ product conversion of work
17. Consideration of social, safety, environmental, ethical and legal issues

1.8. Publications Guidelines:

The work undertaken is to be appreciated and recognized by the significant publications and/or IPR. The quality of the publications reflects the efforts and recognition of the work. So, it is highly recommended to publish work in consultation with the guide in referred national and international Journals of repute, with high Impact Factor and also in recognized conferences. There are some journals operating in different regions which use 'International' word, but in true sense are not International. Refer

1. <http://www.fi.dk/viden-og-politik/tal-og-analyser/den-bibliometriske-forskningsindikator/autoritetslister-for-tidsskrifterog-forlag/bfi-publishers-2011.pdf>
2. <http://www.fi.dk/viden-og-politik/tal-og-analyser/den-bibliometriske-ingsindikator/autoritetslister-for-tidsskrifter-og-forlag/Autoritetslisten%20for%20tidsskrifter%202011%20-20med%20niveauer.pdf>

1.9. IPR Guidelines:

The first legislation in India for protection of Industrial Designs was The Patents & Designs Protection Act, 1872. It supplemented the 1859 Act passed by Governor General of India for granting exclusive privileges to inventors and added protection for Industrial Design. The 1872 Act included the term –any new and original pattern or design, or the application of such pattern or design to any substance or article of manufacture’.

1. Hence it is recommended that students should know about Copyright and Patents. Refer-
http://www.ipindia.nic.inhttp://www.ipindia.nic.in/writereaddata/Portal/IPOGuidelinesManuals/1_30_1_m_anual-designs-practice-and-procedure.pdf
2. <http://collegecirculars.unipune.ac.in/circulars/documents/Syllabus%202019/Forms/AllItems.aspx?InitialTabId=Ribbo%2EDocument&VisibilityContext=WSSTabPersistence>

2. University Syllabus (semester I)

Project Work Stage I

Course Objectives:

- To Apply the knowledge for solving realistic problem
- To develop problem solving ability
- To Organize, sustain and report on a substantial piece of team work over a period of several months
- To Evaluate alternative approaches, and justify the use of selected tools and methods,
- To Reflect upon the experience gained and lessons learned,
- To Consider relevant social, ethical and legal issues,
- To find information for yourself from appropriate sources such as manuals, books, research journals and from other sources, and in turn increase analytical skills.
- To Work in TEAM and learn professionalism

Course Outcomes:

On completion of the course, student will be able to-

- Solve real life problems by applying knowledge.
- Analyze alternative approaches, apply and use most appropriate one for feasible solution.
- Write precise reports and technical documents in a nutshell.
- Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work, Inter-personal relationships, conflict management and leadership quality

Guidelines-

Project work Stage - I is an integral part of the Project work. In this, the student shall complete the partial work of the Project which will consist of problem statement, literature review, design, scheme of implementation (Mathematical Model/SRS/UML/ERD/block diagram/ PERT chart, etc.) and Layout & Design of the Set-up. The student is expected to complete the project up to the design phase. As a part of the progress report of Dissertation work Stage-I, the candidate shall deliver a presentation on the advancement in Technology pertaining to the selected project topic. The student shall submit the duly certified progress report of Project work Stage-I in standard format for satisfactory completion of the work by the concerned guide and head of the Department/Institute.

The examiner will be assessed by a panel of examiners of which one is necessarily an external examiner. The assessment will be broadly based on work undergone, content delivery, presentation skills, documentation and report.

Semester II

Project Work Stage II

Course Objectives:

- To follow SDLC meticulously and meet the objectives of proposed work
- To test rigorously before deployment of system
- To validate the work undertaken
- To consolidate the work as furnished report.

Course Outcomes:

On completion of the course, student will be able to-

- Show evidence of independent investigation
- Critically analyze the results and their interpretation.
- Report and present the original results in an orderly way and placing the open questions in the right perspective.
- Link techniques and results from literature as well as actual research and future research lines with the research.
- Appreciate practical implications and constraints of the specialist subject

Guidelines-

In Project Work Stage-II, the student shall complete the remaining project work which consists of Selection of Technology and Tools, Installations, UML implementations, testing, Results, performance discussions using data tables per parameter considered for the improvement with existing/known algorithms/systems and comparative analysis and validation of results and conclusions. The student shall prepare and submit the report of Project work in standard format for satisfactory completion of the work that is the duly certified by the concerned guide and head of the Department/Institute

3. Undertaking by Students

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

With reference to circular (ref-project/2009/3369) regarding malpractices in project work from DTE, Pune following undertaking is to be submitted.

UNDERTAKING BY STUDENT

We, the students of B.E. Computer hereby assure that we will follow all the rules and regulations related to project activity for the academic year 2018 -2019. The Project titled-

FeRD : Edge-Cloud Computing framework for
Smart Road Detection - And Warning.

will be fully designed/ developed by us and every part of the project will be original work and will not be copied/ purchased from any source.

Name of the student

1. kajal Gadekar
2. Anita Talekar
3. Rakshanda Borse
4. Anumadha Birajdar

Signature

kajal
Anita
Rakshanda
Anumadha

4. Schedule of Project Work

Semester I

Sr. No.	Activity Scheduled	Date (Tentative)
1.	Registration of Project Teams	Third Year Semester II/ Mid of June
2.	Submission of Project Proposal	Last Week of June
3.	Project presentations	First week of July
4.	Finalization of projects & allotment of guide	Second week of July
5.	Submission of final Proposal	Third week of July
6.	Review meeting/ presentation for progress of project work- I	Last week of July
7.	Review meeting/ presentation for progress of project work- II	Third week of August
8.	Review meeting/ presentation for progress of project work- III	Second week of Sept
9.	Review meeting/ presentation for progress of project work- IV	Last week of Sept
10.	Submission of partial project report	1 st Week Oct
11.	Project work (Stage I) Examination	As per SPPU Notification

Semester II

Sr. No.	Activity Scheduled	Date(Tentative)
1.	Review meeting/ presentation for progress of project work -V	Second week of Jan
2.	Review meeting/ presentation for progress of project work -VI	Second week of Feb
3.	Review meeting/ presentation for progress of project work- VII	Last week of March
4.	Submission of final project report and Project Work book to the project Coordinator	First week of April
5.	Project Examination	As per SPPU Notification

5. Project Review (Semester I)

The group members are expected to present their work undertaken during the semester. Journey of development has to be rationally presented with thorough literature survey in review meeting.

5.1 Project Review-I: Problem Statement, Motivation, objectives and Literature Review

Student is expected to deliver presentation covering Problem Statement, Motivation, objectives and Literature Review.

Sr. No.	Question	Date	Remark / Grade	Sign of Guide
1)	Do Research gap identified lead to find motivation of project?	5/08/2022	Yes	APU
2)	Does the statement give clear identification about what your project will accomplish?	6/08/2022	Yes	APU
3)	Is the statement short and concise?	6/08/2022	Yes	APU
4)	Do similar type of methodology / model exists?	7/08/2022	Yes	APU
5)	Is the studied literature sufficient to decide scope of the project?	16/08/2022	Yes	APU
6)	Are the objectives clearly and unambiguously listed?	17/08/2022	Yes	APU
7)	Can a person who is not familiar with the project understand scope of the project by reading the project problem statement?	19/08/2022	Yes	APU
8)	Are project objectives of study (what product, process, resource etc.) clearly defined?	19/08/2022	Yes	APU
9)	Are the objectives set helpful to achieve goal of the project?	20/08/2022	Yes	APU
10)	Does the project contribute to our society by any means?	20/08/2022	Yes	APU

Remark and Suggestions:

Feasibility study must do.

Name and Sign of Reviewers:

1. Prof. Anjali kadam APU

APU
Demi

2. Prof. Dr. S. P. kadam

Prof. D. D. Pukale D

5.2 Project Review-II: Feasibility and Scope

Student is expected to deliver presentation covering Feasibility and Scope

Sr. No.	Question	Date	Remark / Grade	Sign of Guide
1)	Is the project's view point understood?	21/08/2022	Yes	APD
2)	Is the project goal statement in alignment with the sponsoring organization's business goal and mission?	21/08/2022	No	APD
3)	Who is the project's end user?	21/08/2022	Customer	APD
4)	What is the projected cost of producing a product?	22/08/2022	40,000/-	APD
5)	Is project achievable in specified (Time, Cost Budget)?	22/08/2022	Yes	APD
6)	Are the requirements within the scope of the project?	22/08/2022	Yes	APD
7)	Is the scope properly defined?	23/08/22	Yes	APD
8)	Does the problem statement clearly define scope of the project?	23/08/22	Yes	APD
9)	Do the project requirements fit into available software and hardware?	25/08/2022	Yes	APD
10)	Whether the milestones are stated completely and project timeline is given?	27/08/2022	Yes	APD
11)	Whether risks like technical risks, Operational risks, schedule risks, business risks are identified correctly or not?	28/08/2022	Yes	APD
12)	Whether Risk prioritization is done properly and any back up plan is decided?	29/08/2022	Yes	APD

Remark and Suggestions:

Cost estimation of resources must be done

Name and Sign of Reviewers:

1. Prof. A.P. kadam

APD

2. Prof. Dr. B.P. kadam

APD
Devi

3. Prof. D.P. Pukale

5.3 Project Review-III: Requirement Analysis

Student is expected to deliver presentation covering Requirement Analysis

Sr. No.	Question	Date	Remark / Grade	Sign of Guide
1)	Is information domain analysis complete, consistent and accurate?	12/09/2022	yes	APU
2)	Is problem statement categorized in identified area and targeted towards specific area there in?	13/09/22	yes	APU
3)	Is external and internal interfacing properly defined?	14/09/2022	yes	APU
4)	Are requirements consistent with schedule, resources and budget?	15/09/2022	yes	APU
5)	Are all requirements traceable to system level?	22/09/22	yes	APU
6)	What is needed to make the product?	23/09/22	Software	APU
7)	Is there a demand for the product?	26/09/22	yes	APU
8)	Is identification of stakeholders done properly?	26/09/22	yes	APU
9)	Whether all requirements are captured and documented in line with scope?	28/09/22	yes	APU
10)	Whether all type of analysis classes are identified?	13/09/22	yes	APU
11)	Whether the Acceptance criteria is decided	13/09/22	yes	APU
12)	Is SRS document as per IEEE format complete and correct?	13/09/22	yes	APU

Remark and Suggestions:

Need to work on Contribution

Name and Sign of Reviewers:

1. Prof. A. P. Kadam

APU

2. Prof. Dr. S. P. Kadam

Ward

3. Prof. D. D. Pukale

✓

5.4 Project Review-IV: Design

Student is expected to deliver presentation covering Design

Sr. No.	Question	Date	Remark / Grade	Sign of Guide
1)	Are requirements reflected in the system architecture?	7/11/22	Yes	APD
2)	Does the design support both project (product) and project goals?	7/11/22	Yes	APD
3)	Does the design address all the issues from the requirement?	9/11/22	Yes	APD
4)	Is effective modularity achieved and modules are functionally independent?	9/11/22	Yes	APD
5)	Are structural diagrams (class, Object, etc) well defined?	9/11/22	Yes	APD
6)	Are all class associations clearly defined and understood? (Is it clear which classes provide which services)?	10/11/22	Yes	APD
7)	Are the classes in the class diagram clear? (What they represent in the architecture design document?)	11/11/22	Yes	APD
8)	Is inheritance appropriately used?	11/11/22	Yes	APD
9)	Are the multiplicities in the use case diagram depicted in the class diagram?	12/11/22	Yes	APD
10)	Are all objects used in sequence diagram?	12/11/22	Yes	APD
11)	Are the symbols used in all diagrams corresponding to UML standards?	13/11/22	Yes	APD
12)	Are behavioral diagrams (use case, sequence, activity, etc.) well defined and understood?	13/11/22	Yes	APD
13)	Does each case have clearly defined actors and input/ output?	14/11/22	Yes	APD
14)	Does the sequence diagram match with class diagram?	15/11/22	Yes	APD
15)	Is aggregation/ containment (used) clearly defined and understood?	16/11/22	Yes	APD
16)	Whether State charts are capturing system's dynamic behavior correctly?	17/11/22	Yes	APD
17)	Related to procedural thinking whether DFDs and CFDs along with transaction and transformation flow are done correctly ?	17/11/22	Yes	APD

Remark and Suggestions:

Name and Sign of Reviewers:

1. Prof. A. P. Kadam
2. Prof. Dr. S. P. Kadam
3. Prof. D. D. Pukale

6. Internal Evaluation Sheet (Semester I)

Sr. No.	Names of Team Members	Problem Statement / Motivation / Objectives / Scope/ Feasibility Requirement (05)	Literature Survey (05)	Requirement Analysis (05), Modeling & Designing (10)	Planning & Prototyping (05)	Presentation & Question - Answer (10)	Partial Project Report (10)	Total (50)
1.	Ankita C. Tilekar	5	5	8	4	8	7	42
2.	Rakshanda Borse	5	5	8	4	8	9	44
3.	Kajal Gadekar	5	5	8	4	8	7	42
4.	Anuradha Birajdar	5	5	8	4	8	9	44

Name and Signature of Evaluation Committee:

1. Prof. Prof. Shubhada Mane
2. Prof. Prof. A. P. Kadamb




Examiners Feedback and Suggestions:

We are going to stored this data in Cloud or not. Time and cost feasibility.
time Complexity of CNN Algorithm


Signature of Guide
[Name of Guide]

PAC


Signature of Head
[Name of HoD]
Head of Department

7. Project Review: (Semester II)

The group members are expected to present their work undertaken during the semester. Journey of development has to be rationally presented.

7.1 Project Review-I: Modeling (Model Refinement and Algorithm development)

Student is expected to deliver presentation covering Modeling

Sr. No.	Question	Date	Remark/ Grade	Sign of Guide
1)	Which software Development Process model is used? (Water fall, Incremental, RAD) How? (? at this level?)	1/2/2023	Yes	APU
2)	Are data objects, their attributes and relationships clearly identified? (All constraints fro SRS are captured or not?)	4/2/2023	Yes	APU
3)	Have the objects and respective classes and their responsibilities?	7/2/2023	Yes	APU
4)	Have you analyzed the requirements been analyzed and represented into respective models?	14/2/2023	Yes	APU
5)	Have the different system states been differentiated and depicted them in the form of state transition diagram?	17/2/2023	Yes	APU
6)	Does the mathematical model clearly imply design of the project?	21/2/2023	Yes	APU
7)	Does the mathematical model clearly states goal of project?	21/2/2023	Yes	APU
8)	Is the interface between the modules properly identified?	24/2/2023	Yes	APU
9)	Are any functional dependencies identified and described?	25/2/2023	Yes	APU
10)	Which architectural model does the system support?	27/2/2023	Yes	APU
11)	Whether Deployment diagram is in line with selected architecture?	28/2/2023	Yes	APU
12)	Whether all components are designed properly and represented in component diagram?	1/3/2023	Yes	APU
13)	Whether NP-completeness of algorithms is checked?	4/3/2023	Yes	APU

Remark and Suggestions:

Changes in deployment diagram

Name and Sign of Reviewers:

1. Prof. A. P. Kadam
2. Prof. Dr. S. P. Kadam

7.2 Project Review-II: Coding / Implementation

Student is expected to deliver presentation covering Coding / Implementation

Sr. No.	Question	Date	Remark/ Grade	Sign of Guide
1)	Does the code completely and correctly implement the design?	11/3/2023	Yes	APL
2)	Does the code comply with the coding standard?	14/3/2023	Yes	APL
3)	Is the code well structured, consistent in style, and consistently formatted?	16/3/2023	Yes	APL
4)	Are all functions in the design coded?	20/3/2023	Yes	APL
5)	Does the code make use of object oriented concepts?	23/3/2023	Yes	APL
6)	Does the code support granularity?	25/3/2023	Yes	APL
7)	Is the language used for coding correctly chosen as per the project need?	28/3/2023	Yes	APL
8)	If any off-the-shelf components are used, Have you understood the functionalities of using it?	29/3/2023	Yes	APL
9)	Are all comments consistent with the code?	31/3/2023	Yes	APL
10)	Whether code optimization is done properly?(By using language features)	11/4/2023	Yes	APL

Remark and Suggestions:

Overall code is well structured and consistent. Good use of comments. However, optimization can be done by using language features like loops, conditionals, etc.

Name and Sign of Reviewers:

1. Prof. A. P. kadam

APL

2. Prof. Dr. S. P. kadam

APL

7.3 Project Review-III: Validation and Testing

Student is expected to deliver presentation covering Validation and Testing

Sr. No.	Question	Date	Remark/ Grade	Sign of Guide
1)	Has alpha testing been done?	3/1/2023	yes	PPU
2)	Has beta testing been done?	5/1/2023	yes	PPU
3)	Have been validated the requirements, design and code as per standard?	12/1/2023	yes	PPU
4)	Has GUI testing of project been performed? How?	13/1/2023	yes	PPU
5)	Does the system comply with basic usability norms?	18/1/2023	yes	PPU
6)	Has the code been tested using standard datasets available in your area of project?	20/1/2023	yes	PPU
7)	Has the code been tested in real time environment?	25/1/2023	yes	PPU
8)	After integration of all components whether total performance of system is checked?	27/1/2023	yes	PPU
9)	Whether repository of all components along with versions is documented?	28/1/2023	yes	PPU
10)	Have social, safety, environmental, ethical and legal issues been considered while providing solution to problem?	29/1/2023	yes	PPU

Remark and Suggestions:

Changes in GUI

Name and Sign of Reviewers:

1. Prof. A.P. Kadam PPU

2. Prof. Dr. S.P. Kadam PPU

7.4 Project Review-III: Report Writing

Student is expected to deliver presentation covering Report Writing

Sr. No.	Question	Date	Remark/ Grade	Sign of Guide
1)	Is the report written as per the prescribed format?	11/5/2023	Yes	APL
2)	Is the report timely prepared?	4/5/2023	Yes	APL
3)	Is the report properly organized, spelled, grammatically correct?	12/5/2023	Yes	APL
4)	Is the report plagiarism free?	15/5/2023	Yes	APL
5)	Is the report precise and written to the point?	16/5/2023	Yes	APL
6)	Does the report contain complete results and comparative graphs?	17/5/2023	Yes	APL
7)	Are all figures and tables properly numbered and labeled?	18/5/2023	Yes	APL
8)	Are all figures and tables properly cited?	19/5/2023	Yes	APL
9)	Whether references are properly cited?	20/5/2023	Yes	APL

Remark and Suggestions:

Changes in Report formatting

Name and Sign of Reviewers:

1. Prof. A. P. Kadam APL

2. Prof. Dr. S. P. Kadam S

8. Internal Evaluation Sheet (Semester II)

Sr. No.	Names of Team Members	Modeling (10)	Coding and Implementation (40)	Testing (10)	Understanding, Individual Involvement / Contribution in the project (10)	Team Work (10)	Demonstration cum Presentation (10)	Documents & Report (10)	Total (100)
1.	Anuradha M. Birajdar	8	35	9	9	9	9	10	89
2.	Rakshanda J. Borse	8	35	9	9	10	9	9	89
3.	Kajal D. Giadekar	9	35	9	9	10	10	9	89
4.	Ankita C. Tilekar	9	35	9	9	10	9	10	89

Name and Signature of Evaluation Committee:

1. Prof. Prof. A. P. Kadam Apk
2. Prof. Prof. Dr. S. P. Kadam Spk

Examiners Feedback and Suggestions:

Apk
Signature of Guide
[Prof. A. P. Kadam]
rachna

PAC

Spk
Signature of Head
[Prof. Dr. S. P. Kadam]
Head of Department

9. Contest Participation Details

9.1. Participation in Project Competition

Sr. No.	Name and Place of Project Competition and Exhibition	Date	Certificates / prizes won, if any
1.	Capgemini Codex hackathon Microsoft Teams Online.	11/5/2023	3 rd prize
2.	Avinya Project Competition	27/4/2023	Certificate
3.	Arinya Paper presentation	28/4/2023	Certificate.
4.	IJCRT paper publication	2/2/2023	Certificate

Attach attested copy of certificate(s)

9.2. Paper Publication/ Presentation/IPR

Sr. No.	Name of Organizer	Date	Certificates/ Prizes won, if any
1.	International Journal of Creative research thoughts	2/2/2023	Certificate
2.			
3.			
4.			

Attach attested copy of certificate(s)

10. Rubrics

A. Idea Inception

Grade (Grade Point)	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Parameter				
Problem Definition and Scope of the Project	9			
Literature Survey	9			
Software Engineering Approach		8		
Requirement Analysis		8		

B. Implementation

Grade (Grade Point)	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Parameter				
Implementation- Design, platform, coding,	✓ 9			
Optimization considerations(Memory, time, Resources, Costing)		✓ 8		
Thorough Testing of all modules	✓ 9			
Integration of modules and project as whole	✓ 9			

C. Documentation

Grade (Grade Point)	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Parameter				
Proposal		✓ 8		
Project Report	✓ 9			
Quick references		✓ 8		
System manual		—		
Installation Guide		—		
Work Book		—		

D. Demonstration

Grade (Grade Point)	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Parameter				
Project Presentation and Demonstration (User Interface, ease of use, usability)		✓ 8		
Understanding individual capacity & involvement in the project	✓ 9			
Team Work (Distribution of work, intra-team communication and togetherness)	✓ 9			
Outcomes / Usability	✓ 9			

E. Contest Participation / Awards, Publications and IPR

Grade (Grade Point)	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Parameter				
Participation in various contests	✓ 9			
Appreciation and Awards	✓ 9			
Publications		✓ 7		
Copyright	✓	✓ 8		
Patent		—		
Commercial value /product conversion of Work		—		

F. Environment & Ethics (solution to problems considering)

Grade (Grade Point)	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Parameter				
social	✓ 9			
safety	✓ 9			
environmental		—		
ethical	✓ 9	—		
Legal issues		—		

Annexure I: Format for Final Proposal

Title Page

- Project Group ID
- Title of the project
- Domain such as Databases, Data Mining, Image processing, WSN, Web technology etc.
- Team Member (PRN, Roll No, Name, Role/Task assigned, email, mobile & sign)
- Sponsorship details, if any (Name, External Guide name and Designation with Signature, e- Mail ID)
- Internal Guide(with signature of approval)
- Type of Project
- Mentor(PG Student/Alumni/other)
- TE students associated with:(Roll No, Name)

Inner Pages:

- Keywords (ACM Keywords)
- Problem Definition
- Abstract
- Process Diagram, System architecture, List of modules, and functionalities
- Literature survey (Study, Current market survey: similar systems/products available, their pros and cons.
- Objectives
- Scope of the project
- Software and hardware requirements
- Expected Outcomes
- Probable date of completion
- References (This should include the list of books, magazines, research papers, web links etc. referred by the students)

Annexure II: System Requirement Specification

Software requirement Specification is a detailed write-up indicating the requirements that the project demands. It contains actual detailed problem definition. The definition should include all that is to be done and is to be developed in the final software and / or Hardware (product) that has to be generated form the years work (User's point of view). The entries under this section are to be categorized as,

1. Necessary functions,
2. Desirable functions, and others

Requirement may not be final and provision should be available to add features dynamically without affecting the actual flow and design of the document. Modified requirements (after doing feasibility study) are to be prepared under all the 3 categories listed above form the developer's point of view. The requirements listed herein should be feasible technically form the software/ Hardware point of view.

It should include following important requirements.

1. **Detailed Problem Definition**
2. **External Interface Requirements**

- User interfaces
- Hardware Interfaces
- Software Interfaces
- Communication Interfaces

3. **System Features**

- Feature 1
- Feature 2 etc.

4. **Other Non- functional requirements.**

- Performance requirements
- Safety requirements
- Software Quality attributes

Annexure III Partial Project Report (Semester I)

A preliminary report of project work (Partial Project Report) is to be prepared as per the guideline given below using Latex and is to be submitted at the end of semester I.

Title Page

First page containing Name, Topic Name, Guide Name, Year, Branch, and College Name etc.

Certificate

- Certificate
- Project approval sheet
- Certificate by the sponsoring authority, if any.

Acknowledgements (if any)

Thanking any person / staff member / friend if to be done so.

Abstract

A minimum of 100 words briefing the topic in consideration.

Keywords

A minimum of 5 and maximum of 10

Introduction

Introduction includes briefing of the details to follow, details of project work, objectives, scope of the project, motivation and organization of report.

Literature Survey

The purpose of the literature survey is to identify information relevant to project work and the potential and known impacts of it within the project area. This section should include a comprehensive report of current market survey done with respect to problem. Include study of similar systems available, if any along with their pros and cons. identify those areas where there is an absence or scarcity.

Design Details (Phase I to IV)

Phase I: Requirements Analysis

The Group is to submit a detailed write - up indicating the requirements that the project demands, viz.

- Actual detailed problem definition.
- The definition is to include all that is to be done and is to be put up in the final software and / or
- Hardware (product) that is to be generated from the years work (User's point of view).

Requirement may not be final and provision should be available to add features dynamically without affecting the actual flow and design of the document.

Modified Requirements (After doing feasibility study) are to be prepared under all the 3 categories listed above from the developer's point of view. The requirement listed herein should be feasible technically from the software / Hardware point of view.

Follow the standard format of SRS.

Phase II: Analysis Phase

The group (based on Phase I) is to suggest the paradigm followed by them in the project. The paradigm should be justifiable from Phase I. The various stages and work to be completed under them is to be indicated in detail.

Phase III: Design Phase

ERDs (Optional, decide in consultation with guide)

- The group is to draw the ERD (Entity Relationship Diagram) for the project. (This should be justifiable with regard to Phase I & II)
- The ERD after getting evaluated (by dry running) is to be analyzed for incompleteness from any point of view.
- The ERD thus validated should be made fair in a presentable fashion.
- This ERD is to be included in the Report.

IF

The project group is to follow an "Object Oriented" Approach for their Project.

THEN

- The group should all UML (Unified Modeling Language) diagrams for the project.
- These diagrams are to be refined in every aspect for this report (as per requirements finalized in phase I)
- Proper notations are to be used in all the figures drawn.
- Proper Color-coding if required is to be used.
- Extensions to diagrams / customizations may be done and represented (if the project demands it)

ELSE (groups following Structured Approach)

- The group should draw the DFD-s (Data Flow Diagrams) for the Project. (These should be justifiable with respect to Phase I, II and the ERD)
- DFD Level 0, Level 1, Level 2 should be drawn in an evolutionary fashion (No entries to appear in Level 2 unless they are in Level 1, which in turn are in Level 0)
- The DFD's are to be validated and made final in a presentable fashion.
- Proper Color- coding is expected
- Extensions to DFD-s may be represented (if the project demands it)

Phase - IV: Planning Phase

- The group should finalize the Front End/ Back End required for the project as per the demands of the project(Software and / or hardware)
- The Front End/ Back End should be justifiable depending on the complexity of the project.
- The structure of the database should be finalized depending on the complexity of the project.
- Any Normalization required on the database is done so as to ensure correctness for the future phase.
- Coding Language / Methodology should be finalized/
- Time requirement to be finalized and indicated
- Actual project plan including major milestones should be decided and finalized
- Rough estimates of lines of code / functions / routines to be made.
- Rough estimates of lines of code / Objects / Classes to be made (for Groups following OO Paradigm)

- Software Reuse /Re - Engineering possibilities are to be expected and indicated
- Software and Hardware requirement.
- Probable date of completion.
- Scope of the project.
 - A prototype is expected which basically includes all the MAJOR features in the project.
 - The GUI/ Front end should be prepared.
 - The structure of the database / back end (if any) to be indicated.
 - The prototype is built basically to give a feel of the actual software and / or hardware (Product) that is expected
 - Major routines / Functions are expected.

Conclusions

Write conclusions drawn from the work done with atleast 50 words.

References

List out Books, Magazines, Thesis, Journals, Web links etc referred in IEEE format

Plagiarism Check Report

Annexure IV: Format for Project Report (Semester II)

A report of project work has to be prepared as per the guidelines given below using Latex and should be submitted at the end of semester II along with CD containing (copy of Partial Project Report, Final Project Report along with .tex files, Power point presentation, copy of base paper and reference papers, executable Project Code, supportive software platform for the project execution).

- **First page as per standard college reports**

First page containing Name, Topic Name, Guide Name, Year, Branch, and College Name etc. (see format displayed herewith)

- **Certificate** (will be provided by college)

Dissertation approval sheet (see format displayed herewith) Also attach certificate certifying the project work done approved by the sponsoring authority, if any.

- **Abstract**

A minimum of 100 words briefing the topic in consideration.

- **Keywords**

A minimum of 5 and maximum of 10

- **Index**

Details of various Topics, Sub-Topics, with Page No. Figure Index, giving details of page number, figure number and figure caption Table Index, giving details of page number, table number and table caption (If any) Index of Pseudo-code / Sample code (If any)

I) Introduction

Minimum of 200 words, giving some briefing of the details to follow.

- Detailed problem definition

- Justification of problem

- Need for the new system

- Advances/additions/updating the previous system

- Presently available systems for the same

- Purpose of your system

- Organization of the report

This section should be relevant to the Literature Survey done and reported in the partial project report. The purpose of the literature survey is to identify information relevant to project work and the potential and known impacts of it within the project area. This section should include a comprehensive report of current market survey done with respect to problem. Include study of similar systems available, if any along with their pros and cons. identify those areas where there is an absence or scarcity.

II) Analysis

- Project plan

- Requirement analysis

- Team structure

The Group has to submit a detailed write-up indicating the requirements that the project demands-

Actual detailed problem definition

The definition should include all that has to be done and developed in the final software and / or Hardware (product) that will be generated from the years work (User's point of view).

The entries under this section are to be categorized as-

1. Necessary functions,
2. Desirable functions,
3. Others

Requirement may not be final and provision should be available to add features dynamically without affecting the actual flow and design of the document. Modified Requirements (after doing feasibility study) are to be prepared under all the 3 categories listed above from the developer's point of view. The requirements listed herein should be feasible technically from the Software / Hardware point of view. The new list should be categorized in the 3 categories listed above. (Follow the IEEE format of SRS)

The group is to suggest the Paradigm followed by them in the Project. The Paradigm should be justifiable from Phase I. The various stages and work to be completed under them has to be indicated in detail.

III) Design

- Software Requirement Specification(SRS) format is as given below.
- Risk assessment
- Brief discussion on Project plan submitted in semester I including major milestones

and the work done as per it.

IV) Modeling

- UML diagrams (all 9)
- ERD & Normalization (NF) for database (if any)
- The group should draw the ERD (Entity Relationship Diagram) for the Project. (This should be justifiable with regard to Phase I & II)
 - The ERD after getting evaluated (by dry running) should be analyzed for incompleteness from any point of view
 - The ERD thus validated should be made fair in a presentable fashion
 - This ERD is to be included in the Report

IF

The project group is to follow an "Object Oriented "Approach for their Project.

THEN

- The group should prepare all UML (Unified Modeling Language) diagrams for the project
- These diagrams are to be refined in every aspect for this report (as per requirements finalized in phase I)
- Proper notations are to be used in all the figures drawn
- Proper Color-coding if required is to be used
- Extensions to diagrams / customizations may be done and represented (if the project demands it)

ELSE (groups following Structured Approach)

- The group is to draw the DFD-s (Data Flow Diagrams) for the Project.
(These should be justifiable with respect to Phase I, II and the ERD)
- DFD Level 0, Level 1, Level 2 should be drawn in an evolutionary fashion (No entries to appear in Level 2 unless they are in Level 1, which in turn are in Level 0)
- The DFD-s are to be validated and made final in a presentable fashion.
- Proper notations are to be used in all the figures drawn
- Proper Color-coding is expected
- Extensions to DFD-s may be represented (if the project demands it)

V) Coding

- Software used
- Hardware specification
- Programming language
- Platform
- Components
- Tools
- Coding Style Format

V) Test data Sets, Result and Analysis**VI) Testing**

- Format technical reviews
- Test plan
- Test cases
- Test results

(Unit, integration, regression, system, α, β)

VII) Configuration Management Plan**VIII) Software Quality Assurance Plan**

- * Costing (Time, Money and Resources)

(Do not include costing in the project report; submit to the guide)

Conclusion

Conclusions in atleast 50 words based on work done

References

List out Books, Magazines, Thesis, Journals, Web links etc referred in IEEE format

Glossary

In Keyword Alphabetical Order Ascending along with Page numbers

Plagiarism Check Report

Annexure V: Project Report Formatting Guidelines

- 1) **Report Size:** Limit your Project report to preferably 25- 40 pages for partial project report. Limit your Project report to preferably 80-100 pages for final project report.
- 2) **Footer:** The footer "Department of Computer Engineering, BVCOEW, Pune" should be included. It should be TIMES NEW ROMAN 10 pt and centrally justified.
- 3) **Header:** Project Title centered and page nos. on right should be included. Start numbering from introduction.
- 4) **Paper Size:** A4 Size, bond paper.
- 5) **Margins:** Mirrored.
 1. Top : 1 inch
 2. Bottom : 1 inch
 3. Inside : 1.25 inch
 4. Outside : 1 inch
- 6) **Line Spacing:** 1.5 lines
- 7) **Title of Chapter:**
 1. Font : Arial (Bold face, Capital,)
 2. Size : 16 pt, Alignment: centered
- 8) **All Topics heading:**
 - i. First order Heading: (for example -1. Introduction)
 1. Font : Times New Roman(Bold Face)
 2. Size : 14 pt
 - ii. Second order Heading: (for example -1.1 Evolution)
 1. Font : Times New Roman(Bold Face)
 2. Size : 12 pt
 - iii. Third order Heading: for example -1.1.1 Image Processing
 2. Size : 12 pt
 - 3.
- 9) **Text:**
 1. Font : Times New Roman(Bold Face)
 2. Size : 12 pt
- 10) **Figures and Tables:**
 1. Caption: (for figures below the figure and for tables above the table)
 2. Font: Garamond(Bold)
 3. Size: 11 pt
 4. Alignment: Center
- 11) **References :**
 - . Book
Author name(s), Book Title, Publisher, Copyright Year, page nos. if any.
 - . Journal/ Magazine/ Periodical
Author name(s), paper name, Journal/ Magazine/ Periodical name, issue no., page nos.
- . **Web Resources**
 Complete URL including File name.
- Plagiarism Check Report**

Annexure VII: Report Documentation

Report Documentation

Report Documentation			
Report Code: CS-BE-Project	2018-2019	Report Number: < >	
Report Title:			
Address (Details): Bharati Vidyapeeth's College of Engineering for Women, Pune-43 Pune Satara Road Pune.			
Author 1 [with Address, phone, E-mail]: Address E-mail : Roll: <Roll Number> Cell No	Author 2 [with Address, phone, E-mail]: Address E-mail : Roll: <Roll Number> Cell No	Author 3 [with Address, phone, E-mail]: Address E-mail : Roll: <Roll Number> Cell No	Author 4 [with Address, phone, E-mail]: Address E-mail : Roll: <Roll Number> Cell No
Year: 2018-19 Branch: Computer Engineering			
<u>Key Words:</u> <Keywords in the Report>			
Type of Report: FINAL	Report Checked By:	Report Checked Date:	Guides Complete Name: <Guide's Complete Name>
Total Copies			
Abstract: <A Brief Abstract of the Seminar>			
NOTE – This table should not go beyond this page. Scale down the Abstract if it does not fit in one page. Take guide's Signature in the "Report Checked By:" Cell and Date of Signature in the "Report Checked Date:" Cell. This page is the last page of the projects report and is NOT to be included in the "Page Count"			

Annexure VIII: Software Engineering Code of Ethics and Professional Practices

(Courtesy / Reference- <http://www.acm.org/about/code-of-ethics>)

Computers have a central and growing role in commerce, industry, government, medicine, education, entertainment and society at large. Software engineers are those who contribute by direct participation or by teaching, to the analysis, specification, design, development, certification, maintenance and testing of software systems. Because of their roles in developing software systems, software engineers have significant opportunities to do good or cause harm, to enable others to do good or cause harm, or to influence others to do good or cause harm. To ensure, as much as possible, that their efforts will be used for good, software engineers must commit themselves to making software engineering a beneficial and respected profession. In accordance with that commitment, software engineers shall adhere to the following Code of Ethics and Professional Practice.

The Code contains eight Principles related to the behavior of and decisions made by professional software engineers, including practitioners, educators, managers, supervisors and policy makers, as well as trainees and students of the profession. The Principles identify the ethically responsible relationships in which individuals, groups, and organizations participate and the primary obligations within these relationships. The Clauses of each Principle are illustrations of some of the obligations included in these relationships. These obligations are founded in the software engineer's humanity, in special care owed to people affected by the work of software engineers, and the unique elements of the practice of software engineering. The Code prescribes these as obligations of anyone claiming to be or aspiring to be a software engineer.

Software engineers shall commit themselves to making the analysis, specification, design, development, testing and maintenance of software a beneficial and respected profession. In accordance with their commitment to the health, safety and welfare of the public, software engineers shall adhere to the following Eight Principles:

1. PUBLIC - Software engineers shall act consistently with the public interest.
2. CLIENT AND EMPLOYER - Software engineers shall act in a manner that is in the best interests of their client and employer consistent with the public interest.
3. PRODUCT - Software engineers shall ensure that their products and related modifications meet the highest professional standards possible.
4. JUDGMENT - Software engineers shall maintain integrity and independence in their professional judgment.
5. MANAGEMENT - Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.
6. PROFESSION - Software engineers shall advance the integrity and reputation of the profession consistent with the public interest.
7. COLLEAGUES - Software engineers shall be fair to and supportive of their colleagues.
8. SELF - Software engineers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.

Environment and Computing-

Information and communication technologies (ICTs) have been contributing to environmental problems: computers, electronic devices and ICT infrastructure consume significant amounts of electricity, placing a heavy burden on our electric grids and contributing to greenhouse gas emissions. In 2007, the total footprint of the ICT sector -

including personal computers (PCs) and peripherals, telecoms networks and devices and data centers - was 830 Mt CO₂ emission, about 2% of the estimated total emissions from human activity released that year (a figure equivalent to aviation). ICT hardware poses severe environmental problems both during its production and its disposal. Each stage of a computer's life, from its production, throughout its use, and into its disposal, presents environmental problems. Manufacturing computers and their various electronic and non-electronic components consumes electricity, raw materials, chemicals, and water, and generates hazardous waste. All these directly or indirectly increase carbon dioxide emissions and impact the environment and the trend is to increase in the BAU (Business As Usual) scenario.

Green Computing-

Hence you all our students are requested to follow green computing practices. Green computing is the study and practice of designing, manufacturing, using, and disposing of computers, servers, and associated subsystems — such as monitors, printers, storage devices, and networking and communications systems —efficiently and effectively with minimal or no impact on the environment. Green computing includes the dimensions of environmental sustainability, the economics of energy efficiency, and the total cost of ownership, which includes the cost of disposal and recycling. Green computing benefits the environment by improving energy efficiency, lowering greenhouse gas emissions, using less harmful materials, and encouraging reuse and recycling. Green design, Green manufacturing, Green use, Green disposal are complementary paths of green ICT. Only focusing on these four fronts we can achieve total environmental sustainability from the IT side and make IT greener throughout its entire lifecycle.

Social Life and Computing-

Each IT professional must keep in mind the three key components of a corporate Green IT best practices policy -Environment, Economy and Social aspect. The invention of the computer has completely changed the way we live our lives. Nearly everything is controlled by a computer; cars, satellites, phones, etc. Computers have made our lives easier. Computers can also have positive effects on a person's social life when their power to connect over great distances is harnessed fully. Computers have both positive and negative impact in our society. While technology is a wonderful thing it is almost likely that it can be used in an immoral or wrong way. There is a price to pay for everything even if it appears it's making life easier on people.

While proper lifecycle management can greatly boost a IT company's ecological and environmental sustainability position, it can also contribute to achieving goals on the social front. Hardware retirement practices are the primary concern in this regard. In addition to seeking carbon neutrality, a proper asset retirement strategy should seek sustainability in the communities where companies operate.

The following social objectives should be considered:

1. To optimize sustainability in their IT infrastructure, companies should focus on each state of the IT lifecycle
2. Setting the Appropriate Corporate Sustainability Policy
3. Avoiding unethical labor practices and Controlling unethical exports
4. Accountability in the Recycling e-waste and Sustainability Metrics and Reporting
5. Greater Transparency Regarding Material Analysis and Extraction
6. Compliance with stringent, evolving security regulations



Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Department of Information Technology

Final Year Project Work

Academic Year: 2022-23

Project Title	: Identifying the psychological impact of online games and social media using artificial intelligence
Project Area	: Artificial Intelligence, Healthcare, Psychological well-being
Internal Guide	: Prof. Dr. Ketaki Malgi

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology

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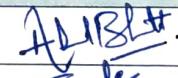
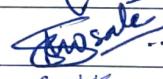
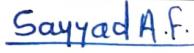
- 1. Undertaking by Students.**
- 2. Project Schedule**
- 3. Group Details**
- 4. Abstract Format**
- 5. Monthly Planning Sheet (Semester – I)**
- 6. Project Review – I Check List**
- 7. Performance Evaluation Sheet – I (Review – I)**
- 8. Project Review – II Checklist**
- 9. Performance Evaluation Sheet – II (Review – II)**
- 10. Monthly Planning Sheet (Semester – II)**
- 11. Project Review – III Checklist**
- 12. Performance Evaluation Sheet – III (Review – III)**
- 13. Project Review – IV Checklist**
- 14. Performance Evaluation Sheet – IV (Review – IV)**
- 15. Evaluation Summary Sheet (Review – I to IV)**
- 16. Project Report Format**
- 17. Participation in Project Competition.**
- 18. Paper Publications. (If any)**
- 19. Examination Evaluation Guidelines**
- 20. Examination Evaluation Sheet (Semester-I)**
- 21. Examination Evaluation Sheet (Semester-II)**

SEMESTER-I

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology

UNDERTAKING BY STUDENTS

We, the students of B.E.I.T. are hereby assure that we will follow all the rules and regulations of SPPU related to the project work for the academic year. The Project entitled- Identifying the psychological impact of online games and social media using artificial intelligence will be fully designed and developed by us and no part of the project/full project will be designed and developed by any external entity or copied from some external resources. We are fully aware that copying or taking help of any external agency in the development of our project is unethical and illegal. The examiners have /University has full rights to initiate an action against us as per university norms if involved in unfair/illegal/unethical work.

Sr. No.	Roll No.	Name of Student	Signature
1	4308	BHATT AACHAL ANAND	
2	4309	BHOSALE SIMANTINI MANOJKUMAR	
3	4326	SAPANA SUNIL GONARKAR	
4	4364	SAYYAD ALFIJA FARUK	

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology

Rules & Regulations

1. All students must enter the correct information in the workbook.
2. All the entries in the project workbook must be verified by the concerned project guide.
3. Students must report to their respective guide on project day as per the timetable.
4. Activities of the project work should be completed as per the project plan only.
5. Project group must submit soft copies of Project Abstract, Project Report and Publications in PDF format only.
6. Project group members submit two hard copies of Project Report in the format provided by the department.
7. Project workbooks must be brought at the time of Project Reviews & Project Examination.
8. Any changes, if any, must be countersigned by the concerned project guide.
9. For project reviews and project examination, all students must report 15 minutes before the scheduled time.
10. For any query, concerned guide should be consulted.

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
(Academic Year: 2022-2023)

PROJECT WORK SCHEDULE

Sr. No.	Activity Scheduled	Date
SEMESTER I		
1.	Registration of Project Groups	23-7-22
2.	Project Topic Submission	23-7-22
3.	Allocation of Guide	29-8-22
4.	Submission of Abstract to Project Guide and Project Coordinator in the Prescribed Format	20-9-22
5.	Project Review - I	17-9-22
6.	Project Review - II	
7.	Verification of Project Workbook by Internal Guide (before submission of Preliminary Project Report)	15-10-22
8.	Submission of Final Preliminary Project Report in Prescribed Format	5-11-22
	External Term-work Evaluation (After Theory Examination)	
SEMESTER II		
1.	Project Review - III	13-2-23
2.	Project Review - IV	19-5-23
3.	Submission of Draft Copy of Final Project Report to Guide	24-5-23
4.	Verification of Project Book by Internal Guide (before submission of Final Project Report)	26-5-23
5.	Submission of Final Project Report in Prescribed Format	29-5-23
	Final Project Examination (After Theory Examination)	3-6-23

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
(Academic Year: 2022-2023)

Project Group No.: 06

College Code :4034

Project Title: Identifying the psychological impact of online games and social media using artificial intelligence

GROUP DETAILS:

Sr. No.	Roll No.	Name of the Student	Mobile No.	Email id	T. E. Result
1	4308	BHATT AACHAL ANAND	7666283132	aachalbhatt18@gmail.com	9.81
2	4309	BHOSALE SIMANTINI MANOJKUMAR	7719987304	simantinibhosale0130@gmail.com	9.38
3	4326	SAPANA SUNIL GONARKAR	808276629	sapanagonarkar10@gmail.com	9.50
4	4364	SAYYAD ALFIJA FARUK	7666593033	alfijasayyad1511@gmail.com	9.79

Ketaki Naik
Name & Signature Internal Guide

APL
Signature of Head of
Department of Information Technology

Mobile No.: 9423200138.

Email id: ketaki.naik@bharatividyapeeth.edu

SL

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
(Academic Year: 2022-2023)

Project Title: Identifying the psychological impact of online games and social media using artificial intelligence.

Project Group No.:06	Guide Name: Prof. Dr. Ketaki Malgi
-----------------------------	---

GROUP MEMBERS:

Roll No. / Seat No.	Name of Student	Project Area	Project Platform
4308	BHATT AACHAL ANAND	Artificial Intelligence,	Django Framework
4309	BHOSALE SIMANTINI MANOJKUMAR	Healthcare, Psychological well-being	
4326	SAPANA SUNIL GONARKAR		
4364	SAYYAD ALFIJA FARUK		

Abstract

Online gaming is a major trend all over the world. Everyone is fond of playing games and using social media. But these games have pros and cons. The aim is to study the impact of online games and social media on an individual's psychological well-being using artificial intelligence. This year the World Health Organization (WHO) declared addiction of online gaming is a type of mental disorder. Especially depression, anxiety, and loneliness. To identify the probability of an individual whether addicted or not, the concept of Logistic Regression model is used. This model helps to separate the relative effectiveness of various interventions for various categories of people such as young/old or male/female. For understanding the input NLP concept is used.

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Department of Information Technology
(Academic Year: 2022-2023)

Semester - I

Weekly Planning Sheet

Academic Year:2022-2023

Week No.	Activity Planned	Activity Completed Status	Student Signature	Guide Signature
Week 1	Finalization of Domain and Project Title, Problem statement.	Finalization of Domain and Project Title, Problem statement.	ALIBRIT Sop Sayed AF	
Week 2	Identification of gaps as per reference papers	Identification of gaps as per reference papers	ALIBRIT Sop Sayed AF	
Week 3	Finalization of Motivation, Objectives, and Scope of the project.	Finalization of Motivation, Objectives, and Scope of the project.	ALIBRIT Sop Sayed AF	Kamalor
Week 4	System overview- proposed system and expected outcomes.	System overview- proposed system and expected outcomes.	ALIBRIT Sop Sayed AF	
Week 5	Architecture and initial phase of design (DFD).	Architecture and initial phase of design (DFD).	ALIBRIT Sop Sayed AF	
Week 6	Identification UGC Care Listed journal for Paper Publication and draft preparation.	Identification UGC Care Listed journal for Paper Publication and draft preparation.	ALIBRIT Sop Sayed AF	
Week 7	User and System Requirements. Functional and Non-functional Requirements.	User and System Requirements. Functional and Non-functional Requirements.	ALIBRIT Sop Sayed AF	Kamalor
Week 8	SRS Document, Writing structures SRS as per Problem Statement, Requirement Analysis / Models.	SRS Document, Writing structures SRS as per Problem Statement, Requirement Analysis / Models.	ALIBRIT Sop Sayed AF	
Week 9	UML/ER Diagrams.	UML/ER Diagrams.	ALIBRIT Sop Sayed AF	
Week 10	Detail architecture / System design/ Algorithms with analysis / Methods / Techniques.	Detail architecture / System design/ Algorithms with analysis / Methods / Techniques.	ALIBRIT Sop Sayed AF	Kamalor

Week 11	Detailed Design (DFD levels as per the problem statement).	Detailed Design (DFD levels as per the problem statement).	<i>ALIB for Sayed A.S. Sayed A.S.</i>
Week 12	GUI building and coding	GUI building and coding	<i>ALIB for Sayed A.S. Sayed A.S.</i>

Kamaloo
Project Coordinator

Dr. I. A. Malg.

Kamaloo
Internal Guide

Dr. I. A. Malg.

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
PROJECT REVIEW – I
(Academic Year: 2022-2023)

Group Id:	06	Date: 17-9-22
Project Title: Identifying the psychological impact of online games and social media using artificial intelligence		
Sr. No.	Roll No.	Student Name
1	4308	BHATT AACHAL ANAND
2	4309	BHOSALE SIMANTINI MANOJKUMAR
3	4326	SAPANA SUNIL GONARKAR
4	4364	SAYYAD ALFIJA FARUK

Project STATEMENT	
1. Is the statement short and concise (10-20 words maximum)?	✓ Y / N / NA / NC*
2. Does the statement gives clear indication about what your project will accomplish?	✓ Y / N / NA / NC*
3. Can a person who is not familiar with the project understand scope of the project by reading the Project Problem Statement?	✓ Y / N / NA / NC*
REQUIREMENT: SCOPE AND OBJECTIVES	
Does the Scope and Objectives establish the "context" for the proposed project by referencing to the following elements:	
a. Are all aspects of the requirements document (i.e., Functional Spec.) addressed in the design?	✓ Y / N / NA / NC*
b. Is the architecture / block diagram well defined and understood?	✓ Y / N / NA / NC*
c. The project's objective of study (what product, process, resource etc.) is being addressed?	✓ Y / N / NA / NC*
d. The project's purpose is the purpose of project addressed properly (why it is being pursued: to evaluate, reduce, increase, etc.)?	✓ Y / N / NA / NC*
e. The project's viewpoint: Is the project's viewpoint is understood? (Who is the project's end user)?	✓ Y / N / NA / NC*
f. Is the project goal statement being in alignment with the sponsoring organization's business goals and mission?	✓ Y / N / NA / NC*
ANALYSIS	
1. Is information domain analysis complete, consistent, and accurate?	✓ Y / N / NA / NC*
2. Is problem statement categorized in identified area and targeted towards specific area therein?	✓ Y / N / NA / NC*
3. Are external and internal interfaces properly defined?	✓ Y / N / NA / NC*
4. Does the Use Case Model accurately reflect the actors and their roles and responsibilities?	✓ Y / N / NA / NC*
5. Are all requirements traceable to system level?	✓ Y / N / NA / NC*
6. Is similar type of methodology / model is used for existing work	✓ Y / N / NA / NC*
7. Are requirements consistent with schedule, resources, and budget	✓ Y / N / NA / NC*

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Department of Information Technology

PROJECT REVIEW – I

(Academic Year: 2022-2023)

STUDENT PERFORMANCE EVALUATION

Students' Contribution and Performance		Marks (25)			
Particulars		Group Members			
		1	2	3	4
1. Background and Topic (4 M)		4	4	4	4
2. Project Scope and Objectives (4M)		4	4	4	4
3. Literature Survey (5 M)		5	4	4	4
4. Project Planning (4 M)		4	4	4	4
5. Presentation Skills (4 M)		3	4	3	3
6. Question and Answer (4 M)		4	4	4	4
Total(25M)		24	24	23	23
Comments (if any)					

To be filled by internal guide & reviewer(s) only.

* Whether the presentation / evaluation is as per the schedule.: YES / NO (If NO mention the reasons for the same.)

Review – I: Deliverables

- Problem Statement / Title
- Purpose, Scope, Objectives
- Abstract (System Overview)
- Introduction (Architecture and High-level Design)
- Literature Survey
- References
- Project Plan 1.0

Name & Signature of evaluation committee -

Neeru

Name of Reviewer 1

Prof. A. V. Kanade

Patel

Name of Reviewer 2

Prof. K. V. Patil

Kamal

Name of Internal Guide

Dr. K. A. Maigni

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
PROJECT REVIEW – II
(Academic Year: 2022-2023)

Group Id:	06	Date: 15-10-22		
Project Title: Identifying the psychological impact of online games and social media using artificial intelligence				
Sr. No.	Roll No.	Student Name	Contact Details	Internal Guide Details
1	4308	BHATT AACHAL ANAND	7666283132	Guide Name: Prof. Dr. Ketaki Malgi
2	4309	BHOSALE SIMANTINI MANOJKUMAR	7719987304	
3	4326	SAPANA SUNIL GONARKAR	808276629	
4	4364	SAYYAD ALFIJA FARUK	7666593033	

DESIGN	
1. Are requirements reflected in the system architecture?	Y / N / NA / NC*
2. Does the design support both project (product) and project goals?	Y / N / NA / NC*
3. Does the design address all the issues from the requirements?	Y / N / NA / NC*
4. Is effective modularity achieved and modules are functionally independent?	Y / N / NA / NC*
5. Are structural diagrams (Class, Object, etc.) well defined and understood?	Y / N / NA / NC*
6. Are all class associations clearly defined and understood? (Is it clear which classes provide which services)?	Y / N / NA / NC*
7. Are the classes in the class diagram clear? (What they represent in the architecture design document?)	Y / N / NA / NC*
8. Is inheritance appropriately used?	Y / N / NA / NC*
9. Are the multiplicities in the use case diagram depicted in the class diagram?	Y / N / NA / NC*
10. Are behavioral diagrams (use case, sequence, activity, etc.) well defined and understood?	Y / N / NA / NC*
11. Is aggregation/containment (if used) clearly defined and understood?	Y / N / NA / NC*
12. Does each case have clearly defined actors and input/output?	Y / N / NA / NC*
13. Is all concurrent processing (if used) clearly understood and reflected in the sequence diagrams?	Y / N / NA / NC*
14. Are all objects used in sequence diagram?	Y / N / NA / NC*
15. Does the sequence diagram match class diagram?	Y / N / NA / NC*
16. Are the symbols used in all diagrams correspond to UML standards?	Y / N / NA / NC*

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
PROJECT REVIEW – II
(Academic Year: 2022-2023)

Student's Contribution and Performance				
Particular s	Marks (25)			
	Group Members			
	1	2	3	4
1. System Architecture & Literature Survey (Review-I)	Y/N	Y/N	Y/N	Y/N
2. Project Design (5 M)	5	5	5	5
3. Methodology /Algorithms and Project Features (5 M)	4	5	4	5
4. Project Planning (2 M)	2	2	2	2
5. Basic details of Implementation (5 M)	5	5	5	5
6. Presentation Skills (4 M)	4	4	4	4
7. Question and Answer (4 M)	4	4	4	4
8. Summarization of ultimate findings of the Project	Y/N	Y/N	Y/N	Y/N
Total(25M)	24	25	24	25
Comments (if any)				

To be filled by an internal guide & reviewer(s) only.

* Whether the presentation / evaluation is as per the schedule.: YES / NO (If NO mention the reasons for the same.)

Review – II: Deliverables

- Problem Statement / Title
- Abstract
- Introduction
- Literature Survey (comparison with existing system)
- Methodology
- Design / algorithms/ techniques used
- Modules Split-up
- Proposed System
- Software Tools / Technologies to be used
- Proposed Outcomes
- Partial Report (Semester – I)
- Project Plan 2.0

Name & Signature of evaluation committee –

Name of Reviewer 1

Prof. A. V. Kanade

Name of Reviewer 2

Prof. K. V. Patil

Name of Internal Guide

Dr. K. A. Maigni

SEMESTER-II

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
(Academic Year: 2020-21)
Semester – II

Weekly Planning Sheet

Academic Year:

Week No.	Activity Planned	Activity Completed Status	Student Signature	Guide Signature
Week 1	Collection of relevant data required for Analysis	Collection of relevant data required for Analysis	ALIBRIT SAF Saqib SayyadAF	
Week 2	Data Cleaning to avoid misleading Model	Data Cleaning to avoid misleading Model	ALIBRIT SAF Saqib SayyadAF	
Week 3	Building the Prediction Model	Building the Prediction Model	ALIBRIT SAF Saqib SayyadAF	Kamalor
Week 4	Evaluation of Model	Evaluation of Model	ALIBRIT SAF Saqib SayyadAF	
Week 5	GUI for Registration and Login page	GUI for Registration and Login page	ALIBRIT SAF Saqib SayyadAF	
Week 6	Building GUI for Model	Building GUI for Model	ALIBRIT SAF Saqib SayyadAF	
Week 7	Prepare template of Challenges for all the users	Prepare template of Challenges for all the users	ALIBRIT SAF Saqib SayyadAF	Kamalor
Week 8	Prepare Solutions according to Level of Addiction	Prepare Solutions according to Level of Addiction	ALIBRIT SAF Saqib SayyadAF	
Week 9	Creation of Database	Creation of Database	ALIBRIT SAF Saqib SayyadAF	
Week 10	Integrating the Modules	Integrating the Modules	ALIBRIT SAF Saqib SayyadAF	
Week 11	Prepare Final Project Report	Prepare Final Project Report	ALIBRIT SAF Saqib SayyadAF	Kamalor
Week 12	Review and Project Submission	Review and Project Submission	ALIBRIT SAF Saqib SayyadAF	

Kamalor
Project Coordinator

Dr. I.S. A. Maig

Kamalor
Internal Guide

Dr. I.S. A. Maig

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
PROJECT REVIEW – III
(Academic Year: 2022-2023)

Group Id:		06	Date: 13-02-2023	
Project Title: Identifying the psychological impact of online games and social media using artificial intelligence				
Sr. No.	Roll No.	Student Name	Contact Details	Internal Guide Details
1	4308	BHATT AACHAL ANAND	7666283132	Guide Name: Prof. Dr. Ketaki Malgi
2	4309	BHOSALE SIMANTINI MANOJKUMAR	7719987304	
3	4326	SAPANA SUNIL GONARKAR	808276629	
4	4364	SAYYAD ALFIJA FARUK	7666593033	

Implementation (SOURCE CODE REVIEW CHECKLIST)	
a. Structure	
1. Does the code completely and correctly implement the design?	✓ Y / N / NA / NC*
2. Does the code comply with the Coding Standards?	✓ Y / N / NA / NC*
3. Is the code well-structured, consistent in style, and consistently formatted?	✓ Y / N / NA / NC*
4. Does the implementation match the design?	✓ Y / N / NA / NC*
5. Are all functions in the design coded?	✓ Y / N / NA / NC*
b. Documentation	
1. Is the code clearly and adequately documented?	✓ Y / N / NA / NC*
2. Are all comments consistent with the code?	✓ Y / N / NA / NC*

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
PROJECT REVIEW – III
(Academic Year: 2022-2023)

STUDENT PERFORMANCE EVALUATION

Students' Contribution and Performance		Marks (25)			
Particulars		Group Members			
		1	2	3	4
1. Architecture / System Design - (if any modification)		YY	YN	YN	YY
2. 50 % Implementation (10 M)		10	10	10	10
3. Partial results obtained (7 M)		7	6	7	6
4. Presentation skills (4 M)		4	3	3	4
5. Question and Answer (4 M)		3	4	4	4
6. Summarize the methodologies / Algorithms implemented / to be implemented		YY	YN	YN	YN
Total(25M)		24	23	24	24
Comments (if any)					

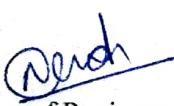
To be filled by an internal guide & reviewer(s) only.

* Whether the presentation / evaluation is as per the schedule.: YES / NO (If NO mention the reasons for the same.)

Review – III: Deliverables

- Detailed Design (if any deviation)
- 50% of code implementation
- Some Experimental Results
- Project Plan 3.0

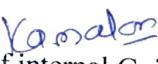
Name & Signature of evaluation committee -


 Name of Reviewer 1

Prof. A. V. Kanade


 Name of Reviewer 2

Prof. K. V. Patil


 Name of internal Guide

Dr. S. A. Malgi

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
PROJECT REVIEW – IV
(Academic Year: 2022-2023)

Group Id:	06	Date: 19-05-2023		
Project Title: Identifying the psychological impact of online games and social media using artificial intelligence				
Sr. No.	Roll No.	Student Name	Contact Details	Internal Guide Details
1	4308	BHATT AACHAL ANAND	7666283132	Guide Name: Prof. Dr. Ketaki Malgi
2	4309	BHOSALE SIMANTINI MANOJKUMAR	7719987304	
3	4326	SAPANA SUNIL GONARKAR	808276629	
4	4364	SAYYAD ALFIJA FARUK	7666593033	

IMPLEMENTATION AND TESTING	
1. Is every feature evaluated?	Y / N / NA / NC*
2. Are all functions, user screens and navigation evaluated? (e.g., module, object, integration, usability, system)	Y / N / NA / NC*
3. Are test cases designed? (Manual and automated)	Y / N / NA / NC*
4. Is the testing tool used?	Y / N / NA / NC*
5. Is the result analysis done properly and the appropriate conclusion drawn?	Y / N / NA / NC*
6. Implementation status (code completion in percentage)	
7. Final thesis status (in percentage)	

FILL IN BRIEF

Final results are known or not? :
 Quality of Presentation :
 List the chapter numbers of final report :
 Project Completion Date :
 Final Report Submission Date :

General

Is the LOGBOOK of the project
up-to-date and signed?

- NC – Not Clear
- NA – Not Applicable

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
PROJECT REVIEW – IV
(Academic Year: 2022-2023)
STUDENT PERFORMANCE EVALUATION

Students' Contribution and Performance		Marks (25M)			
Particulars	Group Members	1	2	3	4
1. Implementation (100%) (5 M)	5	5	5	5	5
2. Testing, Results and Performance Evaluation (5 M)	5	5	5	5	5
3. Final Project Report (5 M)	5	5	5	5	5
4. Publications (2 M)	2	2	2	2	2
5. Presentation skills (4 M)	4	4	4	4	4
6. Question and Answer (4 M)	4	4	4	4	4
Total(25M)	25	25	25	25	25

Comments (if any)

To be filled by internal guide & reviewer(s) only.

* Whether the presentation/evaluation is as per the schedule.: YES / NO (If NO mention the reasons for the same.)

Review – IV: Deliverables

- Detailed Design
- 100% of code implementation
- Experimental Results
- Performance Evaluation
- Test Cases
- Result Analysis and Conclusion
- Final Thesis
- Project Plan 4.0

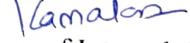
Name & Signature of evaluation committee -


Name of Reviewer 1

Prof. A. V. Kanade


Name of Reviewer 2

Prof. K. V. Patil


Name of Internal Guide

Dr. S. A. Malgudi.

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Department of Information Technology

PROJECT REVIEW – I TO IV

(Academic Year: 2022-2023)

Summary of Project Work Evaluation Sheet

Sr. No.	Roll No. / Exam. No.	Name of the Student	I	II	III	IV	Total	Student Signature
1	4308	BHATT AACHAL ANAND	24	24	24	25	97	<i>Aachal</i>
2	4309	BHOSALE SIMANTINI MANOJKUMAR	24	25	23	25	97	<i>Bhosale</i>
3	4326	SAPANA SUNIL GONARKAR	23	24	24	25	96	<i>Sapana</i>
4	4364	SAYYAD ALFIJA FARUK	23	25	24	25	97	<i>Sayyad A.F.</i>

Overall Remarks or Comments (if any)

Devda
Name of Reviewer 1

Prof. A. V. Kanade

Patil
Name of Reviewer 2

Prof. K. V. Patil

Kamal
DR. K. A. Malgi
Name of Internal Guide

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Department of Information Technology
(Academic Year: 2022-2023)

Participation in Project Competition/Event

Sr. No.	Name & Place of Project Competition / Exhibition	Date	Certificate / Prizes won (If any)
1.	AVISHKAR 2022 - Zonal Level Research Project Competition held at PCCOER, Ravet	07-12-2022	Certificate of Participation
2.	PRAKALP held at JSPM's Rajashri Shahu College of Engineering, Tathwade	23-03-2023	Certificate of Participation
3.	TECHNOVATIONS at Bharati Vidyapeeth's College of Engineering for Women, Dhankwadi	27-04-2023	Certificate of Participation
4.	AVINYA- TechFest at Bharati Vidyapeeth's College of Engineering for Women, Dhankwadi	27 and 28-04-2023	Certificate of Participation
5.	National Level Project Competition held at Smt. Kashibai Navale College of Engineering, Pune	04-05-2023	Certificate of Participation
6.	Project Competition 2023 held at PVGCOET & GKPIIM, Pune	05-05-2023	Certificate of Participation

Paper Publication / Presentation

Sr. No.	Name of the organizing society	Date	Certificate / Prizes Win (If any)
1.	International Conference on Recent Innovation in Intelligence Computing	10-03-2023	Certificate of Appreciation
2.	Journal of Data Acquisition and Processing	12-05-2023	

* Photocopy of the certificate must be attached to this page.

Kamala
Project Coordinator

Dr. K. A. Maigi

Kamala
Internal Guide

Dr. K. A. Maigi



JEPPIAAR
COLLEGE OF ARTS AND SCIENCE
(Affiliated to University of Madras)

**INTERNATIONAL CONFERENCE
ON RECENT INNOVATION IN INTELLIGENCE COMPUTING**

Organized by
DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS

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APPRECIATION**

This certificate of appreciation is awarded to **AACHAL BHATT** of

BHARATI VIDYAPEETH'S COLLEGE OF ENGG. FOR WOMEN for participating/ Presenting a paper entitled

A STUDY ON EFFECT OF ONLINE GAMES AND SOCIAL MEDIA ON HUMAN BRAIN.

Conference on Recent Innovation in Intelligence Computing held on March 10, 2023.

H. J. D.
CONVENOR / CO- CONVENOR

G. M. S.
HOD

J. J. S.
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INTERNATIONAL CONFERENCE ON RECENT INNOVATION IN INTELLIGENCE COMPUTING

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APPRECIATION

SIMANTINI BHOOSALE of

BHARATI VIDYAPEETH'S COLLEGE OF ENGL. FOR WOMENS Presenting a paper entitled

A STUDY ON EFFECT OF ONLINE GAMES AND in the International SOCIAL MEDIA ON HUMAN BRAIN .

Conference on Recent Innovation in Intelligence Computing held on March 10, 2023.

4-~~Aug~~

CONVENOR / CO- CONVENOR

G. M. W.

HOD

June

PRINCIPAL



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COLLEGE OF ARTS AND SCIENCE
(Affiliated to University of Madras)

**INTERNATIONAL CONFERENCE
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DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS

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APPRECIATION**

This certificate of appreciation is awarded to **ALFIJA SAYYAD** of

BHARATI VIDYAPEETH'S COLLEGE OF ENGLISH FOR WOMEN (or ~~for English~~) for ~~for English~~ / Presenting a paper entitled

**A STUDY ON EFFECT OF ONLINE GAMES
AND SOCIAL MEDIA ON HUMAN BRAIN.** in the International
Conference on Recent Innovation in Intelligence Computing held on March 10, 2023.

A. Jay
CONVENOR / CO- CONVENOR

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APPRECIATION**

This certificate of appreciation is awarded to SAPANA GONARKAR of
BHARATI VIDYAPEETH'S COLLEGE OF ENGG FOR WOMENS for Participating / Presenting a paper entitled
A STUDY ON EFFECT OF ONLINE GAMES AND SOCIAL MEDIA ON HUMAN BRAIN. in the international
Conference on Recent Innovation in Intelligence Computing held on March 10, 2023.

H. Jay
CONVENOR / CO-CONVENOR

L. M.
HOD

Devi
PRINCIPAL



SAVITRIBAI PHULE PUNE UNIVERSITY
Internal Quality Assurance Cell (IQAC)

AAVISHKAR - 2022

ZONAL LEVEL RESEARCH PROJECT COMPETITION

Certificate of Participation

This is to certify that Mr./Miss. Aachal Bhatt
of Bharati Vidyapeeth's College of Engineering College/Institute has participated in
Zonal Level Research for UG / PG / Post PG (M.Phil. / Ph.D.) at "**AAVISHKAR 2022**" Research
Festival, Under Engineering + Technology category, held at PCCOER, Ravet
during 7th December 2022


Coordinator

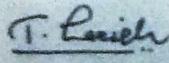

Principal


Prof. Sanjay Dhole
Director, IQAC

SAVITRIBAI PHULE PUNE UNIVERSITY
Internal Quality Assurance Cell (IQAC)
AAVISHKAR - 2022
ZONAL LEVEL RESEARCH PROJECT COMPETITION
Certificate of Participation

This is to certify that Mr./Miss. Simantki Bhosale of Gharati Vidyapeeth's College of Engineering College/Institute has participated in Zonal Level Research for UG / PG / Post PG (M.Phil. / Ph.D.) at "AAVISHKAR 2022" Research Festival, Under Engineering + Technology category, held at PCCOER, Ravet during 7th December 2022


Coordinator


Principal


Prof. Sanjay Dhole
Director, IQAC

JSPM'S
Rajarshi Shahu College of Engineering, Tathawade, Pune
(An Autonomous Institute Affiliated to SPPU)
Department of Information Technology

INNOVISION 2023

Presents

A Project Competition & Exhibition...

PRAKALP
"INNOVATION ACCOMPLISHED"

CERTIFICATE

OF PARTICIPATION
IS PRESENTED TO



IDBI BANK
Bank Aisa Dost Jaisa

Simantini Bhosale

for participating in the Project Competition and Exhibition held on
23 & 24 March 2023 organised by Department of Information Technology,
JSPM's Rajarshi Shahu College of Engineering, Tathawade, Pune-33.

Archana Jadhav

Prof. Archana Jadhav
FACULTY CO-ORDINATOR

Nihar Ranjan

Dr. Nihar Ranjan
HEAD OF DEPARTMENT

R. K. Jain

Dr. R. K. Jain
DIRECTOR

SARAS ROBOTICS
& ACTIVITY CENTER

SI-UK

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M CAD Solutions

JSPMS
Rajarshi Shahu College of Engineering, Tathawade, Pune
(An Autonomous Institute Affiliated to SPPU)
Department of Information Technology

INNOVISION 2023

Presents

A Project Competition & Exhibition...

PRAKALP
"INNOVATION ACCOMPLISHED"

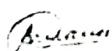
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OF PARTICIPATION
IS PRESENTED TO

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Bank Alsa Dost Jaisa

Alfiya Shyed

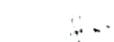
for participating in the Project Competition and Exhibition held on
23 & 24 March 2023 organised by Department of Information Technology,
JSPM's Rajarshi Shahu College of Engineering, Tathawade, Pune - 33.



Prof. Archana Jadhav
FACULTY CO-ORDINATOR



Dr. Nihar Ranjan
HEAD OF DEPARTMENT



Dr. R. K. Jain
DIRECTOR

SARAS ROBOTICS
& ACTIVITY CENTER

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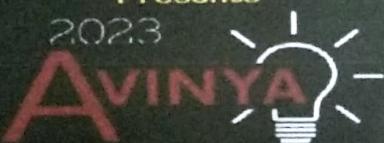
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M CAD Solutions



Bharati Vidyapeeth's College of Engineering for Women, Pune - 43

Affiliated to Savitribai Phule Pune University (Formerly University of Pune) approved by DTE, Govt. of Maharashtra and AICTE, Delhi

Presents



National Level Technical Festival

27th and 28th April, 2023

Certificate of Merit

This Certificate is awarded to Mr./Ms. _____

Bhatt Aachal Anand

of _____

BVCOEW

for participating / volunteering.

in _____

Project competition

at Avinya '23

He/She has won _____

Prize.


Prof. Dr. S. M. Rajbhoj
Coordinator


Prof. A. B. Vitekar
Co-Cordinator


Prof. R. M. Shamalik
Co-Cordinator


Prof. Dr. S. R. Patil
Principal

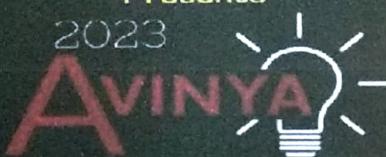




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Presents



National Level Technical Festival

27th and 28th April, 2023

Certificate of Merit

This Certificate is awarded to Mr./Ms. _____

Sapana Sunil Gonarkar

of _____ Bharati Vidyapeeth's College of
engineering for women, pune

for participating / volunteering.

in Avinay project competition

at Avinay '23

He/She has won _____

Prize.

Prof. Dr. S. M. Rajbhoj
Coordinator

Prof. A. B. Vitekar
Co-Cordinator

Prof. R. M. Shamalik
Co-Cordinator

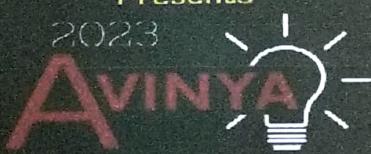
Prof. Dr. S. R. Patil
Principal



Bharati Vidyapeeth's College of Engineering for Women, Pune - 43

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Presents



National Level Technical Festival

27th and 28th April, 2023

Certificate of Merit

This Certificate is awarded to Mr./Ms.

of Bharati Vidyapeeth's College of
Engineering for Women, Pune
in Project Competition

He/She has won

Sayyad Alfija Faruk

for participating / volunteering
at AVINYA '23

Prize.

Prof. Dr. S. M. Rajbhoj
Coordinator

Prof. A. B. Vitekar
Co-Coordinator

Prof. R. M. Shamalik
Co-Coordinator

Prof. Dr. S. R. Patil
Principal



Pune Vidhyarthi Griha's College of Engineering and
Technology and G. K. Patel (Wani) Institute of Management



**DEPARTMENT OF COMPUTER ENGINEERING &
DEPARTMENT OF INFORMATION TECHNOLOGY**



CERTIFICATE OF PARTICIPATION

This is to certify that Mr./Ms. Sapana Gonarkar of Bharati Vidyapeeth's College of engineering for women pune has participated in the "Project Competition 2K23" held on 5th May, 2023 organized by the Department of Computer Engineering and Information Technology at PVGCOET & GKPM, Pune.

Prof. Deepak D. Sapkal
HoD Computer Dept.

Dr. Surendra A. Mahajan
HoD IT Dept.

Dr. Manoj R. Tarambole
I/C Principal



Sinhgad Institutes

SINHGAD TECHNICAL EDUCATION SOCIETY'S
SMT. KASHIBAI NAVALE COLLEGE OF ENGINEERING

14, L-Vindhan (Bldg.), off E. Sinhgad Road, Pune - 411011,

Department of Information Technology

"NATIONAL LEVEL PROJECT COMPETITION"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr./Ms. SAPANA GONARKAR has presented project at ***National Level Project Competition***, held at ***Department of Information Technology***, Smt. Kashibai Navale College of Engineering, Pune - 41 on 4th May 2023.



Prof. S. A. Bobade
Coordinator

Prof. A. D. Lendhe
Coordinator

Prof. Mrs. M. P. Desai
Coordinator

Dr. M. L. Bhangare
Coordinator

Dr. K. R. Berole
Vice Principal

Dr. A. V. Deshpande
Principal



IETE PUNE CENTRE

Raghuraj, 62, Indira Nagar, Erandawane, Pune - 411004. Phone : (020) 25449762 E-mail : ietepune5@gmail.com

CERTIFICATE

This is to certify that,

Mr./Miss.

Aachal Bhatt

Project Title **IDENTIFY IMPACT OF ONLINE GAME** from

BVCOEW

Participated in "National Level Project Competition 2023" arranged by The Institution of Electronics and Telecommunication Engineers, Pune on 27th April, 2023 at Bharati Vidyapeeth's College of Engineering for Women, Pune 411043.

Dr. Daulappa G. Bhalke
Hon. Secretary

Dr. Virendra V. Shete
Chairman

COORDINATORS

Dr. Pramod Kulkarni
DIT, Pimpri, Pune

Prof. Rageshri Bakre
MIT-ADT, Pune

Dr. Prabhakar Kota
MES, COE, Pune

Dr. Sharda Kore
BVCOEW, Pune

Dr. Yogesh Angal
JSPM's BSIOTR, Wagholi

Dr. Ravindra Kharadkar
Immdt. Past Chairman

Dr. Sunil Somani
Hon. Treasurer

Dr. Urmila Patil
Vice Chairman

Dr. Dnyaneshwar Mantri
Vice Chairman



IETE PUNE CENTRE

Raghuraj, 62, Indira Nagar, Erandawane, Pune - 411004. Phone : (020) 25449762 E-mail : ietepune5@gmail.com

CERTIFICATE

This is to certify that,

Mr./Miss.

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Participated in "National Level Project Competition 2023" arranged by The Institution of Electronics and Telecommunication Engineers, Pune on 27th April, 2023 at Bharati Vidyapeeth's College of Engineering for Women, Pune 411043.

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A STUDY ON EFFECT OF ONLINE GAMES AND SOCIAL MEDIA ON HUMAN BRAIN

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ABSTRACT

Online games and social media have become the most favorite leisure activity, any individual irrespective of age (kids, teenagers and adults), gender, and profession intentionally get involved in such activities. These activities result in addiction which leads to anxiety, depression, loneliness, sadness, and behavioral changes. Gaming increases the user's risk for physical and psychological health problems. Excessive gaming can cause dopamine exhaustion, emotional suppression, and lack of motivation. Investing time in online gaming and social media not only has adverse effects but it can also be useful as it helps develop hand and eye coordination. Few gaming applications help increase the speed of decision-making and problem solving. Whereas it also increases memory capacity and benefits children with attention disorders. Gaming addiction and Social Media Addiction occurs when people prioritize the usage of such technologies over every other thing including their personal life and career, which leads to unhealthy behavior and dependency. Such people may not know the negative consequences of using certain applications.

Keywords: *Addiction, Video Game, Social media, Mental Health, Anxiety, Online games, Depression, Loneliness, Sadness.*

1. INTRODUCTION

Understanding the risk factors associated with Internet gaming disorder (IGD) is important to predict and diagnose the condition of an individual. The purpose is to identify major risk factors that predict addiction based on psychological factors and gaming characteristics of the player. Objective of using AI in gaming is to provide realistic gaming experience to the user which is fascinating. In addition, AI in gaming increases the player's interest and provides satisfaction for a long period of time. The rewarding part of the brain releases dopamine in response to a pleasurable experience or hyper arousal gained from the activity. If a person experiences hyper arousal while playing video games, the brain associates the activity with dopamine. The person develops a strong drive to seek out that same pleasure again and again and refrains from performing other activities that might seem boring [1]. Heavy involvement in online activities may increase the risk of problematic use of social media and games. The aim of this research is to understand the human dependencies over online games and social media. However, little is known about parental predictors of problematic social media and game use. While social media provides many benefits, such as giving adolescence the chance to express themselves creatively, learning opportunities, and the chance to connect with others, social media can also have a negative impact on students, both physically and mentally. It is easy to become addicted, and research shows that students who spend too much time on games and social media can suffer from poor sleep, eye fatigue, negative body image, depression, anxiety, cyberbullying, and more [2]. Physical consequences of gameplay addiction includes migraines, disturbed sleep, backaches, eating irregularities, and poor personal hygiene. Social media use can reduce quality sleep and harm mental health. It impacts human in the form of depression, anxiety, and low self-esteem type of mental illness. Although social media has increased our connectivity, it is also reducing our social and

communication skills. Increased aggression, which may indicate that children are learning violence from gaming. Behavioral changes, such as increased social isolation or lower grades in school. Irritated Difficulty sleeping. This survey involves the impact of addiction, behavioral patterns of users based on previous work. We have extended our research for all age groups. ,

2. LITERATURE SURVEY

This review explores the research on the impact of online games and social media on human psychology, addiction, privacy risks related with gaming and usage of such harmful applications. The major objective of this review is to understand user preferences and behavioral patterns of humans. Another objective is to find the techniques and algorithms that can be used to classify the users according to the usage.

• Online game Addiction

Online games addiction has become a very common phenomenon that affects not only an individual, but also our societies. Researchers [4] studied the data collected by the user responses to set of questionnaire. A total of 1174 students were analyzed based on their answers, it was found that 5.7% of the sample were addicted users to games and 44% users were determined to be problematic gamers. The questionnaire also contained the questions about whether the parents are employed, do they have siblings' certain factors determined the social anxiety levels within an individual. It was also found that the students with single parents or working parents tend to have higher addiction levels and social anxiety. Similarly, Researchers [5] explored the data collected from students of Pondicherry, 574 students were analyzed. They compared the lifestyles before and now like previously physical activities were part of day-to-day lives but now people are more attracted to be on their digital handsets. They also brought into discussion

the way adolescent communicate and interact has changed due to addiction.

- **Impact on mental health**

According to the study on students of International Islamic University Malaysia (IIUM)[6], the study determined the relationship between online gaming addiction and mental health, particularly depression, anxiety and loneliness. Online games are a popular technology that has recently become a concern, especially among youths, as mobile devices have become a major part of living since then. Whereas, youths are getting addicted. It also implies that adults and children tend to be exposed to violence in real-life due to excessive use of certain violent gaming applications. Apart from this there is major issue of depression which is generally seen in today's generation. It's found that depression positively relates with gaming addiction [12]. Apart from this the authors [6] also bring into discussion few major concerns namely social anxiety and loneliness. In a study [32], playing violent games on daily basis is found to be associated with depression. Depressive symptoms can be clearly seen in an individual, where the individual plays video games for more than two hour a day is also shown by the researchers.

- **Data Collection**

The data collected by the researchers in [4][5][6] and mostly every paper (where the data is collected) was termed as biased data. The data gathered was based on the responses from the users or the participants. As the data was not real time and response biased there were certain ambiguity in the data as no user wants to be termed as a problematic user. The researchers though considered this data for their findings but also determined the data is not pure and hence, there's a probability that there could be little variations in their results.

- **Online Application Usage**

According to the results from survey [11] most popular online applications used on a daily basis were email (92%), web browsing (92%) and online gaming (91%). Other applications included rapid messaging (86%), downloading multimedia content (75%), social networking sites (68%), online banking (21%) and shopping sites (18%) along with it , the researchers found from collected data that the mean average number of days per week ($SD = 2.17$). Moreover, the mean average number of hours per weekday was found to be 4.42 ($SD = 5.43$) compared with 4.48 hours ($SD = 3.31$) per weekend day; highlighting that the majority of participants spent an equal number numbers of hours gaming during the week and at weekends.. Also, from [6] respondents preferred playing Player Unknown's Battlegrounds (PUBG) (65.1%) the most, followed by Mobile Legend (ML) (58.1%), Call of Duty (COD) (56.1%), Defense of the Ancients (DotA) (36.8%), and lastly, Free Fire (33.3%). This concludes that people are majorly interested in playing violent games rather than preferring any productive activity.

- **Behavioral Patterns**

According to researchers it's observed that there has been seen similar trait of behavioral pattern among the individuals suffering from addiction. Playing games has become the most important activity in person's life and dominates his or her thinking capacity, feelings, cravings and behavior [11]. The researchers also brought into considerations that how a person's mood modifies. Mood modification includes relaxing feelings, though it is only when the person is moving forward (win) application else the mood can modify in negative feeling. Furthermore, Unpleasant emotions and/or physical effects occur when attention from gaming is suddenly reduced or discontinued. Removing attention from the game mostly consists of moodiness and irritability, but also includes physiological symptoms, such as shaking behavior (incase of higher addiction level). Also, this may result in conflict in between the player and those are around him/her [13]. This paper also revealed that the participants for this research also included mostly students (approx. 95%), also government employees and full time workers. Consistent with current literature, a significant proportion of respondents which constitutes of 31% stated they would prefer to exist in a virtual world rather than being in environment of the real world in which we exist today [17].

- **Risk Factors Associated with Gaming**

Internet gaming disorder can be considered a behavioral addiction and has been found to be related to a number of psychological and health problems, including depression, social anxiety, loneliness, a feeling of left out, fatigue, negative self-esteem, impulsivity and anger. Internet gaming co-occurs with various psychiatric conditions and can lead to a range of negative outcomes, physical or mental. Further, it was also related with several medical factors like addiction seemingly affects the brain's dopamine level which keeps the users from coming back for more. The health risks along with suicidal thoughts were also considered through discussion in [6] [7]. According to [7], the researchers have attempted to identify negative effects of excessive gaming and risk factors. Also, in [8] the research has been extended to academic performances of students depending on mobile game addiction or cyberbullying and it was found that academics is not majorly affected, according to the study in Spain[9]. Though studies have been conducted to promote learning and education through mobile learning [10], it cannot be disputed that there are ethical concerns that lurk on the use of mobile games.

- **Algorithms And Accuracy**

Earlier the major research was done for user identification with the help of descriptive statistics, the findings were diversity of smartphones and app usage among individuals [26], also [27] showed that the 88% of users can be uniquely identified by four apps among 1.37 million participants. Whereas, many researchers used random forest for analysis over limited number of users which showed error rate of 3% [28] and an average F1 score of 96.5% for observing over 150 days[29] , the F1 score increased to 98% according to [30]. For mobile app classification using contextual information [31], the

approach shown in this paper is efficient and effective for solving the problem of automatic app classification. Contextual information in App names is insufficient and sparse for achieving a good classification performance.

• Privacy Risks

In [11], the metrics was designed for data disclosure based on the number of data types they have previously disclosed within the gaming environments, participants having disclosure more than 7 were considered as high level disclosures and similarly, the low level disclosers were having value of data types less than 4. From this study the scientist were able to give relationships between the data disclosure and hours as well as levels of addiction. They found that there was significantly weak correlation between the hours in a week and levels of disclosure of data whereas there was a significantly positive correlation between addiction level and disclosure of data. However no correlation was seen among autonomy and data disclosure of participants.

3. IN OUR VISION

• Data Collection

The ambiguity in data or the data collected was termed as biased, in order to remove this issue with data we must capture the real time data. Capturing the real time data will help to gain higher accuracy about the addiction levels among individuals. The data can also help in finding the relation between the behavior traits and gaming. The real time data can be captured by tracking the usage from the devices directly will ensure that the data collected is in pure form. Hence, from this method we would receive a better quality of results and findings.

• Algorithms

According to the literature survey, algorithms used to classify the participants or applications into various different categories were linear regression, KNN algorithm, SVM, descriptive statistics, probabilistic model etc. Whereas according to our literature survey we found that logistic regression can perform well on certain medical concern problems for classifying the participants as addicted or not [23] [24]. For app categorization certain app classification technique needs to be used by considering the complete description of the app whether it is violent game, social, educational or any other type of application. By this we can identify the psychological impact of the particular application on human brain. Also, this will analyze the addiction at greater depth.

• Protocols/ Rules

There should be a strict law in order to control the addiction levels for at least young generation. So, the youth of the nation can be protected from having psychological issues such as stress, anger, anxiety, loneliness, etc. whereas some of these problems can lead them towards harming themselves or having suicidal thoughts. Furthermore, there should be certain rules for publishing the games onto openly available software this makes the situation more difficult.

4. CONCLUSION

From above discussions we found that plenty of humans spend their time on gaming and social media. Also, majority of people involved are students for about 60%. This does not implies this problem is specific to any age group, we also found traces of individuals from all sectors involved in such activities. People are unaware of the physical and psychological impact one could have because of addiction of using online games and social media for enhancing their mood. Up to a particular limit its fine to be engaged in such activities for pleasure but completely relying on them may have an adverse effect on their lives. We also compared the behavioral pattern of a healthy human with the addicted human and came to know that the impact is negative on their psychological health. Furthermore, this behavior can result in conflict with the people in their surroundings. The individual need to observe in which direction their addiction is leading them. Specially, the students may have an immense adverse effect over their career. Also, According to further studies scientist have stated that there would be a huge evolution of humans because of this addicted behavior of human beings.

5. FUTURE SCOPE

A plenty of steps can be taken to prevent people from getting addicted, a lot of research in this domain is still remaining. Several controlling systems need to be built that can be used to prevent the consumers from being the victims of addiction. Furthermore, the solution should have a variety of approaches, including a fundamental shift in delivery mechanisms that will necessarily involve digital solutions. A set of governing policies and protocols can be found to limit the use of violent games, whereas several algorithms can be implemented to deny the access to underaged users. The researchers can also study the physical changes in an individual due to such habits.

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