Faculty of Science and Technology
Savitribai Phule Pune University
Maharashtra, India

Project Work Book

Fourth Year
Artificial Intelligence and Data Science (2020 Course)
(With effect from A.Y. 2023-24)

Project Work Book
(Guidelines and Log)
Course Code: 417527 & 417536
(2020 Course)

Group ID/No :

Project Syndicate

Sr.	Name of the student	Phone No
1		
2		
3		
4		

Project Title:

Project Domain/Area :

Project Guide (Internal) :

Project Guide (External) :

Sponsorship:

Department of Artificial Intelligence and Data Science

Dr.D.Y.Patil Institute of Engineering,Management and Research,Akurdi,Pune

Academic Year : 2023-24

General Instructions

1. Students should enter correct information in the work book and get verified by respective project guide(s) and Project Coordinator.
2. Students should report to their respective guides as per the schedule and its log is to be maintained in the work book.
3. Follow all deadlines and submit all documents strictly as per prescribed formats.
4. The work book should be produced at the time of all discussions, presentations and examinations.
5. The work book must be submitted to project coordinator/ guide/ department / College / University after successful examination at the end of year or whenever asked for.
6. All documents and reports are to be prepared in Latex/Lyx only (All the formats specifications provided adheres to MS Word but consequently applicable to finalized project report published using Latex/Lx)
7. Students can use online tools like overleaf, papeeria, latexbase etc for effective collaborations with group members and project guides.
8. Submit Black Book (number of students+2 copies) as well as soft copy and maintain copy with each member.

Guidelines for Project Group Formation:

1. Project group must consist of three to 4 students in one group.
2. Students of other programme/course may be part of the group, where the group strength can be up to 5 students to promote inter disciplinary project topic.
3. Individual member of the group must be allocated with the specific tasks/modules from the project and their contributions must be seen at the time of evaluation and assessment.

Guidelines for Project Topic:

1. Undergraduate project is a capstone of engineering education. Therefore, it is very important to select a right topic.
2. Project can be undertaken on any subject addressing recent advancement in Computer and Information Technology domain. Research and development projects on problems of practical and theoretical interest should be encouraged.
3. Students can certainly take ideas from anywhere, but be sure that they should evolve them in the unique way to suit their project requirements.
4. The project work can be undertaken in a research institute or organization/company/any business establishment.
5. Student must consult internal guide along with external guide (if any) in selection of topic.
6. Project Coordinator, Head of department and senior staff in the department will take decision regarding selection of projects.
7. In case of industry projects, visit by internal guide will be preferred, at last once during the semester.

Savitribai Phule Pune University

Artificial Intelligence and Data Science

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 andinterdisciplinary settings.

PO10. To demonstrate effective communication at various levels.

PO11. To apply the knowledge of Artificial Intelligence and Data Science for development of projects, and its finance andmanagement.

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

Program Specific Outcomes (PSO)

A graduate of the Artificial Intelligence and Data Science 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 complexities.

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.

Table of Contents

1. Project Work

The word *project* comes from the Latin word *projectum* from the Latin verb *proicere*, "tothrow 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 hppens". (Curtsey Ref- http://en.wikipedia.org/)The intention of Project work is to conceive an idea and to implement it systematicallyby 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 interfaceas 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, 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
- 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

1.3. Course Outcomes:

Students are expected to know and be able to-

CO1: Solve real life problems by applying knowledge

CO2: Analyze alternative approaches, apply and use most appropriate one for feasible solution

CO3: Write precise reports and technical documents in a nutshell

CO4: Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work

CO5: Inter-personal relationships, conflict management and leadership quality

CO6: Show evidence of independent investigation

CO7: Critically analyze the results and their interpretation

CO8: Report and present the original results in an orderly way and placing the open questions in the right perspective

CO9: Link techniques and results from literature as well as actual research and future research lines with the research

CO10: Appreciate practical implications and constraints of the specialist subject

1.4. 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 andit 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

	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	√	√	√		√	√						√
CO2	√	√	√	√							√	
CO3											√	
CO4									√	√		
CO5						√	√	√				
CO6												
CO7												
CO8												
CO9												
CO10												

1.5. Guidelines for Project Work Selection, Finalization and Guide Allotment:

Project is one of the significant contributory team works that has to be completedwith 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 stillthere 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 Coordinatorpreferably in

second semester of third year.

2. Students are provided with list of guides & their domain of expertise, list of earlierthree years projects, constitution of PAC and copy of logbook giving all guidelines.
3. Considering registered teams area of interest/domain and expertise of guide, theProject coordinator in consultation with PAC tentatively allots Project guides.
4. Team may come up with sponsored project (Title suggetion and associated guidance byexternal 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, Ms. Arti Singh, 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.

1.6. 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

1.7. 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-bibliometriskeforskningsindikator/autoritetslister-for-tidsskrifterog-forlag/bfi-publishers-2011.pdf
2. http://www.fi.dk/viden-og-politik/tal-og-analyser/den-bibliometriskeingsindikator/autoritetslister-for-tidsskrifter-ogforlag/Autoritetslisten%20for%20tidsskrifter%202011%20-20med%20niveauer.pdf

1.8. 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 Generalof 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'.

Hence it is recommended that students should know about Copyright and Patents.Refer-

1. http://www.ipindia.nic.in
2. http://www.ipindia.nic.in/writereaddata/Portal/IPOGuidelinesManuals/1_30_1_manual-designs-practice-and-procedure.pdf

2. University Syllabus (semester 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 Journal and from other sources, and in turn increase analytical skills
- To Work in team and learn professionalism

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

CO1: Solve real life problems by applying knowledge
CO2: Analyze alternative approaches, apply and use most appropriate one for feasible solution
CO3: Write precise reports and technical documents in a nutshell
CO4: Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work
CO5: 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, SRS, Model and Design. The student is expected to complete the project at least up to the design phase. As a part of the progress report of project 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 examinee 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, question-answers 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 openquestions in the right perspective.
- Link techniques and results from literature as well as actual research and futureresearch 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

Dr.D.Y.Patil Institute of Engineering,Management and Research,Akurdi,Pune

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

UNDERTAKING BY STUDENT

We, the students of B.E. Artificial Intelligence and Data Science hereby assure that we will follow all the rules andregulations related to project activity for the academic year 2023-24

The Project titled-

_____

_____

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

Name of the student	Signature
1._____	_____
2._____	_____
3._____	_____
4._____	_____

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 ofproject work-I	Last week of July
7.	Review meeting/ presentation for progress ofproject work-II	Third week of August
8.	Review meeting/ presentation for progress ofproject work-III	Second week of Sept
9.	Review meeting/ presentation for progress ofproject work-IV	Last week of Sept
10.	Submission of partial project report	1st 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 LiteratureReview

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?			
2)	Does the statement give clear identification about what your project will accomplish?			
3)	Is the statement short and concise?			
4)	Do similar type of methodology / model exists?			
5)	Is the studied literature sufficient to decide scope of the project?			
6)	Are the objectives clearly and unambiguously listed?			
7)	Can a person who is not familiar withthe project understand scope of the project by reading the project problem statement?			
8)	Are project objectives of study (what product, process, resource etc.) clearly defined?			
9)	Are the objectives set helpful to achieve goal of the project?			
10)	Does the project contribute to our society by any means?			
Remark and Suggestions:				

Name and Sign of Reviewers:

1.

2.

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?			
2)	Is the project goal statement in alignment with the sponsoring organization's business goal and mission?			
3)	Who is the project's end user?			
4)	What is the projected cost of producing a product?			
5)	Is project achievable in specified (Time, Cost Budget)?			
6)	Are the requirements within the scope of the project?			
7)	Is the scope properly defined?			
8)	Does the problem statement clearly define scope of the project?			
9)	Do the project requirements fitinto available software and hardware?			
10)	Whether the milestones are stated completely and project timeline is given?			
11)	Whether risks like technical risks, Operational risks, schedule risks, business risks are identified correctly or not?			
12)	Whether Risk prioritization is done properly and any back up plan is decided?			
Remark and Suggestions:				

Name and Sign of Reviewers:

1.

2.

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?			
2)	Is problem statement categorized in identified area and targeted towards specific area there in?			
3)	Is external and internal interfacing properly defined?			
4)	Are requirements consistent with schedule, resources and budget?			
5)	Are all requirements traceable to system level?			
6)	What is needed to make the product?			
7)	Is there a demand for the product?			
8)	Is identification of stakeholders done properly?			
9)	Whether all requirements are captured and documented in linewith scope?			
10)	Whether all type of analysis classes are identified?			
11)	Whether the Acceptance criteria is decided			
12)	Is SRS document as per IEEE format complete and correct?			
Remark and Suggestions:				

Name and Sign of Reviewers:

1.

2.

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.								
2.								
3.								
4.								

Name and Signature of Evaluation Committee:

1. **Dr/Mr/Mrs.**
2. **Dr/Mr/Mrs.**

Examiners Feedback and Suggestions:

Signature of Guide **PAC** **Name and Signature**

[Ms. Arti Singh] **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 Processmodel is used? (Water fall, Incremental, RAD) How? (? at this level?)			
2)	Are data objects, their attributes and relationships clearly identified? (Allconstraints fro SRS are captured or not?)			
3)	Have the objects and respective classes and their responsibilities?			
4)	Have you analyzed the requirementsbeen analyzed and represented into respective models?			
5)	Have the different system states been differentiated and depicted them in theform of state transition diagram?			
6)	Does the mathematical model clearly imply design of the project?			
7)	Does the mathematical model clearly states goal of project?			
8)	Is the interface between the modules properly identified?			
9)	Are any functional dependencies identified and described?			
10)	Which architectural model does the system support?			
11)	Whether Deployment diagram is in line with selected architecture?			
12)	Whether all components are designed properly and represented in component diagram?			
13)	Whether NP-completeness of algorithms is checked?			
Remark and Suggestions:				

Name and Sign of Reviewers:

1.

2.

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?			
2)	Does the code comply with the coding standard?			
3)	Is the code well structured, consistent in style, and consistently formatted?			
4)	Are all functions in the design coded?			
5)	Does the code make use of object oriented concepts?			
6)	Does the code support granularity?			
7)	Is the language used for coding correctly chosen as per the project need?			
8)	If any off-the-shelf components are used, Have you understood the functionalities of using it?			
9)	Are all comments consistent with the code?			
10)	Whether code optimization is done properly?(By using language features)			
Remark and Suggestions:				

Name and Sign of Reviewers:

1.

2.

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?			
2)	Has beta testing been done?			
3)	Have been validated the requirements, design and code as per standard?			
4)	Has GUI testing of project been performed? How?			
5)	Does the system comply with basic usability norms?			
6)	Has the code been tested using standard datasets available in your area of project?			
7)	Has the code been tested in real time environment?			
8)	After integration of all components whether total performance of system is checked?			
9)	Whether repository of all componentsalong with versions is documented?			
10)	Have social, safety, environmental, ethical and legal issues been consideredwhile providing solution to problem?			
Remark and Suggestions:				

Name and Sign of Reviewers:

1.

2.

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?			
2)	Is the report timely prepared?			
3)	Is the report properly organized, spelled, grammatically correct?			
4)	Is the report plagiarism free?			
5)	Is the report precise and written to the point?			
6)	Does the report contain complete results and comparative graphs?			
7)	Are all figures and tables properly numbered and labeled?			
8)	Are all figures and tables properly cited?			
9)	Weather references are properly cited?			
Remark and Suggestions:				

Name and Sign of Reviewers:

1.

2.

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.									
2.									
3.									
4.									

Name and Signatur of Evaluation Committee:

1. **Dr/Mr/Mrs.**
2. **Dr/Mr/Mrs.**

Examiners Feedback and Suggestions:

Signature of Guide **PAC** **Name and Signature**

[Ms. Arti Singh] **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.			
2.			
3.			
4.			

Attach attested copy of certificate(s)

9.2. Paper Publication/ Presentation/IPR

Sr. No.	Name of Organizer	Date	Certificates/ Prizes won, if any
1.			
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				
Literature Survey				
Software Engineering Approach				
Requirement Analysis				

B. Implementation

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

C. Documentation

Grade (Grade Point)	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Parameter				
Proposal				
Project Report				
Quick references				
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)				
Understanding individual capacity & involvement in the project				
Team Work (Distribution of work, intra-team communication and togetherness)				
Outcomes / Usability				

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				
Appreciation and Awards				
Publications				
Copyright				
Patent				
Commercial value /product conversionof 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				
safety				
environmental				
ethical				
Legal issues				

INSTRUCTIONS TO STUDENTS:

1. The log book 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 evaluationat 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._____

2._____

3._____

4._____

(Date & Signature of Students)

Letter of Acceptance

I undersigned, Dr./Prof _____ working in Computer Science and Engineering –AIML / DS Department, willing to guide the project titled

_____

_____

For the Mini-Project 2A/2B(A & B) Semester III/IV/V/VI respectively for Academic Year 2023-24.

The names of the students are:

1._____

2._____

3._____

4._____

_____	_____	_____
(Project Guide)	**(Project Coordinator)**	**(HOD (AI & DS))**

SCHEDULE FOR PROJECT

Date	Week	Contents	Remark	Guide's Signature
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
	12			

PROGRESS/ATTENDANCE REPORT

Title of the Project:

Name of Student1:

Group No.

Name of Student2:

Name of Student3:

Name of Student4:

Name of the Supervisor / Guide: Dr./Prof.

Sr. No	Date	Attendance				Progress/Suggestion	Mapping		
		1	2	3	4		CO	PO	PSO
1									
2									
3									

6								
7								
8								
9								
10								
11								
12								
13								

Name, Date & Sign of the Supervisor/Guide