TE MINI PROJECT LOGBOOK

**Tubetalk: An Intelligent LangChain System for Extracting and Analyzing YouTube Content for User Queries**

GROUP MEMBERS

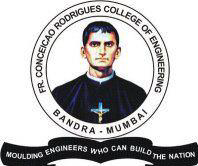
1. Mark Lopes(9913)

2. Jonathan Gomes(9900)

3. Vivian Ludrick(9914)

GUIDE/SUPERVISOR

Prof. Prajakta Dhamnaskar



**Department of Computer Engineering**

**Fr Conceicao Rodrigues College of Engineering, Bandra**

University of Mumbai

(AY 2024-2025)**Student Details**

Semester:

Subject code:

Project Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Category of Project: Application/Product/Research/Review/other\_\_\_\_\_\_\_\_\_\_\_\_\_

Team Members:

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| **Roll Number** | **Name** |
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Project Guide: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Course Outcomes:**

**Semester V**

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| **CO1** | Identify societal/research/innovation/entrepreneurship problems through appropriate literature surveys |
| **CO2** | Identify Methodology for solving above problem and apply engineering knowledge and skills to solve it |
| **CO3** | Validate, Verify the results using test cases/benchmark data/theoretical/ inferences/experiments/simulations |
| **CO5** | Use standard norms of engineering practices and project management principles during project work |
| **CO8** | Demonstrate capabilities of self-learning, leading to lifelong learning. |
| **CO9** | Develop interpersonal skills to work as a member of a group or as leader. |

**Programme Outcomes**

**Engineering Graduates will be able to**

* **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
* **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.
* **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 public health and safety, and the cultural, societal, and environmental considerations.
* **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.
* **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling of complex engineering activities with an understanding of the limitations.
* **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.
* **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and the need for sustainable development.
* **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
* **Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
* **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.
* **Project Management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
* **Life-long learning:** Recognized the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

**Programme Specific Outcomes**

**The student will have the ability to**

* Develop Artificial Intelligence and Machine Learning systems.
* Apply cyber security mechanisms to ensure the protection of information technology assets.

**CO-PO-PSO Mapping with justification:**

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| --- | --- | --- | --- | --- |
| **CO** | **CO Statements** | **PO** | **Level** | **Justification** |
| **CO1** | Identify societal/ research/ innovation/ entrepreneurship problems through appropriate literature surveys | PO1  <1.3.1 1.4.1> | 2 | Students will be able to apply engineering fundamentals and computer science principals to find real time problems.  They shall identify existing solutions and compare them;  Identify risks/impacts in the life-cycle of an engineering product or activity wrt environment and sustainability.  Apply moral & ethical principles to known case |
| PO6  <6.1.1> | 2 |
| PO7  <7.1.1> | 1 |
| PO8  <8.2.2> | 1 |
| **CO2** | Identify Methodology for solving above problem and apply engineering knowledge and skills to solve it | PO2  <2.1.1 2.1.2 2.2.2 2.2.3> | 2 | Students will be able to define problem statements and objectives and scope.  Identify the modules, datasets and computing resouces required to solve the problem,  Define the algorithm ,testcases for proposed solution  Create appropriate documentation.  Apply functionalities/ procedures to get the solution  Discuss limitations and validate tools, techniques and resources  Apply moral & ethical principles to known case |
| PO3  <3.1.1> | 1 |
| PO4  <4.1.2 4.1.3 4.2.1 4.3.1 4.3.2 > | 3 |
| PO5  <5.3.1> | 1 |
| PO8  <8.2.2> | 1 |
| **CO3** | Validate, Verify the results using test cases/benchmark data/theoretical/ inferences/experiments/simulations | PO3  <3.4.3> | 1 | Able to verify the functionalities and validate the design |
| **CO5** | Use standard norms of engineering practices and project management principles during project work | PO10 <10.1.1,10.1.2,10.1.3> | 2 | Understand and interpret technical and non-technical information.  Produce well constructed, well supported written engineering documents.  Able to a show logical progression of ideas using figures, reports, drawing to complement presentations |
| **CO8** | Demonstrate capabilities of self-learning, leading to lifelong learning. | PO12<12.1.2> | 1 | Identify deficiencies or gaps in knowledge and demonstrate an ability to source information to close this gap |
| **CO9** | Develop interpersonal skills to work as a member of a group or as leader. | PO8  <8.2.2>  PO9  PO10  <10.2.1,10.2.2> | 1 | Apply moral & ethical principles to known case  Demonstrate effective communication, problem-solving, conflict resolution and leadership skills  Treat other team members respectfully and maintain composure in difficult situations.  resent results as a team, with smooth integration of contributions from all individual efforts.  Listen to and comprehend information, instructions, and viewpoints of others  Deliver effective oral presentations to technical and non-technical audience |
| 3 |
| 2 |

**WEEK – 01**

**Date:** From \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ To: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Progress Achieved:**

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**Team Member’s contribution:**

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| Team Member 1 | Team Member 2 | Team Member 3 | Team Member 4 |
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**Mentor’s Suggestions:**

**Signature:** **Project guide:**

Team Member 1: Signature:

Team Member 2: Date:

Team Member 3:

Team Member 4:

**WEEK –02**

**Date:** From \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ To: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Progress Achieved:**

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**Team Member’s contribution:**

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| --- | --- | --- | --- |
| Team Member 1 | Team Member 2 | Team Member 3 | Team Member 4 |
|  |  |  |  |

**Mentor’s Suggestions:**

**Signature:** **Project guide:**

Team Member 1: Signature:

Team Member 2: Date:

Team Member 3:

Team Member 4:

**Course Outcomes:**

**Semester VI**

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| --- | --- |
| **CO3** | Validate, Verify the results using test cases/benchmark data/theoretical/ inferences/experiments/simulations |
| **CO4** | Analyze and evaluate the impact of solution/product/research/innovation /entrepreneurship towards societal/environmental/sustainable development |
| **CO5** | Use standard norms of engineering practices and project management principles during project work |
| **CO6** | Communicate through technical report writing and oral presentation.  ● The work may result in research/white paper/ article/blog writing and publication  ● The work may result in business plan for entrepreneurship product created  ● The work may result in patent filing. |
| **CO7** | Gain technical competency towards participation in Competitions, Hackathons, etc. |
| **CO8** | Demonstrate capabilities of self-learning, leading to lifelong learning. |
| **CO9** | Develop interpersonal skills to work as a member of a group or as leader. |

**Details of Publication/Patents/Participation/Awards**

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