
PROJECT EXCELLENCE NAVIGATOR**Prof. S.R. Sontakke^{*1}, Aastha P. Mohod^{*2}, Harshada R. Rohankar^{*3},****Vedanti S. Gomase^{*4}, Shweta A. Patmase^{*5}**^{*1}Professor, P.R. Pote Patil COEM, Amravati, India.^{*2,3,4,5}P.R. Pote Patil COEM, Amravati, India.DOI : <https://www.doi.org/10.56726/IRJMETS71864>

ABSTRACT

The Project Excellence Navigator is a smart platform designed to make managing and completing final year projects easier for students. It helps solve common problems that students and academic institutions face when planning, carrying out, and evaluating projects. The platform offers support at every stage of the project, guiding students from the initial idea all the way to the final presentation.

This system is designed to provide a structured platform for tracking project activities, monitoring progress, and facilitating seamless communication between students, guides, and the Head of Department (HOD). By streamlining these processes, the system enhances transparency, and overall project efficiency.

The system assigns specific roles to its users. Students are responsible for updating their project progress and tracking their activities in a systematic manner. Guides provide valuable feedback, helping students refine their work and ensure continuous improvement. The HOD has oversight of all project activities, allowing for effective supervision and ensuring that projects progress as planned.

To enhance efficiency and reduce manual effort, the system incorporates a rule-based algorithm to automate various processes. This automation ensures that project progress updates are recorded systematically and that feedback is managed efficiently, eliminating inconsistencies and delays. The system's structured approach improves communication, ensures organized documentation of project-related activities, and helps maintain a clear workflow for all students involved.

Keywords: Project Management, Final Year Project, Academic Institutions, Project Tracking, Transparency, Feedback Management, Rule-Based, Project Evaluation.

I. INTRODUCTION

Maintaining the final year projects can be challenging for both students and academic institutions due to issues like poor planning, lack of guidance, and difficulty in tracking progress. To address these challenges, Project Excellence Navigator provides a structured platform for tracking project activities, monitoring progress, and improving communication between students, guides, and the Head of Department (HOD). The system involves the three modules like student module, guide module, and HOD module. This system helps students, guides, and the Head of Department (HOD) work better on projects. Students update their work, guides give remarks, and the HOD checks everything. It makes project work easier, keeps everyone connected, and helps track progress clearly. The system allows you to work on your project digitally instead of doing everything manually, saving a lot of time.

1.1 Motivation:

Managing final year projects is a crucial part of a student's academic journey, bridging the gap between learning and professional practice. However, challenges such as poor planning, ineffective resource management, lack of collaboration, and inadequate tracking often make project completion difficult. These issues can lead to missed deadlines and lower-quality outcomes.

To address these challenges, Project Excellence Navigator was developed as a structured platform to streamline project management. By integrating automation, the system enhances collaboration, ensures efficient progress tracking, and supports students throughout the project lifecycle from initiation to final submission. This approach simplifies project execution, improves accountability, and helps students achieve better results.

1.2 Problem Statement:

Despite the critical role of final-year projects in academic and professional development, many students encounter significant challenges in managing their projects effectively. One of the primary issues is inefficient planning, as students often struggle to structure their projects, define clear milestones, and allocate tasks

systematically. Poor communication within project teams further exacerbates these difficulties, leading to misunderstandings, delays, and a lack of coordination.

Additionally, the absence of robust progress-tracking mechanisms makes it difficult to monitor advancements, identify potential issues early, and ensure adherence to deadlines. Furthermore, inadequate resource management poses another challenge, as students may struggle to optimize the use of available materials and time, resulting in inefficiencies and delays. Collectively, these issues contribute to prolonged project timelines, compromised quality of deliverables, and a less enriching learning experience for students.

1.3 Objectives:

The objective of the Project Excellence Navigator is to create a structured and efficient platform for managing final year projects. This system is designed to improve communication between students, guides, and the Head of Department (HOD) while ensuring transparency in project progress. By streamlining key activities such as group formation, document submission, plagiarism detection, feedback collection, and evaluation, the platform aims to simplify project management. It provides a centralized space for all project-related activities, making the process more organized and productive for both students and faculty.

1. Simplify Project Management – Provide a structured platform to help students manage their final year projects efficiently.
2. Enhance Communication – Improve interaction between students, guides, and HODs for better collaboration.
3. Automate Plagiarism Detection – Check project abstracts for originality and ensure academic integrity.
4. Facilitate Feedback Collection – Enable guides to review student submissions and provide constructive feedback.
5. Streamline Document Submission – Allow students to upload their abstracts, progress reports, and final documents in an organized manner.
6. Ensure Transparency – Give HODs access to student and guide activities for better supervision.
7. Monitor Project Progress – Provide a clear structure for students to update their project work and receive guidance.
8. Support Evaluation Process – Help in assessing student projects and assigning final grades based on performance.

By achieving these objectives, the system ensures a smooth, efficient, and effective project management process, benefiting both students and faculty members.

II. LITERATURE SURVEY

A. Kumar, R. Sharma, and M. Jain, in “AI-powered project management systems: A comprehensive review” (2023), discuss how automated systems improve project planning, tracking, and risk assessment. The paper highlights AI-driven tools for scheduling, resource allocation, and feedback while addressing challenges like data security. Although our system does not use AI for tracking, the study provides insights into optimizing project workflows for better efficiency.[1]

L. Harris and E. Chen, in “Automated feedback and evaluation tools for student projects” (2021), discuss the use of automated systems for assessing student work. The paper highlights how digital tools can provide instant feedback, evaluate project quality, and assist educators in grading. It emphasizes the benefits of reducing manual effort and improving consistency in assessments. While our system relies on guide-provided feedback rather than automation, this study supports the importance of structured feedback mechanisms in student project evaluation.[2]

Nguyen and Lee explored risk management strategies in project management systems, focusing on methods to identify, assess, and mitigate risks (2021). Their study emphasized structured planning techniques to minimize project failures and improve overall project execution. This research aligns with our system’s goal of incorporating risk identification features to help students foresee potential challenges during their project work.[3]

Anderson and Brown examined the role of project management software in enhancing team collaboration (2021). Their work highlighted tools that improve communication, task organization, and workflow efficiency.

While our system does not include task allocation, it promotes structured documentation and feedback exchange between students and guides, ensuring smooth project progression.[4]

Gupta and Singh examined the role of automation in final-year project management, emphasizing its impact on student learning and efficiency (2023). Their study discussed automated evaluation, document tracking, and structured workflows. While our system does not automate evaluation, it facilitates.[5]

Patel explored AI-driven resource management for optimizing project execution (2023). The research focused on intelligent tools that allocate resources efficiently, improving time management and productivity. Since our system does not utilize AI for resource allocation, this study provides insights into optimizing workflows within structured project management environments.[6]

M. N. Patel investigated technological advancements in final-year project management systems, highlighting the integration of digital tools to enhance project coordination and tracking (2022). The study emphasized the benefits of structured project monitoring and automated report generation. While our system does not include AI-driven tracking, it aligns with the study's objective of improving documentation, feedback collection, and project organization through a centralized platform.[7]

Johnson and Singh analyzed the evolution of AI tools in project planning and execution, highlighting their role in optimizing workflows and decision-making (2023). While our system does not incorporate AI for planning, the study provides insights into structured project execution.[8]

Tan reviewed AI-driven resource allocation and optimization strategies, emphasizing efficiency in managing project tasks (2023). Although our system does not use AI for resource management, this study supports the importance of structured project coordination.[9]

Clark conducted a systematic review of digital project management systems, discussing advancements in project tracking and collaboration (2022). While our system does not feature automated tracking, it aligns with the study's focus on improving project documentation and feedback management.[10]

III. PROPOSED WORK

The Project Excellence Navigator focuses on creating a structured platform that supports and improves the management of final year student projects. This system is designed to assist students, guides, and the Head of Department (HOD) throughout the project lifecycle by simplifying the key activities involved in project monitoring and reporting.

The platform will provide a dedicated login for each user role: student, guide, and HOD. Students will be able to log their project details, update their progress manually, and maintain a record of their work in a well-organized format. This helps students stay on track with their work and gives them a clear view of what has been completed and what is pending.

Guides will be able to view each student's progress updates, review submitted work, and provide written feedback through the system. The feedback feature encourages continuous improvement and supports students in understanding what areas need attention. The system will ensure that guides can easily monitor the work of each student under their supervision without needing to manage it manually outside the platform.

The HOD will have access to an overview of all projects in the department. This includes the ability to view student activity, guide feedback, and overall progress summaries. This transparency helps in academic supervision and improves communication between all parties involved

The platform will also include feature that is when the student upload the abstract of the project the system checks the plagiarism and tells that the abstract should accepted or rejected. If the plagiarism percentage is below 30% so it will accept otherwise it will be reject, which will help students define their goals clearly and anticipate any challenges early on. All data will be organized in a central location, making it easier to prepare reports or project documentation when needed.

This system involves developing a digital solution that makes final year project management more structured, transparent, and collaborative while ensuring that students remain in control of their progress and faculty members are kept informed throughout the process.

1. Student Module

This module is designed for students to manage their final year projects efficiently. It allows them to register,

form groups, submit required documents, and track feedback.

- Leader Registration & Group Formation – The group leader registers on the system and forms a team.
- Upload Synopsis – The student uploads the project synopsis (abstract).
- Plagiarism Check – The system checks the plagiarism percentage.

If plagiarism is above 30%, the student is required to revise and re-upload.

If plagiarism is below 30%, the abstract is accepted and submitted to the guide

- Guide Review & Feedback – The guide reviews the synopsis and provides necessary feedback.
- Upload Final Documents – Once the project is completed, the final documents are uploaded.
- Final Evaluation – The project is evaluated, and marks are assigned based on performance.

2 Guide Module

The guide module allows faculty members to supervise student projects by reviewing submissions, providing feedback, and scheduling meetings.

- Login & Access Documents – Guides log in to the system and access project documents.
- Provide Feedback – After reviewing the synopsis and project updates, the guide provides constructive feedback to students.
- Schedule Meetings – If necessary, the guide schedules meetings with students to discuss project progress and improvements.

3 HOD Module

The HOD module enables department heads to oversee the entire project workflow, ensuring that students and guides are properly assigned and monitored.

- Register/Login – The HOD logs into the system to manage project activities.
- View Students & Guides – The HOD can access a list of all students and guides.
- Allocate Groups to Guides – Student groups are assigned to guides based on workload or expertise.
- Monitor Inactivity – If a student or guide is inactive, the system allows the HOD to intervene.
- Schedule Meetings – If necessary, the HOD schedules meetings to discuss overall project progress.

This structured system ensures transparency, smooth communication, and proper project management while helping students complete their projects effectively.

IV. CONCLUSION

The Project Excellence Navigator is a smart and user-friendly platform developed to improve the management of final year projects for students. It helps make project work more organized and efficient by handling important tasks such as planning, setting milestones. This leads to better communication and teamwork among students and guides, resulting in smoother project execution.

While the system does not track progress automatically, it allows students to update their own progress regularly, giving both students and faculty a clear view of project development. Feedback on performance is provided directly by the guide, allowing for personalized guidance and support. Overall, the platform creates a more organized and effective environment for project work, offering a valuable learning experience for both students and faculty.

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