MINI-PROJECT LOGBOOK

GROUP MEMBERS

1. Sanket Sawant (19101B0020)
2. Yash Kadulkar (19101B0018)
3. Roshan Mhatre(19101B0017)

Supervisor/Guide

Prof. Ajitkumar Khachane

VIT | Vidyalankar Institute of Technology
Accredited A+ by NAAC

Department of Information Technology

Vidyalankar Institute of Technology, Wadala, Mumbai -400037

University of Mumbai

(Academic Year 2022-23)

INSTITUTE VISION & MISSION

VISION:

To be a globally recognized institute where learners are nurtured in a scholarly environment to evolve into competent professionals and researchers to benefit society.

MISSION:

- Evolve a curriculum which emphasizes on strong fundamentals with the flexibility to choose advanced courses of interest and gain exposure to tools and techniques in contemporary subjects.
- Encourage a teaching-learning process in which highly competent faculty share a symbiotic association with institutes of repute.
- Facilitate creation and dissemination of knowledge through a digitally-enabled learning environment.
- Develop academic and infrastructural facilities with modern equipment and other learning resources and encourage reciprocal sharing with other institutes through networking.
- Establish a Center of Excellence to enhance academia-industry partnership and work on collaborative projects.

INFORMATION TECHNOLOGY DEPARTMENT

VISION:

To be recognized as a centre of excellence in the field of Information Technology where learners are nurtured in a scholarly environment to evolve into competent professionals to benefit society.

MISSION:

- Evolve a curriculum which emphasizes on strong engineering fundamentals with the flexibility to choose advanced courses of interest and gain exposure to tools and techniques in Information Technology.
- Encourage a teaching learning process in which highly competent faculty share a symbiotic association with the institutes of repute.
- Facilitate creation and dissemination of knowledge through a digitally enabled learning environment.
- Develop academic and infrastructural facilities with modern equipment and other learning resources and encourage reciprocal sharing with other institutes through networking.
- Establish a centre of excellence to enhance academia – industry partnership and work on collaborative projects

PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

PEO I: To enable the pursuit of knowledge in the field of Information Technology and contribute to the profession and employability of the students.

PEO II: To Engage in research, generate the employment through entrepreneurship and work effectively in multidisciplinary environment.

PEO III: To understand the human, social, ethical, and environmental context of their profession and contribute positively to the needs of individuals and society at large.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1	Explain and apply appropriate information technologies and employ appropriate methodologies to help an individual or organization achieve its goals and objectives
PSO2	Manage the information technology resources of an individual or organization
PSO3	Anticipate the changing direction of information technology and evaluate and communicate the likely utility of new technologies to an individual or organization
PSO4	Develop IT systems that would perform tasks related to E-governance and/or Health Care Management

PROGRAM OUTCOMES (POs)

PO's	OUTCOMES
PO1	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
PO6	Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

STUDENT INFORMATION

Project Title: Smart Irrigation System

	Student 1	Student 2	Student 3
Student ID	19101B0020	19101B0018	19101B0017
Name	Sanket Sawant	Yash Kadulkar	Roshan Mhatre
Class with Division	INFT/B	INFT/B	INFT/B
Contact No.	8668523339	9702508069	9082211588
E-mail	sanket.sawant@vit.edu.in	yash.kadulkar@vit.edu.in	roshan.mhatre@vit.edu.in
Address	L-5/ Room no-21 .	65/2, Gopal Niwas	
	Santosh nagar	Sunil Nagar	Near Tata Power
	Goregaon-East	Dombivli (E)	Kalyan (E)
	Mumbai-400065	Thane - 421201	Mumbai – 421301

INSTRUCTIONS TO STUDENTS:

1. The logbook must be submitted to the Guide or Co-Guide for verification and evaluation of project activities at least once in a week.

2. Log book duly signed by guide must be submitted with project report for evaluation at the end of semester to the department.

DECLARATION

I declare that this project represents my ideas in my own words without plagiarism and wherever others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my project work. I promise to maintain minimum 75% attendance, as per the University of Mumbai norms. I understand that any violation of the above will be cause for disciplinary action by the Institute.

Yours Faithfully

1. Sanket Sawant

2. Yash Kadulkar

3. Roshan Mhatre

(Date & Signature of Students**)**

Letter of Acceptance

I undersigned, Prof. Ajitkumar Khachane working in Information Technology Department, willing to guide the project titled **Smart Irrigation System** for the IOE Mini-Project (Div B) Semester VII respectively for the Academic Year 2022-23.

The names of the students are:

1. Roshan Mhatre
2. Sanket Sawant
3. Yash Kadulkar

Prof Ajitkumar khachane
(Project Guide)

Dr. Vipul Dalal
(HOD-Information Technology Department)

COURSE OUTCOMES

CO No.	COURSE OUTCOME /LAB OUTCOME	POs covered	PSOs covered	BL level
CO1	Identify the requirement for the real world problems.	PO2,PO12	PSO1	L1,L2
CO2	Conduct a survey of several available literatures in the preferred field of study.	PO4	PSO2	L1,L2
CO3	Study and enhance software/ hardware skills.	PO5	PSO4	L1,L2
CO4	Demonstrate and build the project successfully by hardware/sensor requirements, coding, emulating and testing.	PO11	PSO3	L1,L2,L3
CO5	To report and present the findings of the study conducted in the preferred domain.	PO6	PSO3	L1,L2,L3,L4
CO6	Demonstrate an ability to work in teams and manage the conduct of the research study.	PO11	PSO3	L1,L2,L3,L4

CO-PO-PSO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	M	M	-	-	-	-	-	-	-	-	-	-	S	M	-	S
CO2	M	S	-	-	-	-	-	-	-	-	-	-	M	M	M	M
CO3	M	S	-	-	-	-	-	-	-	-	-	-	S	M	-	S
CO4	M	-	-	S	-	-	-	-	-	-	-	-	M	M	W	W
CO5	M	M	-	-	-	-	-	-	-	-	-	-	S	M	-	S
CO6		S	-	-	-	-	-	-	-	-	-	-				

SCHEDULE FOR MINI PROJECT

Date	Week	Contents	Remark	Guide Sign
29/08/2022	1	Creating Group for mini project, Explanation of mini project & Presenting different types of project		
05/09/2022	2	Finalization of the project		
12/08/2022	3	Purchase of required components		
19/08/2022	4	Circuit design and integration of components & Node MCU coding		
26/09/2022	5	Blynk app designing and sync data to cloud		
3/10/2022	6	Review I: Issue related to relay module and open high voltage connections.		
10/10/2022	7	Solved issue related to relay module and code		
17/10/2022	8	Project finalization		
1/11/2022	9	Review II and Submission of Logbook and Report		
	10			
	11			
	12			
	13			

PROGRESS/ATTENDANCE REPORT

Title of the Project: Smart Irrigation System	
Group No. IT_B_1_02	Name of Student 1: Sanket Sawant(19101B0020)
	Name of Student 2: Yash Kadulkar(19101B0018)
	Name of Student 3: Roshan Mhatre(19101B0017)
Name of the Supervisor/Guide: Dr./Prof. Ajitkumar Khachane	

Sr. No	**Date**	**Attendance**				**Progress/Suggestion**	**Mapping**		
		1	2	3	4		CO	PO	PSO
1	29/08/2022	P	P	P		Creating Group for mini project, Explanation of mini project & Presenting different types of project			
2	05/09/2022	P	P	P		Finalization of the project			
3	12/08/2022	P	P	P		Purchase of required components			
4	19/08/2022	P	P	P		Circuit design and integration of components & Node MCU coding			
5	26/09/2022	P	P	P		Blynk app designing and sync data to cloud			

6	3/10/2022	P	P	P	Review I: Issue related to relay module and open high voltage connections.			
7	10/10/2022	P	P	P	Solved issue related to relay module and code			
8	17/10/2022	P	P	P	Project finalization			
9	31/10/2022	P	P	P	Review II and Submission of Logbook and Report			
10								
11								
12								
13								

Name, Date & Sign of the Supervisor/Guide

REVIEW-I FORM

Group No: IT_B_1_02

Title of Mini-Project Smart Irrigation System

Date of Review-I: 4-10-2022

No. of students in project team: 3

Student Mini-Project Performance Analysis (Put Tick as per your Observation)

Excellent (3)	Very Good (2)	Good (1)		
Sr. No.	**Observation**	**(3)**	**(2)**	**(1)**
1	Quality of problem and Clarity			
2	Literature Survey			
3	Innovativeness in solutions			
4	Feasibility Of the Project			
5	Usage of technology			
6	Cost effectiveness and Societal impact			
7	Overall Presentation & Performance			
Comments:				

Project Guide & Panel Members Signature: 1) Prof. Pratik Mhatre
2) Prof. Ajitkumar Khachane
3)

Name, Date & Signature
Project Guide

Name, Date & Signature
HOD-Information Technology

REVIEW-II FORM

Group No: IT_B_1_02

Title of Mini-Project : Smart Irrigation System

Date of Review-II: 1 Nov 2022

No. of students in project team: 3

Student Mini-Project Performance Analysis (Put Tick as per your Observation)

Excellent (3)	Very Good (2)	Good (1)		
Sr. No.	**Observation**	**(3)**	**(2)**	**(1)**
1	Usage of effective skill sets			
2	Design and Implementation			
3	Testing and Analysis			
4	Use of standard engineering norms			
5	Cost effectiveness and Societal impact			
6	Contribution of an individual member in team			
7	Overall Presentation & Performance			
Comments:				

Project Guide & Panel Members Signature: 1) Prof. Pratik Mhatre
2) Prof Ajitkumar Khachane
3)

Name, Date & Signature
Project Guide

Name, Date & Signature
HOD-Information Technology

EXAMINER'S FEEDBACK FORM

Name of External examiner:_____

College of External examiner:_____

Name of Internal examiner:_____

Date of Examination: _____/_____/_____ No. of students in project team: ____

Availability of separate lab for the project: Yes / No

Student Performance Analysis (Put Tick as per your Observation)

Excellent (3) Very Good (2) Good (1)				
Sr. No.	**Observation**	**(3)**	**(2)**	**(1)**
1	Quality of problem and Clarity			
2	Innovativeness in solutions			
3	Cost effectiveness and Societal impact			
4	Full functioning of working model as per stated requirements			
5	Effective use of skill sets			
6	Effective use of standard engineering norms			
7	Contribution of an individual's as member or leader			
8	Clarity in written and oral communication			
9	Overall performance			

o Can same mini project extend to next semester by adding new objectives/ideas? (Yes/ No)

o If yes, suggest new Innovative Technique/Idea/ objectives related to this project.

_____

_____

_____

_____

_____

Name, Date & Signature
External Examiner

Name, Date & Signature
Internal Examiner

Name, Date & Signature

HOD-Information Technology