**Abstract**

**1.1 Introduction**

The Institution’s Innovation Council (IIC) Management Platform is a digital system that helps colleges manage student projects efficiently. It serves as a centralized platform where students can submit projects, faculty can review and provide feedback, and administrators can oversee project progress. By automating communication and project evaluation, the platform enhances innovation management within educational institutions.

With the increasing focus on innovation in academic settings, it has become essential to streamline the management of projects and documentation. Traditional methods often lead to inefficiencies, miscommunication, and loss of data. The IIC Management Platform addresses these challenges by providing an organized, automated, and accessible system for students, faculty, and administrators.

**1.2 Objective** The main objectives of the IIC Management Platform are:

* **Simplifying project submission and tracking**: Students can easily upload their projects, ensuring smooth record-keeping and documentation.
* **Maintaining structured records**: The platform stores detailed information about students, faculty, and projects, making it easy to retrieve relevant data.
* **Automating notifications**: Students receive email updates about their project reports, deadlines, and faculty feedback.
* **Facilitating faculty evaluation**: Faculty members can provide structured feedback and assign remarks to each project.
* **Domain-based project filtering**: Projects can be categorized based on their fields to enable efficient assessment.
* **Providing ratings and summaries**: Each project is evaluated based on predefined criteria, ensuring a fair and transparent review process.
* **Ensuring security and efficient documentation**: The system is designed to protect sensitive data while ensuring accessibility for authorized users.

**1.3 System Overview** The platform consists of three main user roles:

* **Admin:** Manages student and faculty information, oversees project documentation, and ensures the platform’s smooth operation.
* **Faculty:** Reviews projects, provides remarks, assigns ratings, and contributes to project evaluation.
* **Students:** Upload their projects, receive automatic email notifications, and access faculty feedback.

**Key Features:**

* **Automatic Email Notifications:** Students are kept informed through email alerts regarding project submissions, feedback, and deadlines.
* **Project Filtering by Domain:** Projects are classified based on their subject area, making it easier for faculty and administrators to review them.
* **Project Summary & Rating System:** Each project receives a summary and an overall rating based on quality, feasibility, and innovation.
* **User-Friendly Interface:** The platform is designed to be easy to use, ensuring smooth navigation for students and faculty.

**1.4 Implementation & Design** The development of the IIC Management Platform follows a structured approach:

**Phase 1: Requirement Gathering**

* Collecting information about students, faculty, and their roles.
* Understanding project submission workflows and faculty review processes.
* Identifying the key pain points in current project management methods.

**Phase 2: System Design**

* **ER Diagrams:** Visual representation of entities (students, projects, faculty) and their relationships.
* **Use Case Diagrams:** Mapping out user interactions and functionalities.
* **Data Flow Diagrams (DFDs):** Illustrating data movement and processing within the system.

**Phase 3: Development**

* Building the core functionalities, including student and faculty dashboards.
* Implementing automated email notifications and project filtering.
* Integrating a chatbot to assist users with queries.

**Phase 4: Testing & Deployment**

* Conducting multiple test cycles to ensure smooth operation.
* Identifying and resolving bugs before the final deployment.
* Launching the system for institutional use and providing user training.

**1.5 Benefits & Future Scope** The IIC Management Platform provides numerous benefits, enhancing efficiency, communication, and project evaluation.

**Benefits:**

* **Improved Documentation:** Keeps a structured record of student projects and faculty evaluations.
* **Enhanced Communication:** Automated emails ensure seamless updates between students and faculty.
* **Efficient Evaluation Process:** Faculty members can review projects in a structured manner.
* **Secure & Scalable:** Designed to accommodate growing data and ensure data security.

CO & PO Mapping

**Course Outcomes (CO) Mapping**

* **CO1 (Understanding Innovation Processes):** The project enhances students’ understanding of innovation management by providing a structured platform for tracking and organizing innovation-related activities.
* **CO2 (Application of Technical Skills):** The development of the platform involves programming, database management, and system design, directly applying technical skills gained from coursework.
* **CO3 (Project Development & Implementation):** Students get hands-on experience in software development, covering the entire Software Development Life Cycle (SDLC).
* **CO4 (Problem Solving & Automation):** The automation of innovation council operations demonstrates the ability to solve real-world problems through software solutions.
* **CO5 (Collaboration & Communication):** The platform encourages collaboration among students and faculty, aligning with professional communication and teamwork skills.

**Program Outcomes (PO) Alignment**

* **PO1 (Engineering Knowledge):** Applying computing, web development, and database skills in building the platform.
* **PO2 (Problem Analysis):** Identifying inefficiencies in manual innovation council processes and devising an automated solution.
* **PO3 (Design & Development):** Designing a user-friendly and secure web application for institutional innovation management.
* **PO4 (Modern Tool Usage):** Utilizing modern technologies such as AI-based chatbots and secure databases for institutional automation.
* **PO5 (Teamwork & Leadership):** Collaboration in requirement gathering, development, and testing phases.
* **PO6 (Communication):** Preparing technical documentation, presentations, and IEEE-format journal papers as part of the project.