

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: Establishing a system for students to showcase projects and discover job opportunities

3. Project Option:

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 cross-reference 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 digital era, the ease of accessing projects from various sources like git repositories and online courses has never been greater. However, the challenge of ensuring the originality of these projects remains a prominent concern.

Our initiative is dedicated to streamlining the process of consolidating student projects from universities and colleges nationwide. These projects undergo a meticulous verification process to guarantee their authenticity, making them readily available for all users.

Colleges interested in submitting and verifying project authenticity will begin by registering on our platform. Original projects are then uploaded, creating a valuable resource for students to explore and learn from. More significantly, our primary focus is on catering to companies' recruitment needs, providing them with a diverse array of student projects to choose from.

Our solution utilizes plagiarism detection APIs to thoroughly examine student submissions, identifying any potential instances of plagiarism. This comprehensive approach serves to maintain academic integrity, promote originality, and centralize a wide range of project ideas.

In essence, our project aims to tackle the critical issue of plagiarism in student projects, placing a strong emphasis on facilitating the hiring process for companies seeking skilled and talented individuals.

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 that the project failed the originality test.
- 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 (Author/ Year)	Proposed work	Methods/ Systems described	Relevant findings/Limitations identified
[1]	Pawan Kumar, Sagar Yadav, Prof. Gurpreet Kaur	"Online Integrated Platform for Projects taken up by Students of various Colleges"	They utilized the Jaccard Index to uncover similarities in the project in order to detect plagiarism	The author of this work has developed an integrated platform for student projects To think about this project and what factors to consider when creating it.
[2]	Sanket Kale, Aniket Shewale, Premsagar J. Sarang, Prasad S.Pawar, Safia Sadruddin	"Project Management System(PMS)"	Progress chart is developed utilizing WBS ("Work Breakdown Structure")	Implemented a system which can manage project cognate all work consummated by utilized and Project coordinator or guide The further modification of the project is to create or expand the system in such way that it can be used at various institute or organization levels
[3]	Vladislav Scherbini and Sergey ButakovSing h /2008	"Plagiarism detection :the tool and the case study"	Applied winnowing algorithm for implementing calculations of fingerprints Built an antiplagiarism plug-in for Moodle CMS(Course Management System)	The developed prototype does not satisfy all the requirements for Moodle plug-ins It uses some Microsoft technologies but the same algorithms could be easily implemented using PHP language as it necessary for Moodle.

[4]	Kerry Xu, Adrien Nurboja	Use of algorithms in detecting intrinsic and extrinsic plagiarism through NLP and machine learning	Applied natural language processing, natural language toolkit, tokenization, sentence tokenizer, stop word removal, stemming and stemming algorithms like Porter algorithm, Lancaster stemmer, Lemmatization, NLP on plagiarism detection	Extrinsic plagiarism suffers from computationally demanding tasks and face difficulty when detecting plagiarism with heavy modification The accuracy of intrinsic plagiarism detectors are much lower and often result in the suspected document being checked by a human.
[5]	Rival Fauzi, Muhammad Iqbal, Tita Haryanti	Design and Implementation of a Final Project Plagiarism Detection System Using Cosine Similarity Method	Developed a plagiarism detection system based on the cosine similarity algorithm	The author has also conducted research on which algorithms may be employed more effectively for plagiarism detection It does not examine projects or research papers from the real-time web, but rather from their database
[6]	Tomas FoltyNnek	Academic Plagiarism Detection: A Systematic Literature Review	Author discovered all of the different methodologies utilized in plagiarism detection	Conducted research on all plagiarism detection research papers Published between 2013 and 2018 and discovered many plagiarism detection strategies and algorithms Discovered hazards in which algorithm and why we should select one of them Able to determine the method to use by reading this study, although the data investigated was restricted to 2018
[7]	Niraj Mohabey, Yash Gavanang, Abubakkar Khan Laves h Singh Chib	Plagiarism detection for project report using machine learning	Focuses on machine learning techniques for plagiarism detection and discusses different approaches, algorithms, and datasets used in detecting plagiarism, along with their advantages and limitations	Presents some future research directions in this area Has produced initial results showing that our content-protecting method achieves the same detection effectiveness as the original method while making it practically impossible to reveal the protected content through common attacks

[8]	Saravana Balaji.B ,Rajshree.R , Prasanth.S	A Survey on Plagiarism Detection	Detailed Study of Common feature of different detectio n systems is described	Presents a survey on plagiarism detection systems
[9]	Md. Feroz Ahmed	Plagiarism detection system	Address two key themes in terms of the Plagiarism Detection System - A submission system of authenticated users and plagiarism detection of submitted documents	This document is the Software Requirements Specification (SRS) for the Plagiarism Detection System (PDS) It contains detailed functional, non- functional, and support requirements and establishes requirements baseline for development of the system
[10	Dr. Nisha Soms, S Prashanth, P Preethika, D Deepak Kumar	Student Project Management System	Have used job breakdown structure to build progress map (WBS)	Have built a web based platform for he management, tracking and supervision of students' final year projects Have not provided the Authenticity of the work uploaded by the students

12. References / Bibliography

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