

# MINI-PROJECT LOGBOOK FH-2024

Project Title: **Xxxx Yy Zzzzz**

## Group Members

1. Member 1 Name (SE-A, ID)
2. Member 2 Name (SE-A, ID)
3. Member 3 Name (SE-A, ID)
4. Member 4 Name (SE-A, ID)

## Project Guide

Prof. **Project Guide Name**



Department of Artificial Intelligence & Data Science

**Terna Engineering College, Nerul, Navi Mumbai - 400 706**



**University of Mumbai**  
**(Academic Year 2022-23)**

## INSTITUTE VISION & MISSION

**Institute Vision:** To deliver value added quality education to the aspiring students, meeting stringent requirements of the changing technology, industry, business and society as whole.

**Institute Mission:** To provide an environment of academic excellence and to adopt appropriate teaching-learning processes to produce competent and skilled engineers ready to meet global challenges.

## AI & DS DEPARTMENT's VISION and MISSION (yet to be finalized)

**Vision:**

**Mission:**

## PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

1. To prepare students for developing excellence in Professional Career, Research and Development and in Higher Education by having deep understanding of Mathematics, Computing and Engineering principles.
2. To enable students to meet real life challenges, designing appropriate computing systems that are technically sound, economically feasible and socially acceptable in current time changing environment by using modern tools.
3. To encourage, motivate and prepare Learner's for Lifelong-learning.
4. To develop the ability among students to scrutinize the social and human context of computing as it impacts individuals, team work, organizations and society including ethical, legal, security and global policy issues.
5. To train students with innovative ideas, entrepreneurship skills with best learning, teaching and leadership qualities.

## PROGRAM OUTCOMES (POs)

**PO1: Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO2: Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3: Design/development of solutions:** 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: Conduct investigations of complex problems:** 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: Modern tool usage:** 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: The engineer and society:** 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: Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10: Communication:** 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: Project management and finance:** 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: Life-long learning:** 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.

## PROGRAM SPECIFIC OUTCOMES (PSOs)

**PSO1:** Inculcate skills to recognize, analyze the problems related to databases, computing, networks and any other domain specific application and provide solutions.

**PSO2:** Ability to develop efficient, secure, user friendly and cost effective software systems.

## STUDENTS INFORMATION

**Project Title:**

	Student 1	Student 2	Student 3	Student 4
<b>Student ID</b>	TUXXXXX	TUXXXXX	TUXXXXX	TUXXXXX
<b>Full Name</b>	First Middle Last	First Middle Last	First Middle Last	First Middle Last
<b>Class with Division</b>	SE, DIV-A	SE, DIV-A	SE, DIV-A	SE, DIV-A
<b>Contact No.</b>				
<b>E-mail</b>				
<b>Address</b>	502, Matrukrupa Apt,			
	Joshi Baug,			
	Kalyan West.			
	421301			

## **INSTRUCTIONS TO STUDENTS:**

1. Students should weekly meet their guide for project progress discussion.
2. The logbook must be submitted to the Guide or Co-Guide for verification and evaluation of project activities at least once in a week.
3. 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. Member 1 Name (SE-A, ID)
2. Member 2 Name (SE-A, ID)
3. Member 3 Name (SE-A, ID)
4. Member 4 Name (SE-A, ID)

## Letter of Acceptance

I undersigned, Prof. \_\_\_\_\_ working in the  
AI & DS Department willing to guide the project titled “

”

for the Mini-Project, Semester IV for the Academic Year 2022-23.

The names of the students are:

1. Member 1 Name (SE-A, ID)
2. Member 2 Name (SE-A, ID)
3. Member 3 Name (SE-A, ID)
4. Member 4 Name (SE-A, ID)

Prof.  
  
**(Project Guide)**

Prof. Renuka  
  
**(Mini-Project Coordinator)**

V.Chimankare  
Dr. Sandeep B. Raskar  
**(Head, AI & DS)**



Course code	Course Name	Credits
CSM401	Mini Project B	02

Objectives	
1	To acquaint with the process of identifying the needs and converting it into the problem.
2	To familiarize the process of solving the problem in a group.
3	To acquaint with the process of applying basic engineering fundamentals to attempt solutions to the problems.
4	To inculcate the process of self-learning and research.

## COURSE OUTCOMES

CO No.	COURSE OUTCOME	POs covered	PSOs covered
CO1	Identify problems based on societal /research needs.	PO1, PO3,PO5	PSO1
CO2	Apply Knowledge and skill to solve societal problems in a group.	PO3,PO9,PO10,PO1	PSO1
CO3	Develop interpersonal skills to work as member of a group or leader.	PO9,PO10,PO11,PO12	PSO1
CO4	Draw the proper inferences from available results through theoretical/ experimental/simulations.	PO12,PO3,PO4	PSO1
CO5	Analyze the impact of solutions in societal and environmental context for sustainable development.	PO6,PO7,PO8	PSO1
CO6	Use standard norms of engineering practices	PO3,PO4,PO5,PO8	PSO1
CO7	Excel in written and oral communication.	PO3,PO10	PSO1
CO8	Demonstrate capabilities of self-learning in a group, which leads to lifelong learning.	PO12,PO10,PO11	PSO1
CO9	Demonstrate project management principles during project work.	PO11,PO1,PO10,PO12	PSO1

## CO-PO-PSO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1		3	1		1								1		
CO2	2		2						3	1			1		
CO3									3	2	3	1	1		
CO4			1	2								1	1		
CO5						1		1					1		
CO6			1	1	1			2					1		
CO7			1							2			1		
CO8										1	1	2	1		



CO9	1									2	2	2	1		
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<b>Guidelines for Mini Project</b>	
1	Students shall form a group of 3 to 4 students, while forming a group shall not be allowed less than three or more than four students, as it is a group activity.
2	Students should do survey and identify needs, which shall be converted into problem statement for mini project in consultation with faculty supervisor/head of department/internal committee of faculties.
3	Students shall submit implementation plan in the form of Gantt/PERT/CPM chart, which will cover weekly activity of mini project.
4	A logbook to be prepared by each group, wherein group can record weekly work progress, guide/supervisor can verify and record notes/comments.
5	Faculty supervisor may give inputs to students during mini project activity; however, focus shall be on self-learning.
6	Students in a group shall understand problem effectively, propose multiple solution and select best possible solution in consultation with guide/ supervisor.
7	Students shall convert the best solution into working model using various components of their domain areas and demonstrate.
8	The solution to be validated with proper justification and report to be compiled in standard format of University of Mumbai.
9	With the focus on the self-learning, innovation, addressing societal problems and entrepreneurship quality development within the students through the Mini Projects, it is preferable that a single project of appropriate level and quality to be carried out in two semesters by all the groups of the students. i.e. Mini Project 1 in semester III and IV. Similarly, Mini Project 2 in semesters V and VI.
10	However, based on the individual students or group capability, with the mentor's recommendations, if the proposed Mini Project adhering to the qualitative aspects mentioned above gets completed in odd semester, then that group can be allowed to work on the extension of the Mini Project with suitable improvements/modifications or a completely new project idea in even semester. This policy can be adopted on case by case basis.

## SCHEDULE FOR MINI PROJECT



**Terna Engineering College**

**Department of Artificial Intelligence & Data Science**

### **S.E. Mini project 1B, FH-2024 Activity Plan**

<b>Week No.</b>	<b>Scheduled Dates</b>	<b>Activity</b>
Week 1	11-01-2023	Group formation
Week 2	18-01-2023	Topic finalization/ Project Name submission
Week 3	25-01-2023	Objectives/ Problem Statement/ Scope of Project
Week 4	1-02-2023	Literature Survey and Review 1
Week 5	08-02-2023	Project scheduling/timelines /software & Hardware requirement specification
Week 6	15-02-2023	Methodology /Flow chart of project work (E-R Diagram /use case, etc.)
Week 7	29-02-2023	Design & Implementation along with Modification and suggestions from guide and examiners based on Review 1
Week 8	21-03-2023	Coding and Testing
Week 9	28-03-2023	Review 2
Week 10	04-04-2023	Finalization of Report and PPT along with project demonstration with the consent of Guide
Week 11	11-04-2023	Submission of Project Reports and certification
Week 12	18-04-2023	Final Certification and Submission of Term Work.

## PROGRESS/ATTENDANCE REPORT

<b style="color: red;">Title of the Project:</b>	
<b style="color: red;">Group No.</b>  <div style="border-bottom: 1px solid red; width: 80%; margin: 10px auto;"></div>	<b style="color: red;">Name of Student 1:</b>
	<b style="color: red;">Name of Student 2:</b>
	<b style="color: red;">Name of Student 3:</b>
	<b style="color: red;">Name of Student 4:</b>
<b style="color: red;">Name of the Guide: Prof.</b>	

Sr. No	Date	Attendance				Progress/Suggestion	Mapping		
		(Members)					CO	PO	PSO
		1	2	3	4				
1						Group formation	CO3, CO7, CO8	PO3, PO1	PSO1
2						Topic finalization/ Project Name submission	CO1	PO2	PSO1
3						Objectives/ Problem Statement/ Scope of Project	CO2	PO3	PSO1
4						Literature Survey and Review 1	CO2, CO7	PO9. PO10, PO11	PSO1
5						Project scheduling/timelines /software & Hardware requirement specification	CO2	PO3, PO9	PSO1
6						Methodology /Flow chart of project work (E-R Diagram /use case, etc.)	CO2, CO7	PO3, PO9, PO10	PSO1
7						Methodology /Flow chart of project work (E-R Diagram /use case, etc.)	CO7	PO9, PO10	PSO1

8					Design & Implementation along with Modification and suggestions from guide and examiners based on Review 1	CO2, CO7	PO3, PO9, PO10	PSO1
9					Design & Implementation along with Modification and suggestions from guide and examiners based on Review 1	CO1	PO1, PO2	PSO1
10					Coding and Testing	CO2, CO7	PO9, PO10, PO11	PSO1
11					Coding and Testing	CO7, CO8, CO9	PO9, PO10, PO11, PO12	PSO1
12					Review 2	CO1, CO2	PO3	PSO1
13					Finalization of Report and PPT along with project demonstration with the consent of Guide	CO2, CO3	PO9, PO10, PO3	PSO1
14					Submission of Project Reports and certification	CO2, CO3	PO9, PO10, PO3	PSO1
15					Final Certification and Submission of Term Work.	CO2, CO3	PO9, PO10, PO3	PSO1

Prof.

**Name, Date & Sign of the Project Guide**

## REVIEW-I FORM

Group No: \_\_\_\_\_

Title of Mini-Project: \_\_\_\_\_

Date of Review-I: \_\_\_\_\_

No. of students in project team: \_\_\_\_\_

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

	Excellent (3)	Very Good (2)	Good (1)		
Sr. No.	Observation			(3)	(2)
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)

2)

Name, Date & Signature  
Project Coordinator

Name, Date & Signature  
Head, AI & DS

## REVIEW-II FORM

Group No: \_\_\_\_\_

Title of Mini-Project: \_\_\_\_\_

Date of Review-II: \_\_\_\_\_

No. of students in project team: \_\_\_\_\_

### 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)

2)

Name, Date & Signature  
Signature  
Project Coordinator

Name, Date &  
Head, AI & DS

## 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					

- Can same mini project extend to next semester by adding new objectives/ideas? (Yes/ No)
- If yes, suggest new Innovative Technique/Idea/ objectives related to this project.

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Name, Date & Signature  
External Examiner

Name, Date & Signature  
Internal Examiner

Name, Date & Signature  
Project Coordinator

Name, Date & Signature  
Head, AI & DS