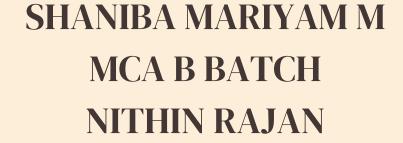


INNOVATRACK



Project idea management system









In colleges, students often face challenges in selecting unique and innovative project topics. The repetitive use of similar ideas leads to a lack of novelty and innovation. The Project Idea Management System is designed to help students and faculty track, validate, and recommend unique project topics. The system ensures that ideas are not duplicated, facilitates project tracking, and provides resources for seminar preparation. By leveraging AI technologies, the platform enhances the efficiency of idea management and validation.





EXISTING SYSTEM

The current approach to project idea selection is largely manual. Students typically select ideas based on personal research, faculty suggestions, or past projects. This leads to several issues:

- High probability of idea duplication across batches.
- Difficulty in finding suitable topics aligned with current trends.
- Limited resources for seminar preparation.
- No AI-driven validation or recommendation system for project ideas.
- Lack of a centralized system for faculty to manage and review project submissions.



- Allowing students to submit project ideas with relevant details.
- Using AI-powered NLP to check idea uniqueness and provide similarity analysis.
- Providing faculty members with a dashboard for reviewing, approving, and providing feedback on project submissions.
- Offering resources such as research papers, videos, and templates for seminar preparation.
- Sending notifications regarding project approvals, rejections, and suggestions.
- Enabling administrators to manage user roles, validate submissions, and enforce uniqueness rules.





• project idea submission

- Students submit project titles and descriptions.
- NLP-Based Similarity Check: The system analyzes the submission and checks for duplicates.
- Only unique project ideas are sent to faculty for approval.
- Faculty can approve/reject ideas and assign scores based on originality and feasibility.





• NLP-based validation analyzes the description and compares it with existing projects.



project repository

- Centralized storage of all past and ongoing projects.
- Categorization based on batch, technology, and domain.
- Advanced search and filtering features.

Upcoming Events

• Event Listing: Displays upcoming seminars, hackathons, project exhibitions, and viva schedules.





Score

• Score Assignment: Faculty can assign scores based on project uniqueness, implementation, and presentation.

Viva

- Material Upload: Teachers can upload viva-related resources, including question banks, reference materials, and guidelines.
- Structured Content: Materials are categorized based on subjects, project domains, and evaluation criteria.
- Student Access: Students can view and download materials to prepare for their viva.

TOOLS AND TECHNOLOGIES

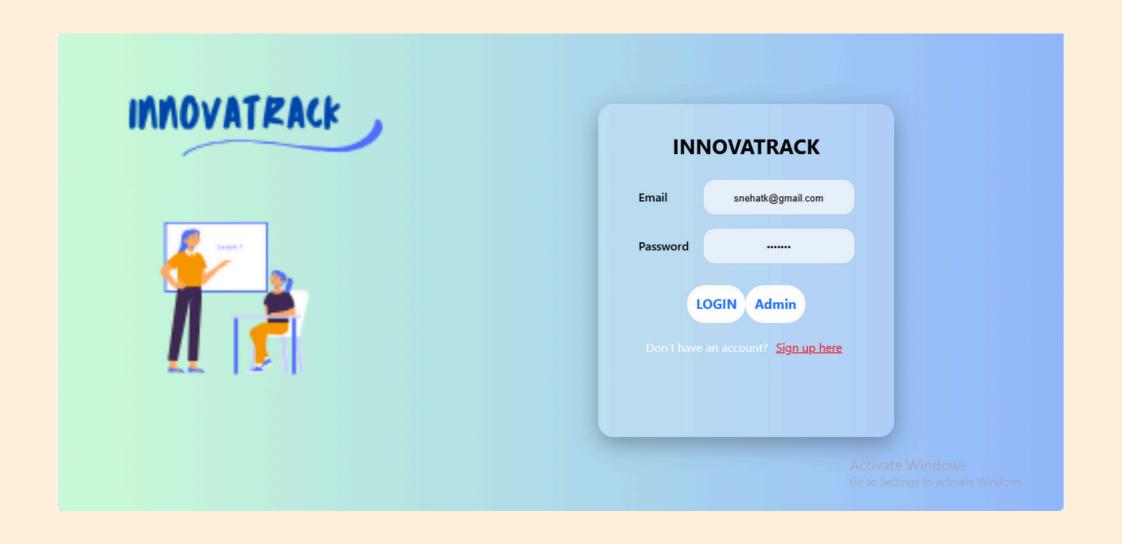
- Frontend: React.js for building a responsive user interface.
- Backend: Node.js and Express.js for handling authentication, data storage, and validation.
- Database: MongoDB for storing project ideas, users, and batch details.
- AI
 - NLP-based idea validation.



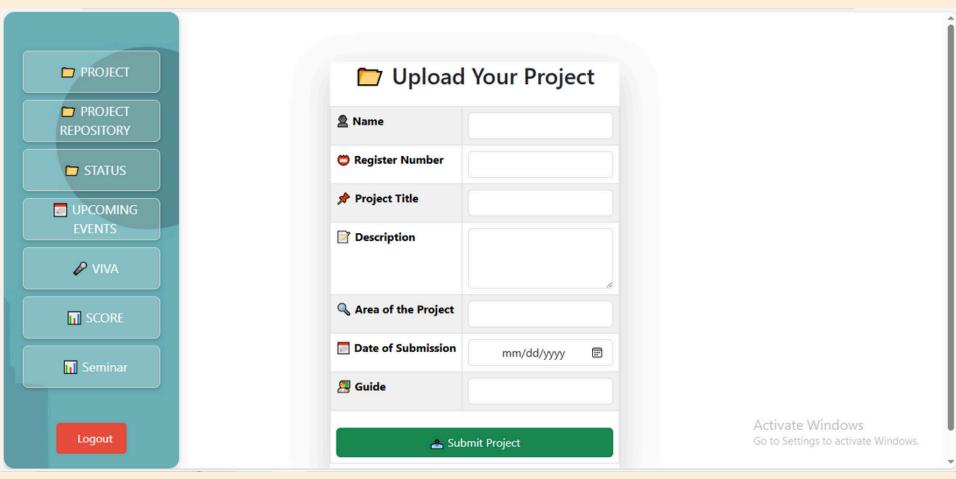
- 1. Research Papers & Books
 - Aggarwal, C. C. (2018). Machine Learning for Text. Springer. (For NLP-based duplicate detection & recommendation system)
 - Manning, C. D., Raghavan, P., & Schütze, H. (2008). Introduction to Information Retrieval. Cambridge University Press. (For text similarity and search algorithms in NLP)
- 2. Web & Documentation References
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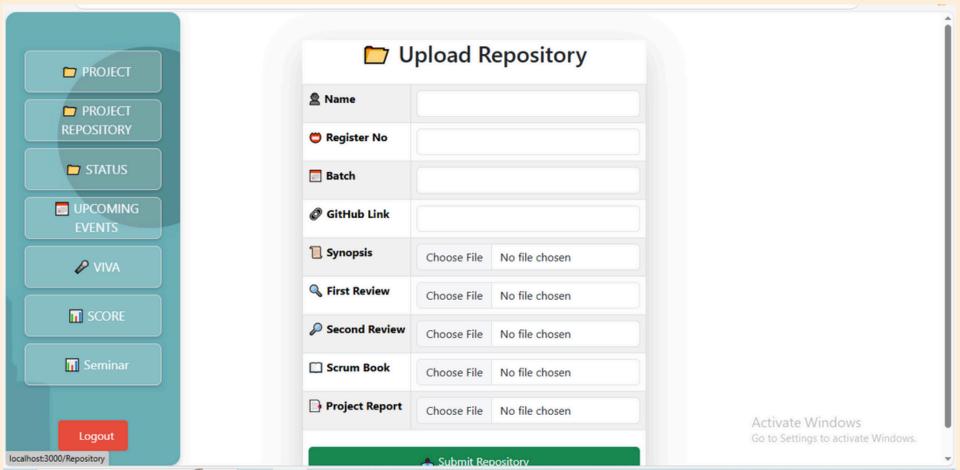
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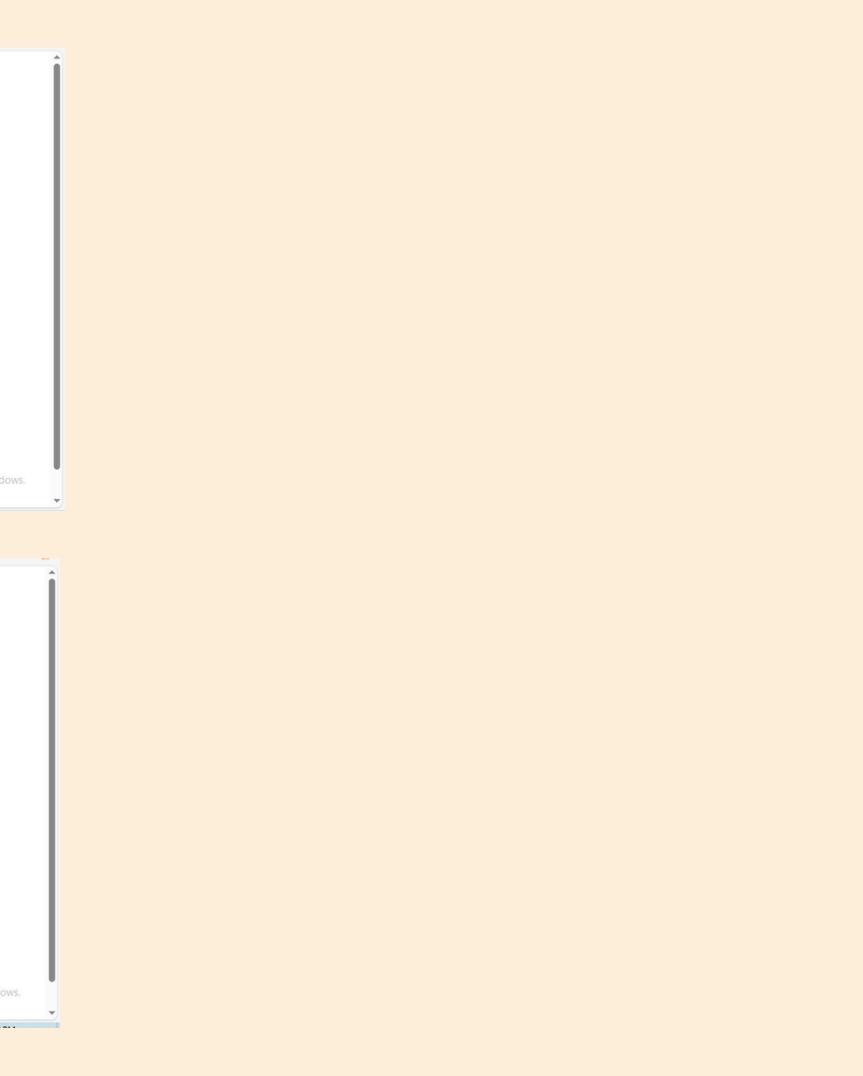
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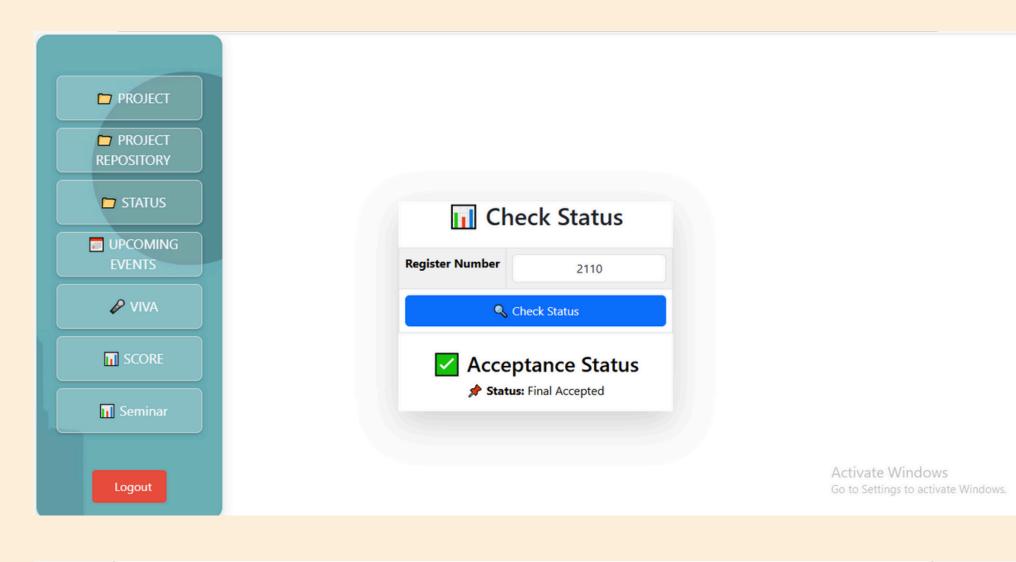


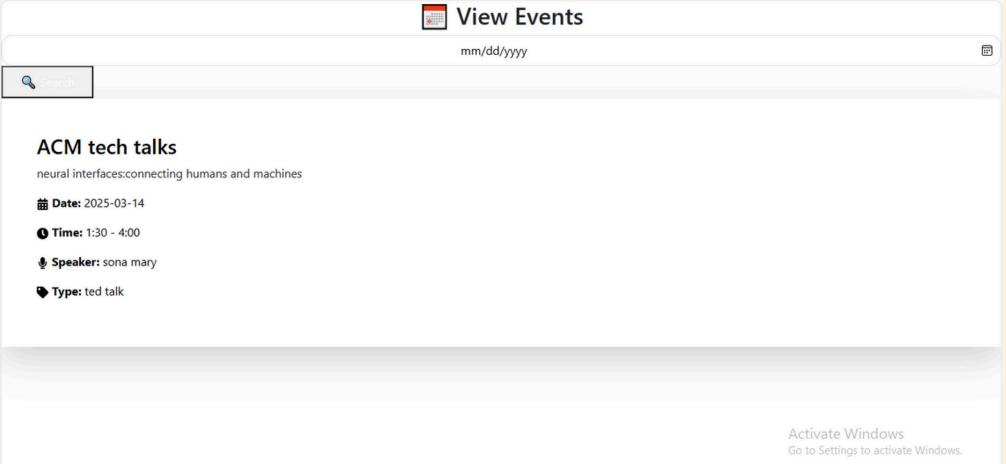


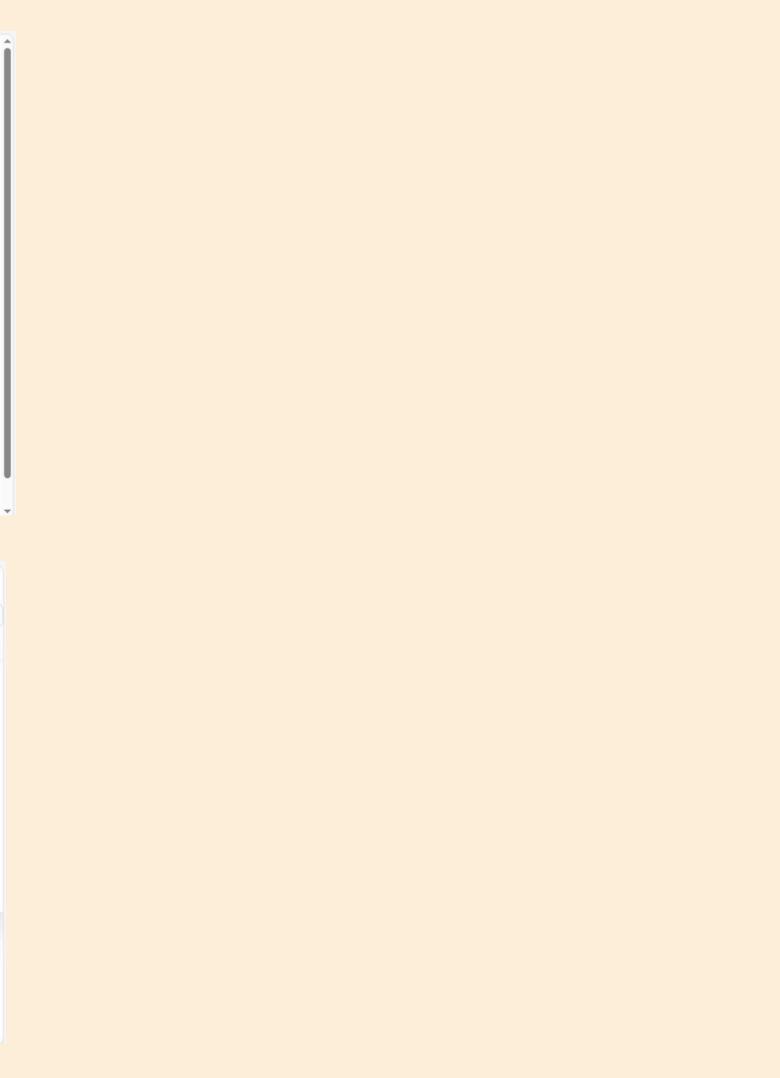


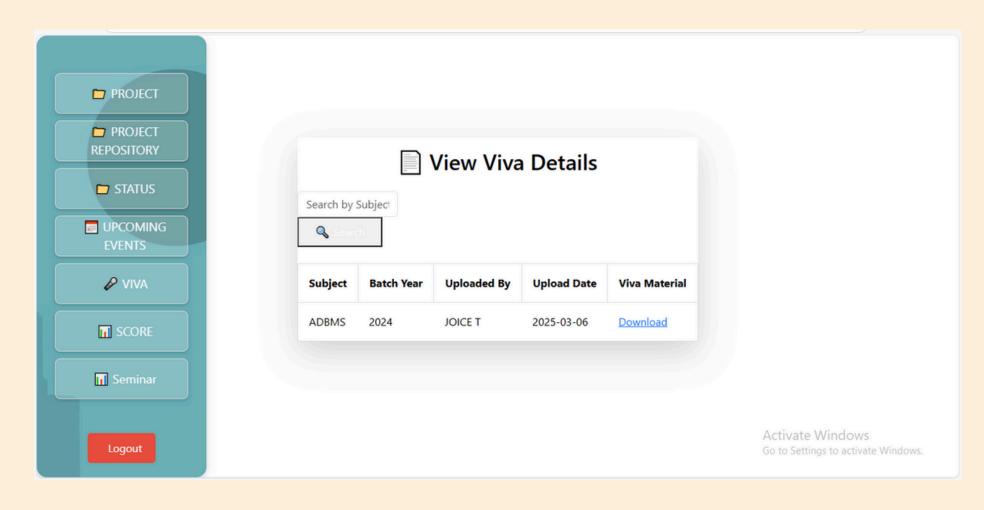


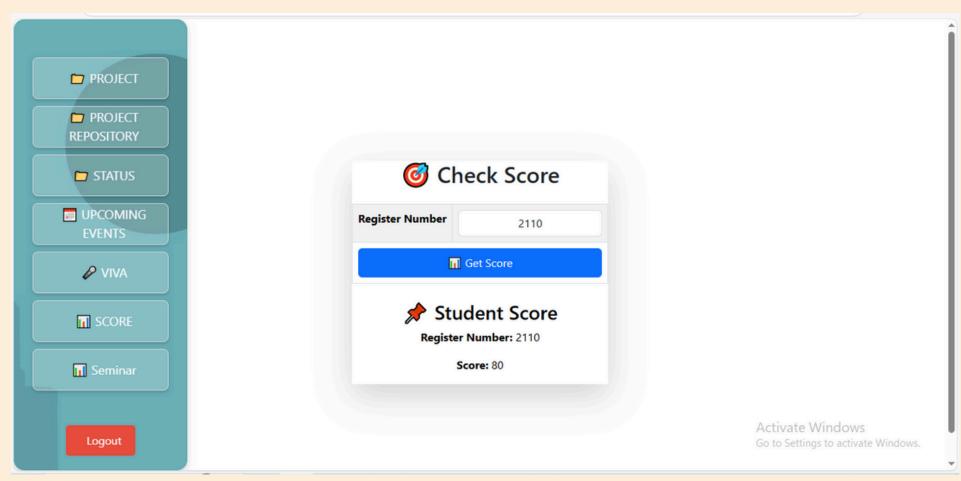


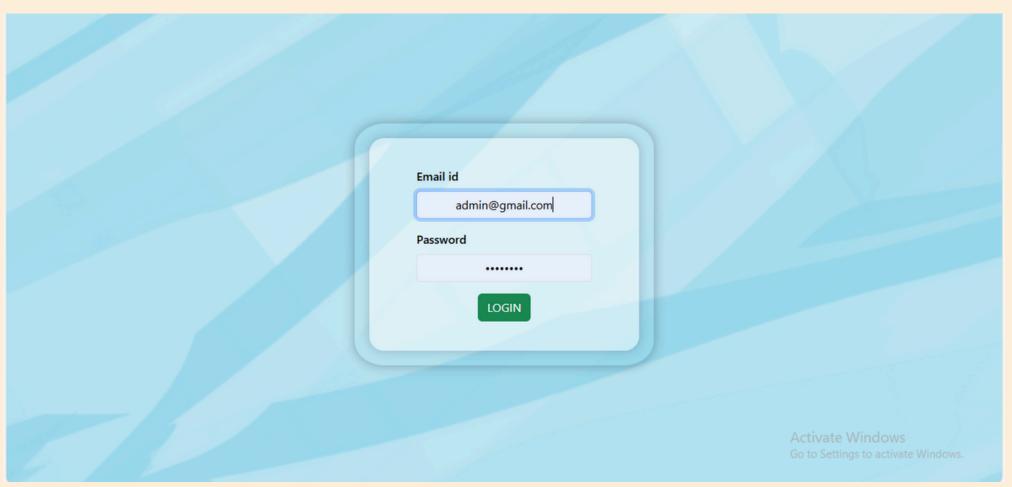




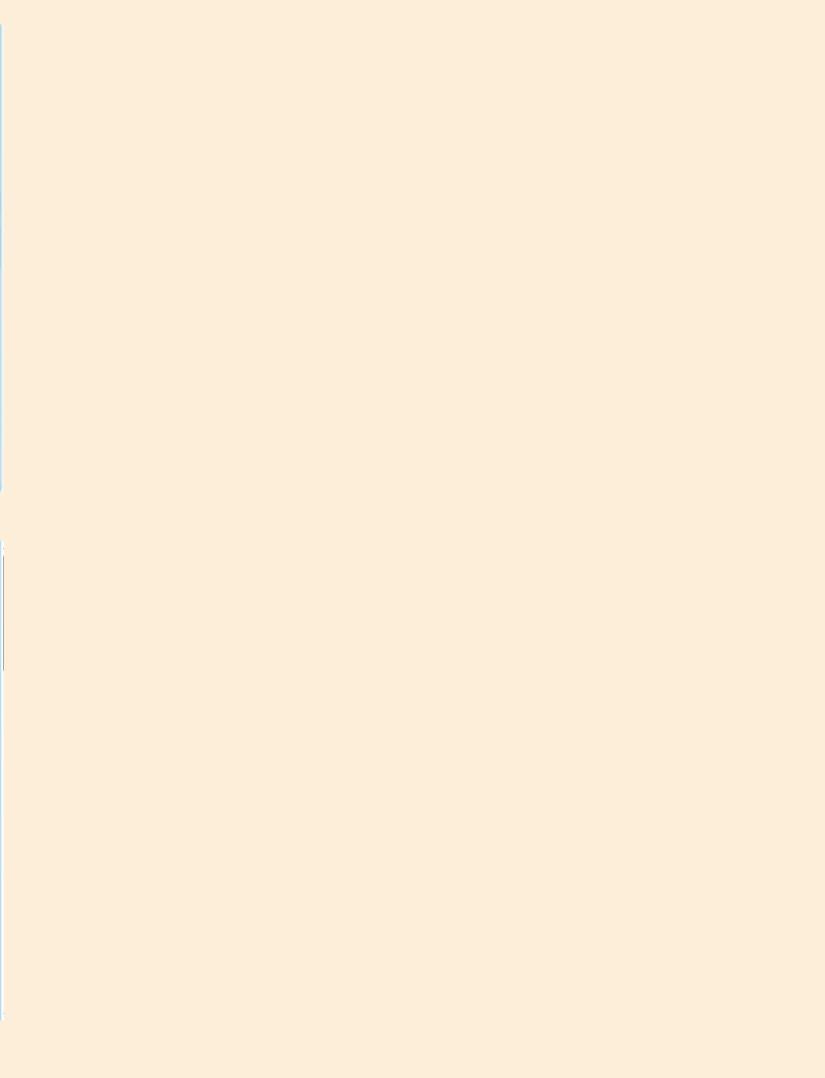


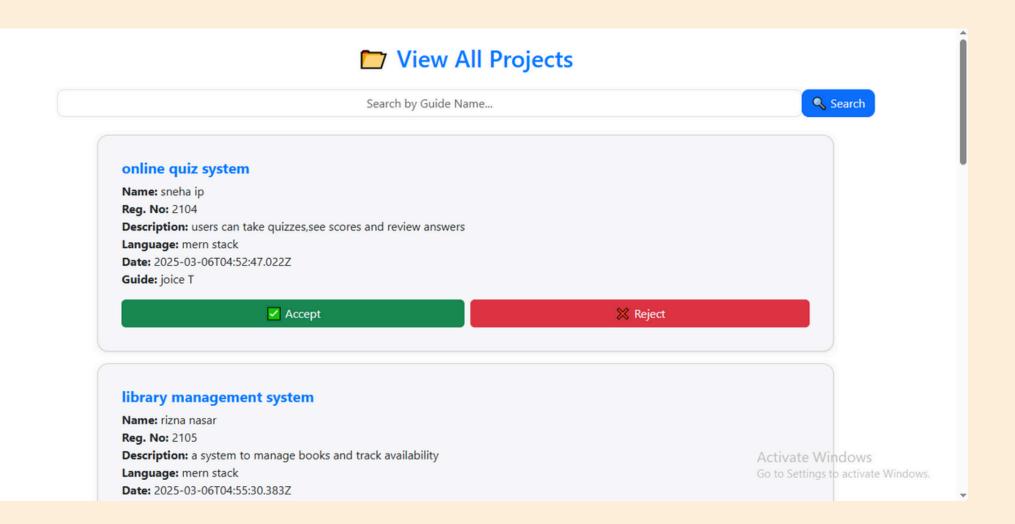


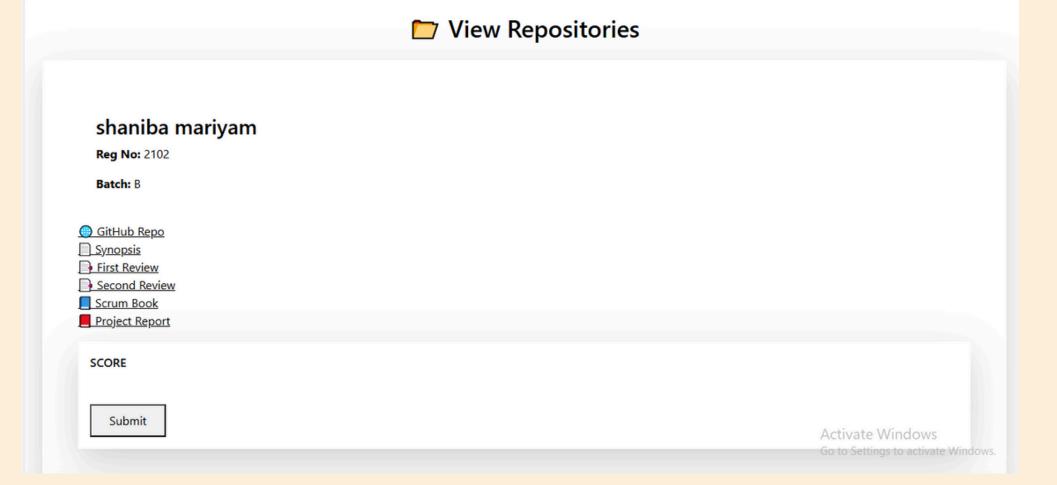


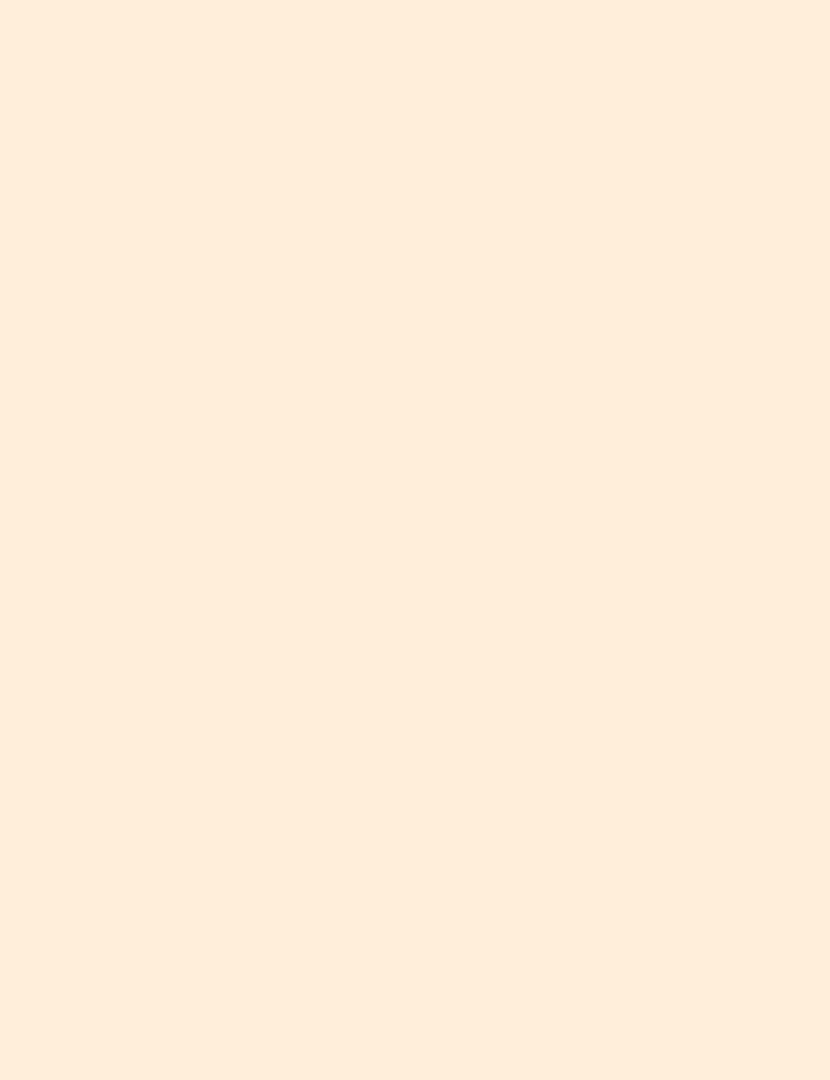
















The Project and Seminar Idea Management System streamlines the process of project and seminar topic selection, ensuring uniqueness and innovation. By incorporating AI-powered validation and ML-based recommendations, the platform significantly reduces redundancy in project ideas while enhancing student and faculty collaboration. The system's centralized repository and preparation resources further aid students in their academic and research endeavors. This platform fosters creativity, innovation, and effective knowledge management in educational institutions.



