

## **Pimpri Chinchwad Education Trust's**

# Pimpri Chinchwad College of Engineering & Research Ravet, Pune



Academic Year: 2023 - 24

**BE Project-Synopsis** 

Term: V

1. Group ID: 28

**2. Project Title:** Developing a common knowledge platform for students to bring all their projects together.

3. Project Option: Web Development & Artificial Intelligence

4. Internal Guide: Dr. Abhijit D. Jadhav

**5. Technical Keywords:** Plagiarism detection, plagiarism Techniques.

**6. Problem Statement:** To bring projects of all domains together and check for their originality providing a single platform for exploring the trending and already build project ideas.

Addressing the Challenges:

- Time-Consuming Process: Faculty members have limited time to review and assess assignments, papers, or projects from multiple students.
- Detecting plagiarism manually can be time-consuming, especially if they need to crossreference sources and conduct online searches.
- Limited Exposure to Current Trends: Students may have limited access to the latest trends and cutting-edge research, which can hinder their ability to stay updated with developments in their field.
- Reduced Curiosity: The absence of exposure to ongoing projects may result in a lack of curiosity and exploration among students.
- Increasing the Hiring rate of talented students.

#### 7. Abstract:

In today's internet-dependent era, accessing projects has become incredibly convenient. Projects are readily available from various sources like git repositories, YouTube courses, and other online platforms. However, ensuring the authenticity of these projects has become a significant concern.

Our approach involves consolidating projects developed by students from different universities and colleges across the country, thoroughly verifying their originality before making them available.

Every college looking to submit and check for plagiarism will first need to register on our website. If a project is deemed original, it will be uploaded to expose other students to the projects available in the market. This will assist students in improving existing project features or using them for practice purposes. Additionally, our platform will not only benefit students but also aid companies in recruitment by allowing them to explore various projects and hire students based on their project requirements.

To achieve this, we will employ AI-powered plagiarism detection to analyze and compare the textual content of students' submissions to detect plagiarism. In summary, this project aims to tackle the critical issue of plagiarism in student projects by providing educators with a robust tool to ensure academic integrity, promote originality, and centralize all project ideas on a single platform.

## 8. Objectives:

- Our objective is to create a system where colleges and universities can upload studentdeveloped projects.
- The primary aim of this initiative is to identify and prevent plagiarism in student projects.
- Enabling companies to recruit students according to their project-related criteria is the purpose of this effort.
- Our goal is to facilitate students and faculty members in accessing previous projects from students nationwide and potentially expanding upon project concepts when necessary.

# 10. Relevant mathematics associated with the Project:

**System Description:** 

#### • Input:

- i) **User Data**: College, student registration and profile information, including name, contact, email etc.
- ii) **Upload Projects**: Colleges will upload the projects of their students for checking plagiarism and sharing ideas.

#### Output:

- i) **Plagiarism report:** The system will report whether the project failed the plagiarism test or
- ii) **Successful upload:** The projects submitted by the college would get uploaded on the platform and now anyone can view it.
- iii) Companies Participation: Various organizations/companies can view the projects and send mail to students if they find that project has a great potential and is deserving.

#### • Data Structures:

- i) User Profiles: Data structure to store college/students' registration and profile information.
- ii) Uploaded projects: Structured data for storing projects under different categories.

#### • Functions:

- i) **Function for Reducing Plagiarism:** A function to find keywords in project to decrease the search while doing plagiarism test.
- ii) **Detecting Best projects Function:** Functionality to find best projects for showing company/organization to reduce their work of checking every project.
- iii) **Plagiarized Project Detection Function:** A function to detect plagiarized functions and alert users and college.

#### • Success Conditions:

- i) **Plagiarism detection:** Plagiarism check should ensure 100% correct results, preventing unauthenticated project submission.
- ii) **User friendly Interaction:** User should experience smooth experience increasing the overall quality of platform.
- iii) **Privacy Protection:** The code of all the projects submitted will not be shared with some unauthenticated person.

- Failure Conditions:
  - i) **Plagiarism detection:** Plagiarism detection techniques fail to recognize a non-original project.
  - ii) Privacy Breaches: Data of the projects submitted is compromised.

# 11. Literature Survey

| Sr.No. | Research article<br>(Author/Year) |                    | Methods/      | Relevant                   |
|--------|-----------------------------------|--------------------|---------------|----------------------------|
|        |                                   | Proposed work      | Systems       | findings/Limitations       |
|        |                                   |                    | described     | identified                 |
| [1]    | Pawan Kumar, Sagar                | "Online Integrated |               |                            |
|        | Yadav, Prof. Gurpreet             | Platform for       | Jaccard       | This website does          |
|        | Kaur                              | Projects taken up  | Index, Main   | plagiarism with Jaccard    |
|        |                                   | by Students of     | Server        | Index.                     |
|        | /June 2022)                       | various Colleges"  |               |                            |
|        |                                   |                    |               |                            |
| [2]    | Prasanth, Rajshree,               | "A Survey on       | Stylometry, J | This plagiarism            |
|        | Saravana Balaji /January          | Plagiarism         | Plag, Yap     | techniques have high cost, |
|        | 2014                              | Detection"         |               | require more time,         |
|        |                                   |                    |               | corruption occurs without  |
|        |                                   |                    |               | warning.                   |
|        |                                   |                    |               |                            |
| [3]    | Niraj Mohabey, Yash               | "Plagiarism        | Dynamic       | Accuracy of this           |
|        | Gavanang, Abubakkar               | Detection for      | programming   | techniques depends on      |
|        | Khan, Lavesh Singh                | project Report     | , Cosine      | text size, language        |
|        | Chib, Bhushan Patil               | using Machine      | Similarity,   | complexity, and dataset    |
|        | /June 2023                        | Learning"          | matrix rules. | quality                    |
|        |                                   |                    |               |                            |

# 12. References / Bibliography

- [1] Pawan Kumar, Sagar Yadav, Prof. Gurpreet Kaur "Online Integrated Platform for Projects taken up by Students of various Colleges", June 2022
- [2] Prasanth, Rajshree, Saravana Balaji "A Survey on Plagiarism Detection", January 2014
- [3] Niraj Mohabey, Yash Gavanang, Abubakkar Khan, Lavesh Singh Chib, Bhushan Patil "Plagiarism Detection for project Report using Machine Learning", June 2023