**MINIPROJECT LOGBOOK**

GROUP MEMBERS

1. Vivek Kumbhar

2. Sufiyan Chougule

3. Nimesh Kuthe

4. Satyam Singh

Guide

Prof. Bhagyalakshmi



**Department of CSE(AIML/IOT)**

**Smt. Indira Gandhi College of Engineering**

Affiliated to University of Mumbai

(2022–2023)

# INSTITUTE VISION & MISSION

**Vision**

* To serve and have a transformative impact on society by constantly pursuing excellence in technical education, innovation and entrepreneurship for human development with strong ethical values.

**Mission**

* Serve and help transform society by graduating talented, broadly educated engineers, equipped with state of art technology resources for developing sustainable solutions.
* Academic excellence in Science, Engineering and Technology through dedication to duty, commitment to research, innovation in learning and faith in human values.
* Cultivate the spirit of entrepreneurship and the connection between academia and industry that fosters problem solving through collaboration
* Enable the students to develop into outstanding professionals with high ethical standards capable of creating, developing and managing global engineering enterprises.

# CSE (AIML/IOT) DEPARTMENT

**Vision:**

**Mission:**

**Program Educational Objectives (PEO):**

1. **Successful Career:** Graduate will analyze the requirements of the problem in computer engineering, understand the technical feasibility, design and provide efficient engineering solutions with ethical values.
2. **Lifelong learning:** Graduates will engage in lifelong learning by doing higher studies and adapt for ever changing industrial and social demands.
3. **Social Awareness:** To train the graduates for a career and work through values & social concern.

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**Program Specific Outcomes (PSO):**

**Engineering** Graduates will be able to:

1. Apply the principles of mathematics, data structure and algorithm to solve the problem.
2. Understand the functionality of hardware and software of computer system and its applications.
3. Participate in planning and implement solution through leadership and professional ethics.

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**Program Outcomes (PO):**

**Engineering Graduates will be able to:**

1. **Engineering knowledge: Apply the knowledge of mathematics, science,    engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.**
2. **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.**
3. **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.
4. **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.
5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **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.
7. **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.
8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **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.
11. **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.
12. **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.

**STUDENT INFORMATION**

## Project Title: Matrix Calculator

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Student 1** | **Student 2** | **Student 3** | **Student 4** |
| **UID/ERP NO** |  |  |  |  |
| **Name** | Vivek Kumbhar | Sufiyan Chougule | Nimesh Kuthe | Satyam Singh |
| **Class with Division** | SE (AIML) | SE (AIML) | SE (AIML) | SE (AIML) |
| **Contact No.** | 8828490600 | 7700030858 | 9324387211 | 6387284705 |
| **E-mail** | Vkumbhar909@gmail.com | sufy\_456@hotmail.com | nk200316@gmail.com | stym7952@gmail.com |
| **Address** | Dattatray Seva Mandal, behind Suman Nagar, Moreshwar chawl, Sion trombay road, Chembur Mumbai-400071 | E/202, New Nasheman Colony, Tanwar Nagar, Kausa-Mumbra,  Thane-400612 | 38/1, Shree Gurudatta Rahivashi Sava Sanstha,  Near Ekvira Mandir, Digha, Navi Mumbai-400708 | B-604, Shivam Paradise,  Navneet Nagar,  Dombivli (E) - 421201 |

**INSTRUCTIONS TO STUDENTS:**

1. The logbook must be submitted to the 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 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.

(Signature of Students)

# LETTER OF ACCEPTANCE

I undersigned, Prof. working in CSE(IOT/AIML) department, willing to guide the project titled

for the mini project-I Semester III /IV respectively for the academic year 2022-23. The names of the students are:

1. Vivek Kumbhar

2. Sufiyan Chougule

3. Nimesh Kuthe

4. Satyam Singh

(Project Guide) (Mini Project Coordinator) (HOD CSE(AIML/IOT)

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# COURSE OUTCOMES

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

**CO-PO-PSO MAPPING**

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

**SCHEDULE FOR MINI PROJECT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Week** | **Contents** | **Remark** | **Guide Sign** |
| 18/7/2022 to  22/7/2022 | 1 | Group Formation |  |  |
| 24/7/2022 to  29/7/2022 | 2 | Searching 3 topics for presentation |  |  |
| 1/8/2022 to  5/8/2022 | 3 | Presented PPT on 3 topics and 1 got selected. (College based online voting system) |  |  |
| 1/8/2022 to  5/8/2022 | 4 | Allocation of Guide and Project IPD submitted to guide |  |  |
| 15/08/2022 to 19/08/2022 | 5 | Weekly Report to Guide regarding Project |  |  |
| 29/08/2022 to 2/9/2022 | 6 | Weekly Report to Guide regarding Project |  |  |
| 19/9/2022 to  23/9/2022 | 7 | Weekly Report to Guide regarding Project |  |  |
| 26/9/2022 to  30/9/2022 | 8 | Weekly Report to Guide regarding Project |  |  |
| 3/10/2022 to  7/10/2022 | 9 | Weekly Report to Guide regarding Project |  |  |
| 10/10/2022 to  14/10/2022 | 10 | Approved Softcopy of Mini Project’s PPT |  |  |
| 31/10/2022 to  4/11/2022 | 11 | Submitted Project Report and Logbook |  |  |

**PROGRESS/ATTENDANCE REPORT**

|  |  |
| --- | --- |
| Title of the Project: Matrix Calculator | |
| Group No.  . | Name of Student 1: Vivek Kumbhar |
| Name of Student 2: Sufiyan Chougule |
| Name of Student 3: Nimesh Kuthe |
| Name of Student 4: Satyam Singh |
| Name of the Supervisor: | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr. No | Date | Attendance | | | | Progress/Suggestion | Mapping | | |
|  |  | 1 | 2 | 3 | 4 |  | CO | PO | PSO |
| 1 | 18/7/2022 to  22/7/2022 |  |  |  |  | Group Formed:  1.Vivek Kumbhar  2.Sufiyan Chougule  3.Nimesh Kuthe  4.Satyam Singh |  |  |  |
| 2 | 24/7/2022 to  29/7/2022 |  |  |  |  | Selected 3 Topics:  1. Unit Converter  2. Matrix Calculator  3. ATM Software |  |  |  |
| 3 | 1/8/2022 to  5/8/2022 |  |  |  |  | Topic Finalized:  Matrix Calculator |  |  |  |
| 4 | 1/8/2022 to  5/8/2022 |  |  |  |  | Requirement Analysis:  Deciding on GUI requirement |  |  |  |
| 5 | 15/08/2022 to 19/08/2022 |  |  |  |  | Requirement Analysis:  Shortlisting to command line or app development |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 29/08/2022 to 2/9/2022 |  |  |  |  | Requirement Analysis:  Finalizing on Command Line interface |  |  |  |
| 7 | 19/9/2022 to  23/9/2022 |  |  |  |  | Feasibility Analysis and Design & Architecture:  Understood Project feasibility via guidelines. Decided the layouts and appearance of the project |  |  |  |
| 8 | 26/9/2022 to  30/9/2022 |  |  |  |  | Product Development:  Studied Algorithms, Wrote Source Code for fulfilling 5 objectives |  |  |  |
| 9 | 3/10/2022 to  7/10/2022 |  |  |  |  | Performed Implementation and Testing on the project prototype |  |  |  |
| 10 | 10/10/2022 to  14/10/2022 |  |  |  |  | Approved Softcopy of Mini Project’s PPT  & Concluded Product Development |  |  |  |
| 11 | 31/10/2022 to  4/11/2022 |  |  |  |  | Submitted Project Report |  |  |  |

Sign of the Supervisor

# 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.

## Signature of External Examiner Signature of Internal Examiner