Industrial Internship Report

Tech Elecon Pvt. Ltd, Anand

Submitted by

Rana Divyang AshokBhai
12102040701047

In partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

In

Computer Engineering

Madhuben & Bhanubhai Patel Institute of Technology

The Charutar Vidya Mandal (CVM) University,

Vallabh Vidyanagar - 388120

May, 2025

Madhuben & Bhanubhai Patel Institute of Technology

Computer Engineering

CERTIFICATE

This is to certify that **Rana Divyang (12102040701047)** has submitted the Industrial Internship report based on internship undergone at **Tech Elecon Pvt. Ltd, Anand** for a period of **16** weeks from **01/01/2025** to **30/04/2025** in partial fulfillment for the degree of Bachelor of Engineering in Computer Engineering**, MBIT** at The Charutar Vidya Mandal (CVM) University, Vallabh Vidyanagar during the academic year 2024-25.

Prof. Jayna Patel
Internal Guide

Dr.Prof.GopiBhatt
Head of the Department

DECLARATION

I, Rana Divyang (12102040701047), hereby declare that the Industrial Internship report submitted in partial fulfillment for the degree of Bachelor of Engineering in Computer Engineering, MBIT, The Charutar Vidya Mandal (CVM) University, Vallabh Vidyanagar, is a bonafide record of work carried out by me at Tech Elecon Pvt. Ltd, Anand under the supervision of Prof. Jayna Patel and that no part of this report has been directly copied from any students' reports or taken from any other source, without providing due reference.

Name of the Student

Rana Divyang

Sign of Student

ACKNOWLEDGEMENT

I am writing to express my sincere gratitude for the opportunity to participate in the React.js internship program. This experience has been incredibly valuable to my professional development, and I am grateful to the many individuals who contributed to its success.

First and foremost, I would like to thank Prof. Jayna Patel and Prof Gopi Bhatt Head of the Computer Engineering Department, for their support and guidance throughout my internship. Their willingness to offer their expertise and provide valuable advice significantly shaped the outcome of my work. I am particularly grateful for their encouragement and assistance during the preparation of this internship report.

I would also like to extend my deepest appreciation to my industry mentor, Mr. Satyam Raval. His guidance, knowledge, and unwavering support throughout the internship were invaluable. Mr. Raval's dedication to sharing his expertise and his willingness to help me overcome challenges significantly contributed to the success of the project.

Furthermore, I am thankful to my fellow team members for their unwavering dedication, collaborative spirit, and hard work. Each team member brought unique skills and perspectives to the table, and their contributions played a crucial role in overcoming challenges and achieving project milestones.

Thank you once again to everyone who provided an opportunity to participate in this internship program. Your support and encouragement have been indispensable, and I am grateful for the opportunity to have learned and grown throughout this experience.

Thank you all!
Divyang Rana

ABSTRACT

This internship report documents the experience gained during a 16-week internship at Tech Elecon Pvt. Ltd. as a Junior Developer Intern. The purpose of the internship was to fulfill the core equipment for the award of bachelor's degree Incomputer engineering and gain practical experience in the IT industry.

During the internship, I worked on various projects that involved frontend and backend development and learned many new computer languages. The main project that I worked on was **the Project Management System** , focusing on frontend and backend integration for efficient asset handling.

Our system leverages React.js for the front-end, Java with Spring Boot for the back-end, and MySQL for database management to provide a responsive, scalable, and user-friendly platform. React.js ensures a dynamic user interface, while Java and MySQL offer a robust backend to handle project data efficiently.

This system allows Project Managers to create and assign tasks, track project progress, and manage teams efficiently, while Team Members can view assigned tasks, update their status, and collaborate effectively. The inclusion of role-based access control ensures that each user has the necessary permissions based on their role.

The objective of this system is to simplify project management, automate task tracking, and enhance team collaboration, making it easier for organizations to plan, execute, and complete projects successfully.

TO WHOM IT MAY CONCERN

This is to certify that **Rana Divyang Ashokbhai** a student of **BACHELORE OF ENGINEERING of Madhuben and Bhanubhai Patel Institute of Technology - CVM University** has successfully completed his internship in the field of **React.js from 01/01/2025 to 30/04/2025** under the guidance of **Mr. Satyam Raval,** Deputy General Manager at **Tech Elecon Pvt Ltd.**

His internship activities include successful completion of the assigned project at the given period of time along with abiding by companies' rules and regulation.

During the period of his internship program with us, he had been exposed to different processes and was found diligent, hardworking, and inquisitive.

We Wish him every success in his life and career.

For Tech Elecon Pvt. Ltd,

OVERVIEW OF THE COMPANY

➢ Company Overview

Tech Elecon Pvt. Ltd. is the IT division of the Elecon group of companies and has more than 25 years of experience in the fields of hardware, software, and networking solutions. It is situated in the heart of Vithal Udyognagar Industrial Estate and in the proximity of the educational town of Vallabh Vidyanagar.

Tech Elecon all set to reach new heights in the field of IT solutions. Tech Elecon is ready with all sorts of solutions and delivers any application that is web based and further our solutions are designed to adapt your business rather than your business adapting the software. Their solutions are 100% fruitful and empower you to take control of client's business online and in real time.

Tech Elecon have more than 100 employees with specialized skills in software development, custom software development, and e-commerce software development using custom software programming including .NET, C#.NET, PHP, and Open Source and Oracle.

Tech Elecon delivers quality products and services with a focus on integrating the same with existing technologies, providing the required automation to our customers to help them achieve their business objectives. Mr. Nilesh Naik, the company's Vice President, is at the helm of the Tech Elecon organization. Mr. Satyam Raval, as Deputy General Manager, and after that, Manager and Associate Manager positions are listed. At the bottom, there are trainees at entry level, who follow up to engineer, senior engineer, also executive and senior executive manager.

➢ Different Services of the Company

Tech Elecon has extensive experience in providing IT services and has successfully adapted to technological advancements, making it the leading IT infrastructure management service provider in the region. Our cutting-edge delivery model covers all the stages of the solution lifecycle, including planning, deploying, managing, maintaining, auditing, upgrading, and improving.

Tech Elecon recognize that each client has unique needs and expectations when it comes to infrastructure and service providers. Our clients have the flexibility to choose from a wide range of IT infrastructure management and performance services based on their specific requirements. They can opt for on-site services on hybrid solutions that include on-site troubleshooting and support services.

Tech Elecon provides various services for business:

- Hardware maintenance and repairing
- Service desk management
- Desktop management
- Network management
- Messaging administrator
- Back-up management

Other services:

- Software Development Services
- Software Licensing
- Microsoft Product Implementation
- Linux Servers/ Desktop Implementation

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2. Profile of Project

2.1 Overview

The **Project Management System** is designed to help organizations manage their projects, tasks, and team collaboration efficiently. It is a **role-based system** where users are categorized into **three primary roles**:

- **Admin** – Manages user accounts and system settings.
- **Project Manager** – Creates and assigns projects, manages tasks, and oversees team members.**Team Member** – Views and updates assigned tasks and collaborates with other team members.

This system aims to eliminate the challenges faced in manual project tracking, such as **miscommunication, unclear task assignments, and delayed project completion**. It provides a **centralized platform** where users can log in, access relevant project details, track progress, and ensure tasks are completed on time.

With a **secure authentication system**, only authorized users can access specific functionalities based on their roles. The system ensures **data integrity** and improves work efficiency through a structured workflow.

2.1 Purpose of the project

The main purpose of this Project Management System is to help organizations manage their projects, tasks, and team members efficiently in one place. It simplifies project tracking by allowing project managers to assign tasks, monitor progress, and manage team collaboration easily. Team members can view their assigned tasks, update their work status, and communicate with their team, ensuring smooth project execution.

With a well-defined role-based system, each user has specific access and responsibilities. Admins manage system users, Project Managers create and monitor projects, and Team Members focus on their assigned tasks. This ensures that everyone knows their role, reducing confusion and improving work efficiency.

By using this system, organizations can increase productivity, improve communication, and ensure that projects are completed on time. It removes the need for manual tracking and multiple communication channels, making project management simpler, faster, and more effective.

2.2 Objectives

- User Role Management
  - Allow users to register and log in based on their roles (Admin, Project Manager, and Team Member).
  - Provide **secure authentication** to prevent unauthorized access.
  - Ensure each user has **specific permissions** based on their role.

- Project Management
  - Enable **Project Managers** to create, edit, and delete projects.
  - Provide a clear **project overview**, including deadlines, progress tracking, and assigned tasks.
  - Allow easy **search and filter options** to manage multiple projects efficiently.

- Task Assignment and Tracking
  - **Project Managers** can assign tasks to **Team Members** and set deadlines.
  - Team Members can **update task progress** (e.g., In Progress, Completed, and Pending).
  - Provide a **task filtering system** to view tasks based on status, priority, or project.

- User-Friendly Interface
  - Ensure an **intuitive design** with a clean and simple UI.
  - Provide **clear navigation** for different roles to access their features easily.
  - Implement **notifications** to keep users informed about updates and deadlines.

- Secure System and Data Management
  - Store all project and task details **securely** in a backend database.
  - Restrict access to **authorized users** only.
  - Ensure **data consistency and integrity** across different roles and modules.

- Collaboration and Team Communication
  - Provide **visibility into task assignments** so team members know their responsibilities.
  - Allow **editing and updating of tasks in real-time** to improve collaboration.
  - Enable **efficient teamwork** by ensuring each member knows their role in a project.

2.3 Scope of the project

The **scope** of this Project Management System defines its functionalities, features, and limitations. The system is designed for **small to medium-sized teams and organizations** looking to streamline their **project planning, execution, and tracking**.

2.3.1 Features and Functionalities

1. **Admin Role:**
   - Manage user accounts (Project Managers and Team Members).
   - Monitor system usage and ensure smooth operations.
2. **Project Manager Role:**
   - Create, edit, and manage projects.
   - Assign tasks to team members and set deadlines.
   - View and manage team members involved in a project.
3. **Team Member Role:**
   - View assigned tasks and update their status.
   - Collaborate with other team members for task completion.
   - Access team member profiles to understand project responsibilities.

2.3.2 Backend and Database Management

- The system will **store all user, project, and task data** securely.
- Data will be updated **in real-time**, ensuring accuracy.
- Role-based authentication ensures **security and privacy** of data.

3. Tools And Technology

3.1 React.js :

React.js is a JavaScript library for building user interfaces, primarily for web applications. It enables developers to create interactive UI components efficiently by using a component-based architecture. Here’s a breakdown:

- **Component-Based**: React breaks down the UI into reusable components, each responsible for rendering a small, self-contained part of the UI. Components can be nested within each other, allowing for complex UI structures.
- **Virtual DOM**: React uses a virtual DOM to improve performance. Instead of directly manipulating the browser’s DOM, React creates a lightweight virtual representation of the DOM in memory. When the state of a component changes, React compares the virtual DOM with the real DOM and only updates the parts that have changed, minimizing DOM manipulation and increasing performance.
- **JSX**: JSX is a syntax extension for JavaScript that allows you to write HTML-like code within JavaScript. It simplifies the process of creating React elements, making the code more readable and expressive.
- **Unidirectional Data Flow**: React follows a unidirectional data flow, meaning data flows in one direction from parent to child components. This makes it easier to understand how data changes over time and debug applications.
- **State Management**: React components can have state, which represents the data that change over time. When the state of a component changes, React automatically re-renders the component, updating the UI to reflect the new state.
- **Lifecycle Methods**: React components have lifecycle methods that allow developers to hook into various points in a component’s lifecycle, such as when it is first mounted or updated. This enables developers to perform actions like fetching data or cleaning up resources at the appropriate times.
- **Declarative Syntax**: React uses a declarative syntax, where you describe what you want the UI to look like, and React takes care of updating the DOM to match that description. This makes it easier to reason about your code and build complex UIs.

3.2 Html (Markup Language):

HTML is the standard markup language used to create the structure and content of web pages. It consists of a series of elements, represented by tags, which define the different parts of a web page such as headings, paragraphs, images, links, and more. HTML elements are organized in a hierarchical structure, with nested elements representing the relationship between different parts of the content. HTML provides semantic meaning to the content, making it accessible to both users and search engines.

3.3 CSS:

CSS is a style sheet language used to control the presentation and layout of HTML elements on a web page. It allows developers to define styles such as colors, fonts, spacing, and positioning, making it possible to create visually appealing and responsive designs. CSS operates by selecting HTML elements and applying styles to them using selectors and declaration blocks. CSS can be applied inline within HTML documents, embedded within

<style> tags in the document's <head> section, or linked externally to the HTML document as a separate stylesheet.

3.4 Material Ui:

Material-UI is a popular React component library that implements Google's Material Design guidelines. It provides pre-designed and customizable UI components, such as buttons, cards, menus, forms, and more, to help developers build modern and visually appealing web applications with ease. Material-UI components are built with React, making them easy to integrate into React projects and leverage React's component-based architecture. Additionally, Material-UI offers extensive theming capabilities, allowing developers to customize the look and feel of their applications to match their brand or design preferences. With its rich set of components, thorough documentation, and active community support, Material-UI simplifies the process of creating responsive and intuitive user interfaces for React-based web applications.

3.5 React-Router-DOM:

React Router DOM is a popular routing library for React applications, enabling developers to handle navigation and routing within single-page applications (SPAs). It allows you to define different routes in your application, each corresponding to a specific URL path, and render different components based on the current URL. React Router DOM provides a `<Browser Router>` component to manage browser history using HTML5 history API, allowing for navigation without full page reloads. It also offers various route components

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3.12 React Hooks:

React Hooks allow functional components to use state and other React features without needing class components. They include useState for state management, useEffect for side effects, useContext for accessing context, useReducer for more complex state logic, useCallback and useMemo for performance optimization, and useRef for creating mutable references. Hooks provide a more concise and readable way to manage state and side effects in React applications, promoting cleaner and more maintainable code.

3.13 React-Date Picker:

React-DatePicker is a flexible and customizable date picker component for React applications, widely used for selecting dates and times within forms or other user interfaces. It is designed to be user-friendly and offers a range of features to enhance date selection, such as customizable date and time formats, support for date range selection, and localization options. This makes it ideal for applications requiring precise date inputs, like booking systems or scheduling applications. React-DatePicker integrates seamlessly with form libraries and state management tools, making it easy to manage form data and validations. Additionally, it offers extensive theming options to ensure the date picker matches the look and feel of the application.

3.14 React-Bootstrap:

React-Bootstrap is a popular library that brings the power of Bootstrap components to React applications, providing a comprehensive set of UI components that adhere to the Bootstrap design system. This ensures consistency and responsiveness across different devices and screen sizes. React-Bootstrap includes a wide range of pre-built components such as buttons, modals, forms, and navigation bars, which can be easily customized and used in projects. Its integration with Bootstrap makes building responsive and mobile-friendly user interfaces straightforward. The library also allows for extensive customization of component styles to match the application's branding, ensuring a visually appealing and accessible user experience.

3.15 React-Recharts:

React-Recharts is a composable charting library built on React components, designed to be simple to use, highly customizable, and performant. It supports various types of charts, including line charts, bar charts, pie charts, and scatter plots, making it ideal for creating data visualizations in React applications. React-Recharts offers extensive customization options for each chart type, including colors, legends, tooltips, and animations. Its composability allows for the combination of different chart components to create complex and interactive data visualizations. The library ensures that charts are responsive and adapt to different screen sizes and devices, making it suitable for displaying business metrics, scientific data, and interactive dashboards.

3.16 Javascript:

JavaScript is a high-level, interpreted programming language primarily used for web development.

- **Dynamic:** JavaScript is dynamic, meaning it can adapt and change as the program runs. This makes it well-suited for creating interactive web pages.
- **Client-Side Scripting**: JavaScript is mainly used as a client-side scripting language in web browsers, allowing developers to create dynamic and interactive web pages by manipulating the HTML and CSS content.
- **Event-Driven:** JavaScript is event-driven, meaning it can respond to user actions such as mouse clicks, keyboard inputs, and form submissions. This enables developers to create responsive and interactive user interfaces.
- **Functional and Object-Oriented:** JavaScript supports both functional and object-oriented programming paradigms, allowing developers to write code in a variety of styles. It also features first-class functions, closures, and prototypes, which contribute to its flexibility and expressiveness.

- **Cross-Platform:** JavaScript is supported by all major web browsers and can run on various platforms, including desktops, mobile devices, and servers. This makes it a versatile language for building a wide range of applications.
- **Libraries and Frameworks:** JavaScript has a rich ecosystem of libraries and frameworks, such as React, Angular, and Vue.js, which streamline the development process and provide additional features and functionalities for building web applications.

3.17 GitHub:

GitHub is a web-based platform and version control system that allows developers to collaborate on projects, host code repositories, and manage software development workflows. Here's a brief overview:

- **Version Control**: GitHub utilizes Git, a distributed version control system, to track changes to files and manage codebase versions. Developers can create branches to work on features or fixes independently, merge changes back into the main branch, and revert to previous versions if needed.
- **Code Hosting**: GitHub provides a centralized platform for hosting Git repositories, making it easy for developers to share their code with others. Repositories can be public or private, and GitHub offers features like issue tracking, project boards, and wikis to support collaboration and project management.
- **Collaboration**: GitHub facilitates collaboration among developers by enabling them to fork repositories, make changes, and submit pull requests to the original repository maintainers for review and integration. Teams can discuss code changes, review proposed modifications, and provide feedback using comments and code reviews.
- **Community and Open Source**: GitHub is widely used by the open-source community to contribute to projects, discover new libraries and frameworks, and engage with other developers. It hosts millions of public repositories covering a diverse range of topics, from web development and data science to machine learning and gaming.

4. System Analysis

4.1 System Features

4.1.1 Front-End Development

- **Responsive Design:**
  - The system will be built using **React.js**, ensuring it works smoothly on desktops, tablets, and mobile devices.
  - The UI will automatically adjust to different screen sizes for a **consistent and user-friendly experience**.

4.1.2 Dynamic Content and Interactions

- **Real-Time Updates:**
  - Users will get instant notifications and updates about **projects, tasks, and team activ- ities**.
  - The system ensures that all changes, like adding or updating tasks, reflect in real time.
  -
- **Interactive Features:**
    - **Buttons, pop-ups, and animations** will improve user interaction and navigation.
  - Users can **easily add, edit, and manage projects, tasks, and members** with interactive elements.
  -
- **Easy-to-Use Forms:**
  - **Project Managers** can **create projects, assign tasks, and update statuses** using simple forms.
  - **Team Members** can **update their task progress** effortlessly.
  -
- **Secure Login and Signup:**
  - The system will include a **secure authentication process** for login and registration.
  - Passwords will be **hashed and stored securely** in the **MySQL database**.
- **Error Checking:**

  - Forms will automatically **validate user inputs**, checking for missing fields or incorrect data.
  - Instant feedback will help users **correct errors before submission**.
  - Users will get instant notifications and updates about **projects, tasks, and team activ- ities**.
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4.1.4 Personalization and User Experience

- **Custom Dashboards:**

  - Each user will have a personalized dashboard showing their **assigned tasks, project status, and team members**.

- **Role-Based Access Control:**

  - **Admins:** Manage user accounts and system settings.
  - **Project Managers:** Oversee projects, assign tasks, and manage team members.
  - **Team Members:** View and update their tasks.

- **Smooth and Responsive UI:**

  - **Fast navigation, clean design, and easy accessibility** for all users.

4.1.5 Single-Page Application (SPA) Approach

- **Fast and Smooth Navigation:**
  - The system is built as a **Single-Page Application (SPA)** using **React.js**.
  - This ensures **quick loading** and **seamless transitions** between different sections without full page reloads.

4.2 Feasibility Study

4.2.1 Technical Feasibility

- **TechnologyStack:**

  The system uses React.js for the front end to create a smooth and interactive user experience. The backend is developed using Java (Spring Boot) to handle server-side logic efficiently. MySQL is used for securely storing and managing project, task, and user data. JWT (JSON Web Token) is implemented for secure user authentication and session management.

- **Infrastructure:**

  The system is hosted on a **cloud-based platform** like AWS or DigitalOcean, ensuring scalability and reliability. The MySQL database is structured to handle large volumes of data efficiently, ensuring smooth performance. The backend server using Java (Spring Boot) ensures a fast and stable connection between users and the database.

- **DevelopmentResources:**
  React.js, Java (Spring Boot), and MySQL are widely used technologies, making it easier to find developers for future updates. The component-based structure of React.js simplifies maintenance and feature upgrades. Java provides a robust backend solution, ensuring the system runs smoothly even with multiple users.

4.2.2 Operational Feasibility

- **User Accessibility:**

  The Project Management System is a **web-based platform**, accessible from any device with an internet connection, including desktops, laptops, tablets, and mobile phones. The **responsive design** ensures a smooth user experience across all screen sizes. Role-based access ensures that **Admins, Project Managers, and Team Members** only see the features relevant to them.

- **Maintenance:**

  The system is built using a **component-based architecture** in React.js, making it easy to update and maintain. Backend updates in **Java (Spring Boot)** and database modifications in **MySQL** can be done without affecting the entire system. Regular updates will ensure bug fixes, performance improvements, and security enhancements.

- **Training and Support:**

  The system is designed to be **user-friendly**, minimizing the need for extensive training. However, **user guides, tutorials, and customer support** will be available to help users navigate and effectively use the platform. Future updates can include an in-app help section or chatbot for real-time assistance.

4.2.3 Economic Feasibility

- **Development Costs:**

  The Project Management System is built using **open-source technologies** like React.js, Java (Spring Boot), and MySQL, which reduces development costs. Initial expenses include **server hosting, domain registration, and developer resources**, but these are manageable with efficient planning.

- **Operational Costs:**
  Since the system is **web-based**, there is no need for expensive hardware. Cloud-based hosting services like **AWS, DigitalOcean, or Firebase** ensure cost-effective scalability. Regular maintenance, security updates, and minor improvements will have minimal ongoing costs.
- **Long-Term Benefits:**
  The system will help **increase productivity, reduce miscommunication, and improve project tracking**, leading to **cost savings in management and efficiency**. The automation of task assignments and tracking reduces manual effort, making project execution smoother and reducing operational overhead.

4.2 System Software and Hardware Requirements for Web App

4.3.1 Development Environment

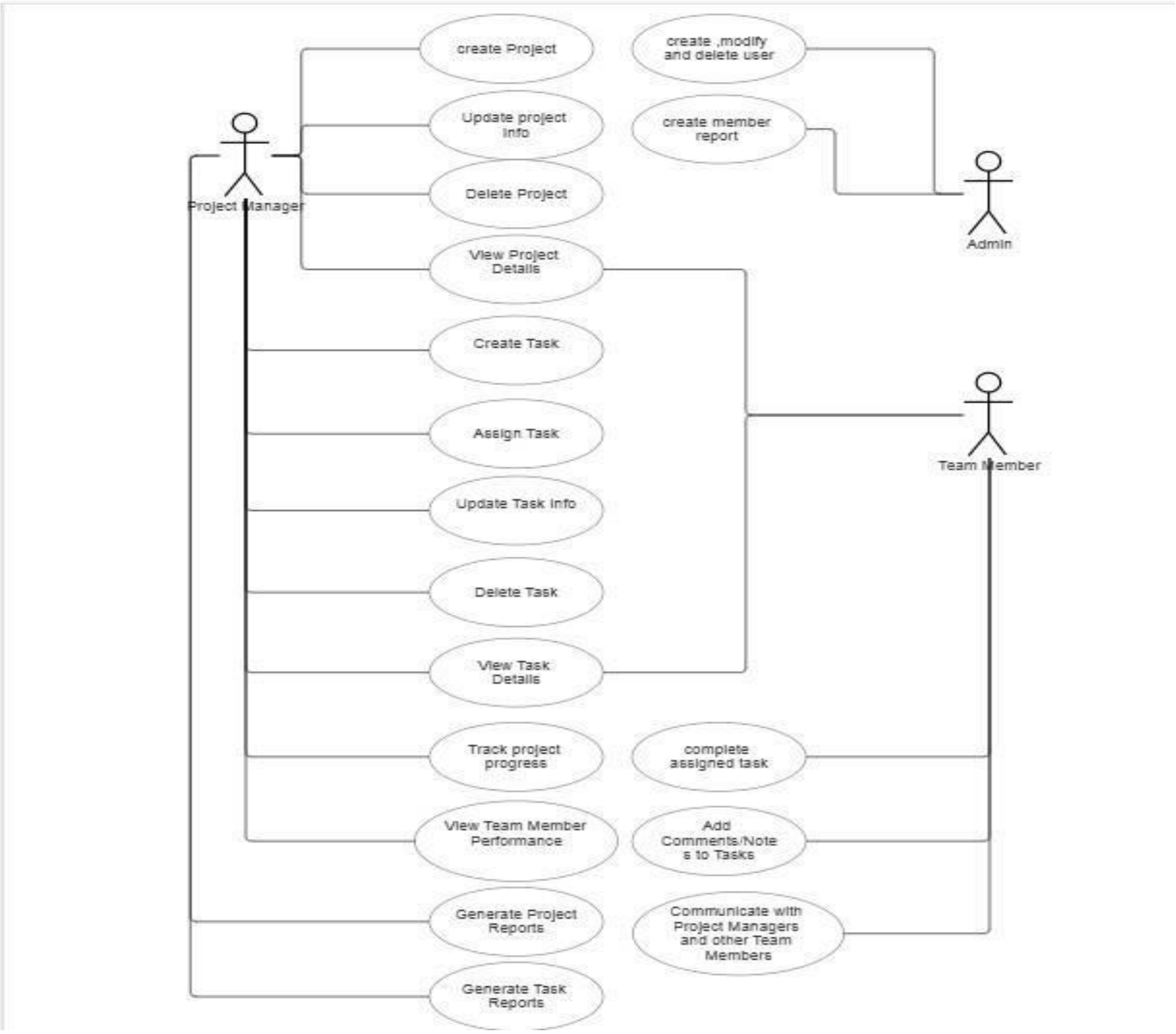
- **Operating System:**
  - Recommended: Windows 10 or 11, macOS 10.10 or later, Ubuntu 16 or later (for best compatibility and performance)
  - Minimum: Most modern operating systems with a compatible web browser should work (may require additional configuration)
- **Hardware:**
  - Minimum:
    - Processor: Dual-core processor (e.g., Intel Pentium 4 or equivalent)
    - RAM: 4 GB
    - Storage: 10 GB free disk space
  - Recommended:
    - Processor: Quad-core processor (e.g., Intel Core i5 or equivalent)
    - RAM: 8 GB or more
    - Storage: 50 GB or more (depending on project complexity and additional tools)

- **Software:**
    - **Backend:** Java (Spring Boot) for handling business logic.
    - **Frontend:** React.js for a responsive user interface.
    - **Database:** MySQL for storing and managing project, task, and user data.
    - **Development Tools:** Visual Studio Code, IntelliJ IDEA, or Eclipse for coding.
    - **Package Managers:** npm (for React.js) and Maven (for Java).
    - **Version Control:** Git/GitHub for code collaboration and tracking.

4.3.2 Deployment Environment

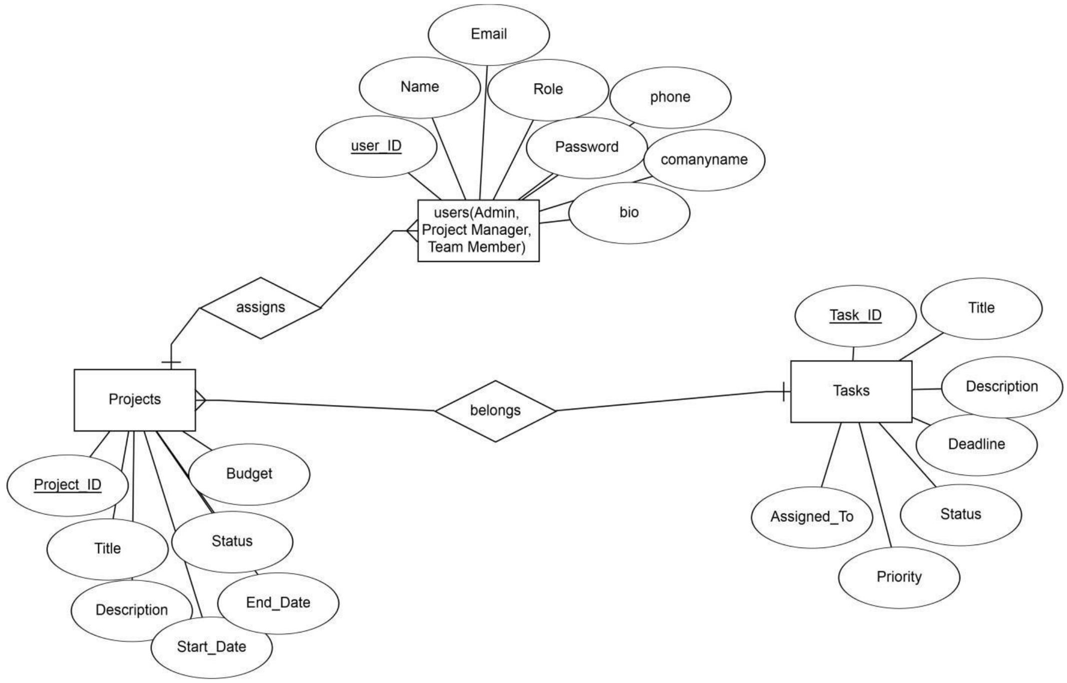
The deployment environment (where the React application runs after development) will vary depending on the chosen hosting provider. However, some general requirements include:

- **Web server:** A web server that can serve static files and handle backend functionality if needed (e.g., Apache, Nginx)
- **Node.js runtime (optional):** If the application requires server-side rendering or other Node.js functionality



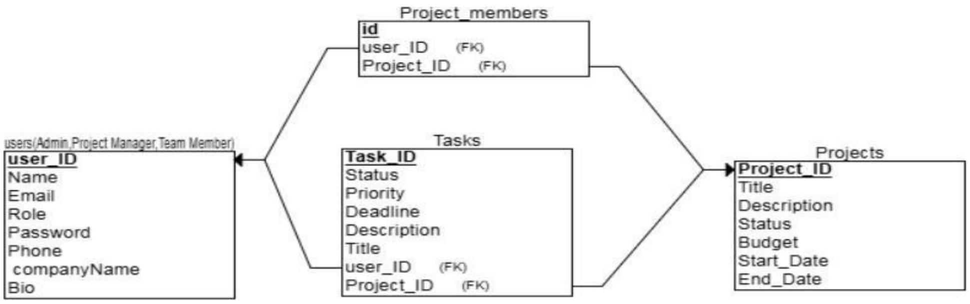
5 System Design

5.1 Use Case Diagram:



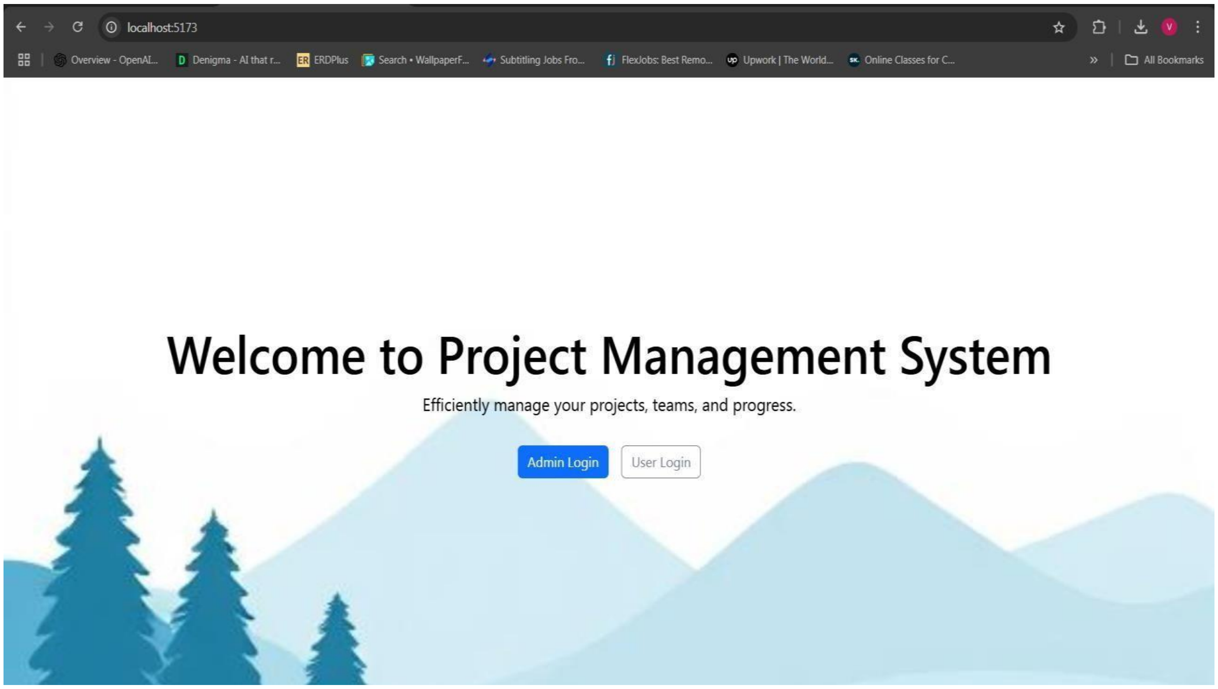
5.3 ER Diagram :

5.2 Class Diagram:



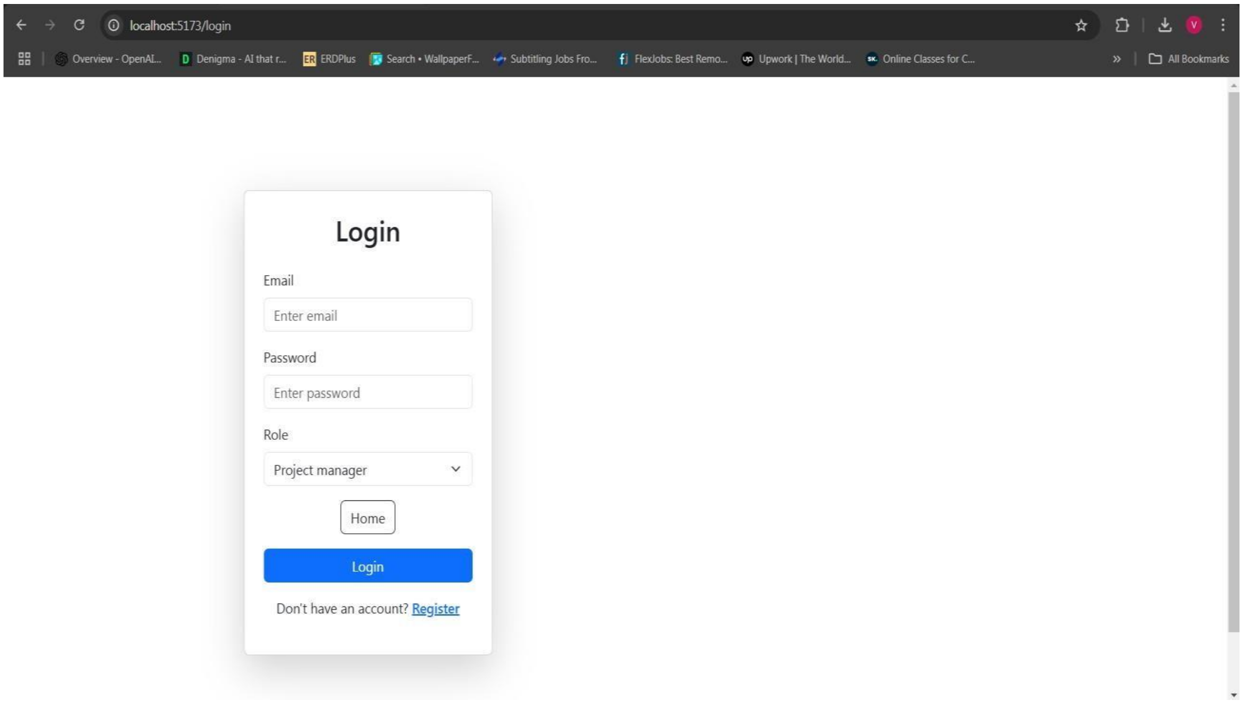
6. Implementation

6 Implementation



Welcome to Project Management System

Efficiently manage your projects, teams, and progress.



localhost:5173/login

Login

Email

Enter email

Password

Enter password

Role

Project manager

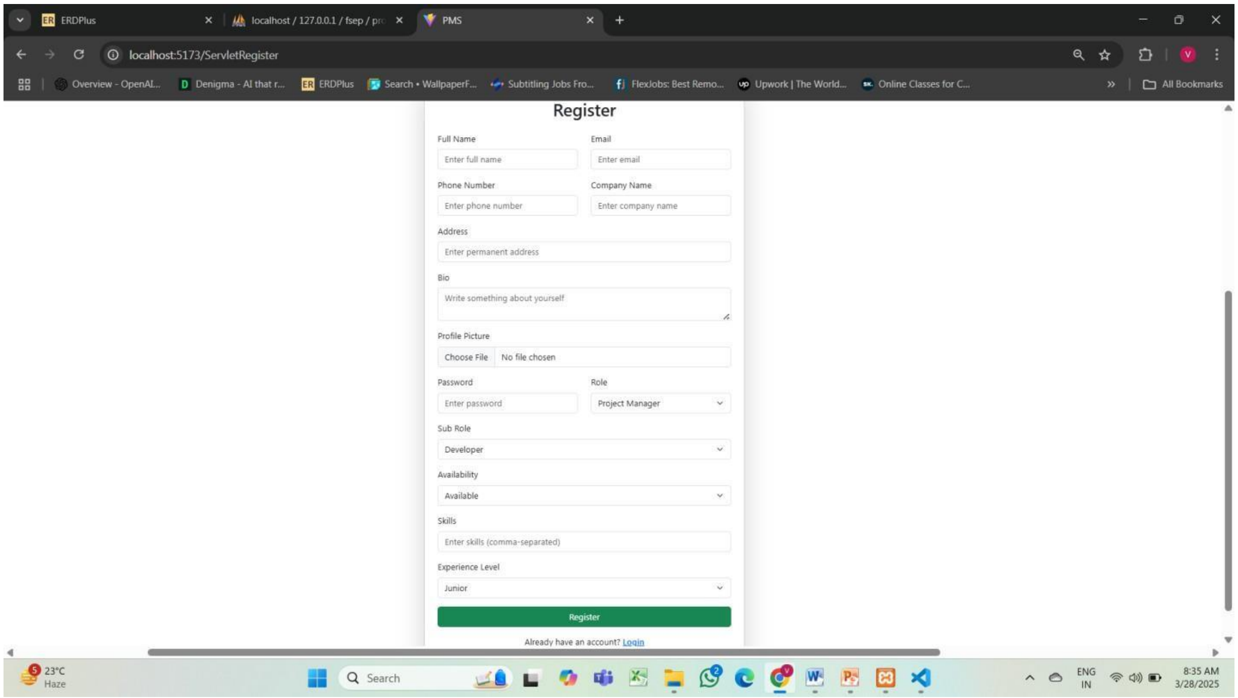
Home

Login

Don't have an account? Register

6.2 Login Page

7.1 Registration page



localhost:5173/ServletRegister

Register

Full Name

Enter full name

Email

Enter email

Phone Number

Enter phone number

Company Name

Enter company name

Address

Enter permanent address

Bio

Write something about yourself

Profile Picture

Choose File No file chosen

Password

Enter password

Role

Project Manager

Sub Role

Developer

Availability

Available

Skills

Enter skills (comma-separated)

Experience Level

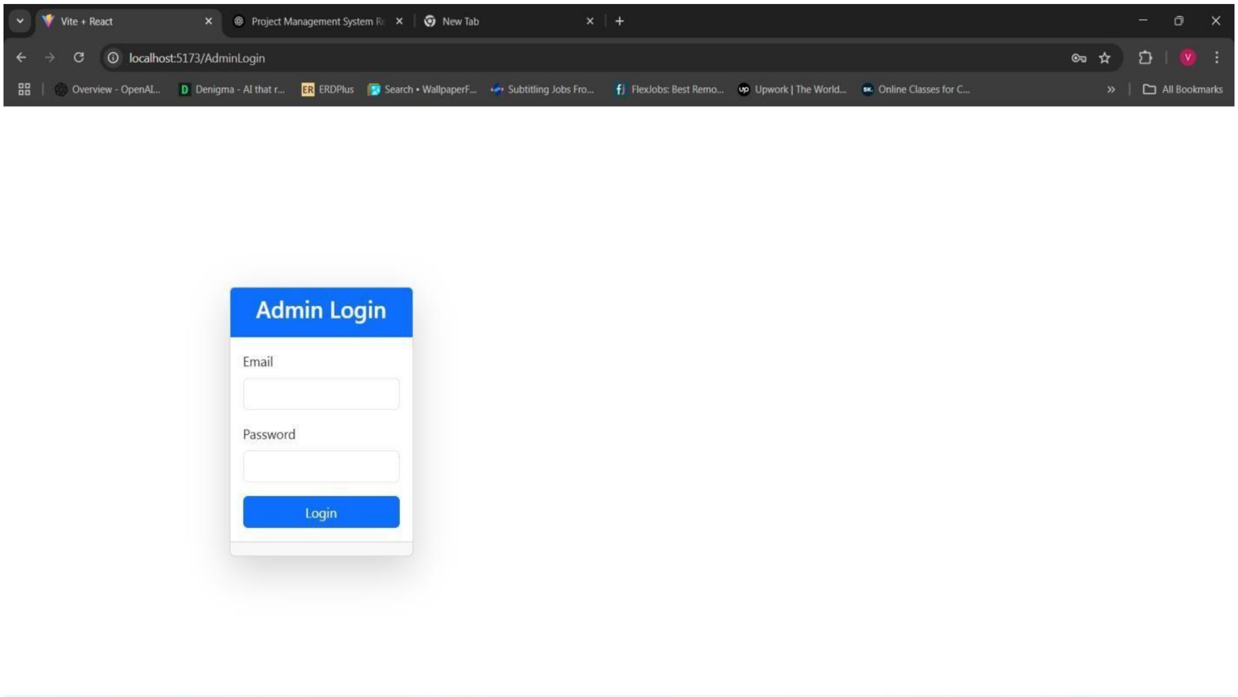
Junior

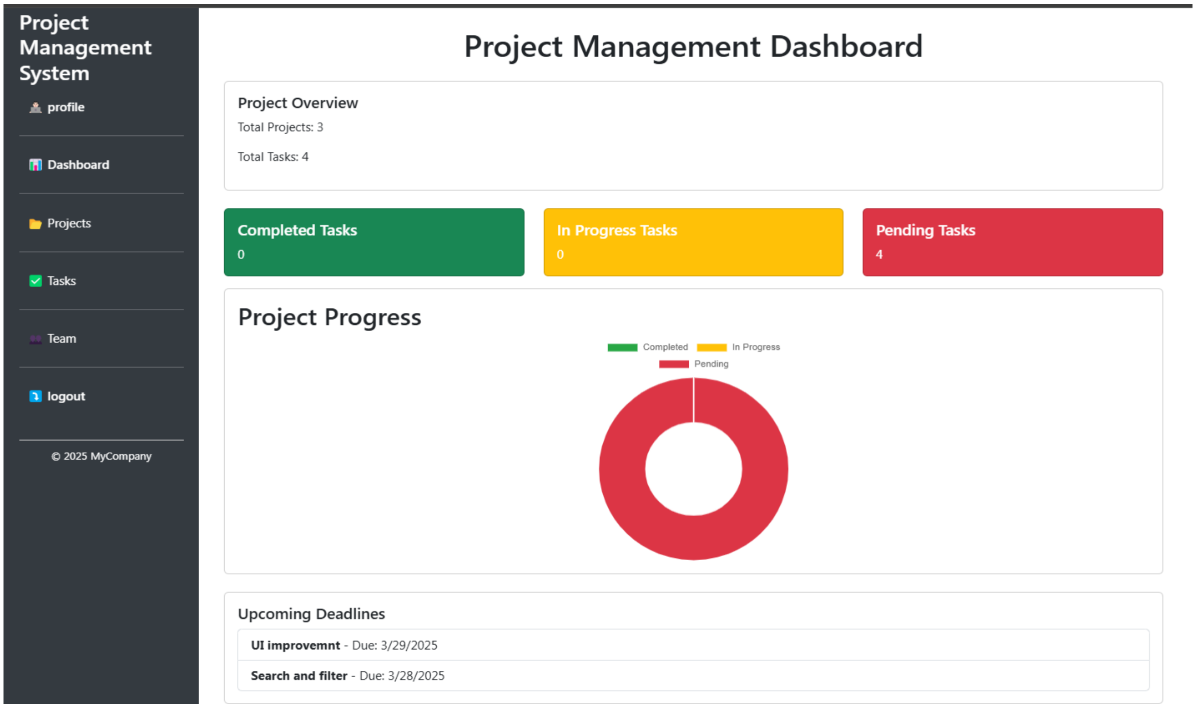
Register

Already have an account? Login

8:35 AM
3/28/2025

7.2 Admin Login page:





Project Management Dashboard

Project Overview

Total Projects: 3

Total Tasks: 4

Completed Tasks	In Progress Tasks	Pending Tasks
0	0	4

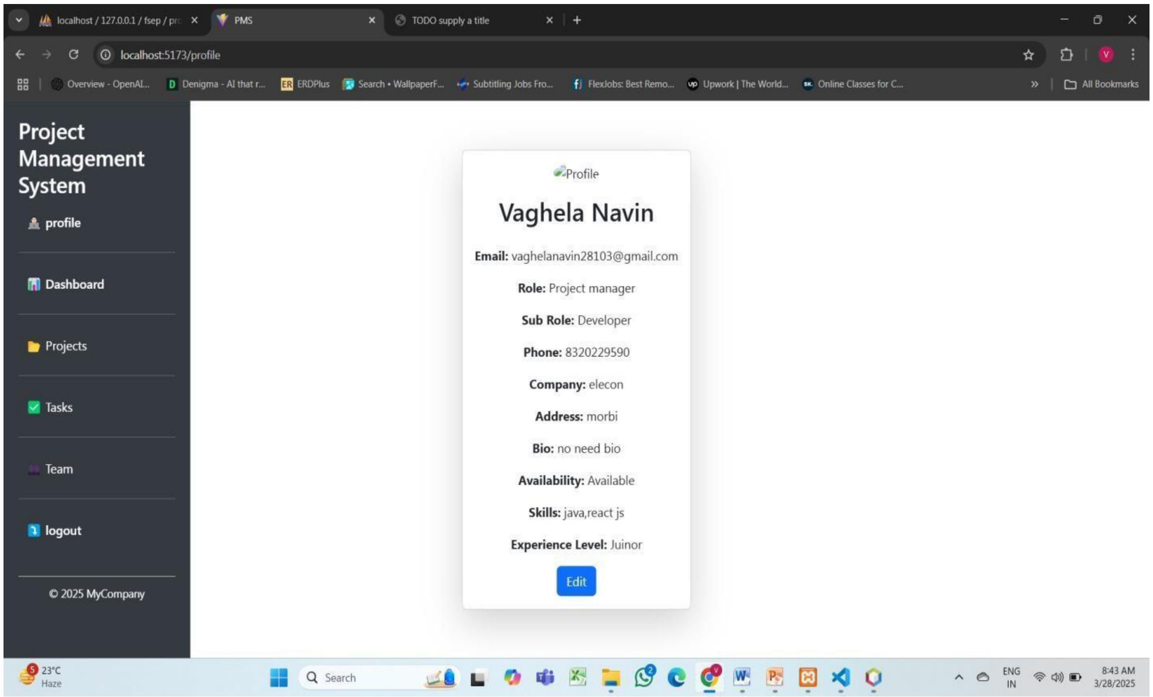
Project Progress

Upcoming Deadlines

UI improvemnt - Due: 3/29/2025

Search and filter - Due: 3/28/2025

7.3 Project manager dashboard:



Vaghela Navin

Email: vaghelanavin28103@gmail.com

Role: Project manager

Sub Role: Developer

Phone: 8320229590

Company: elecon

Address: morbi

Bio: no need bio

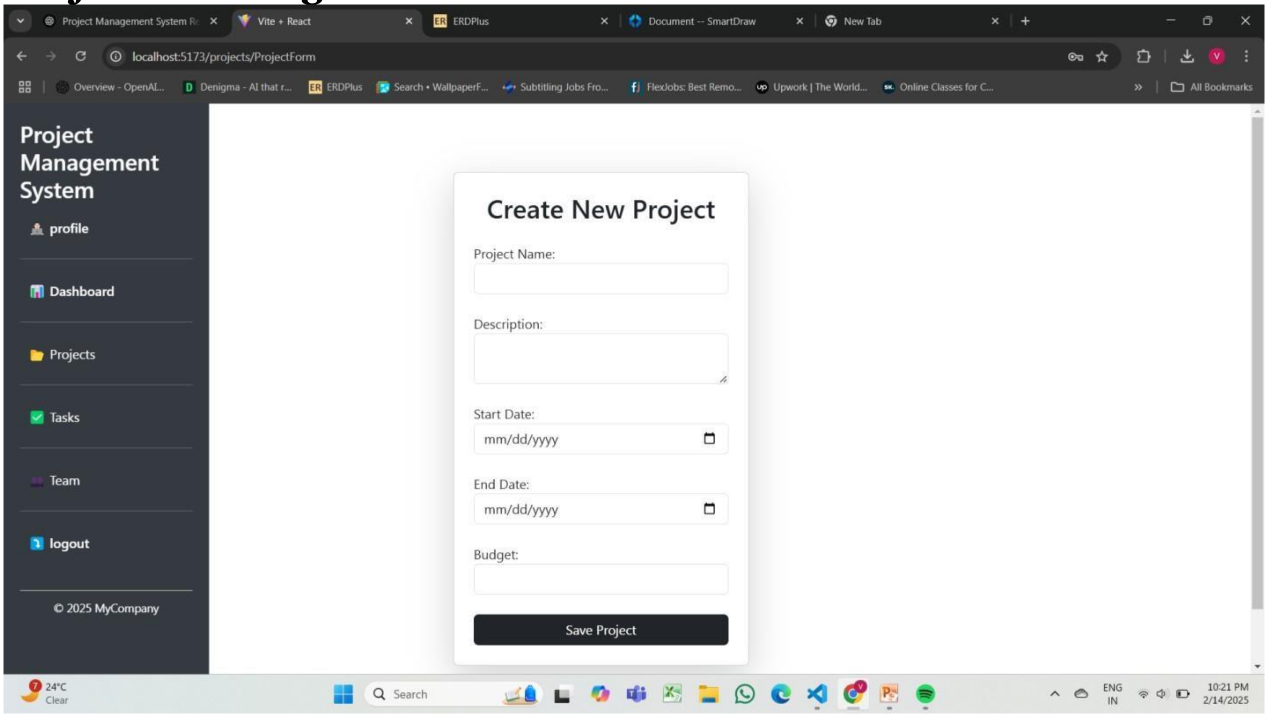
Availability: Available

Skills: java,react js

Experience Level: Juinor

7.4 Profile web page:

7.3 Project form Page



Create New Project

Project Name:

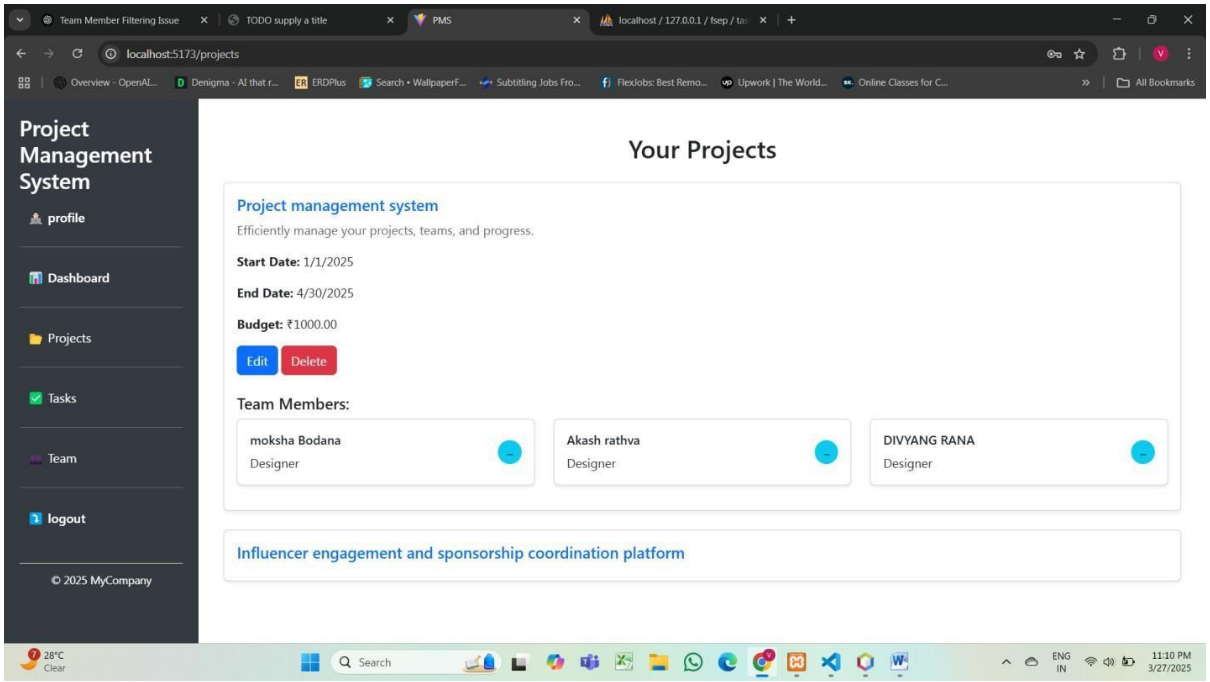
Description:

Start Date: mm/dd/yyyy

End Date: mm/dd/yyyy

Budget:

7.4 Project list Page



Your Projects

Project management system

Efficiently manage your projects, teams, and progress.

Start Date: 1/1/2025

End Date: 4/30/2025

Budget: ₹1000.00

Team Members:

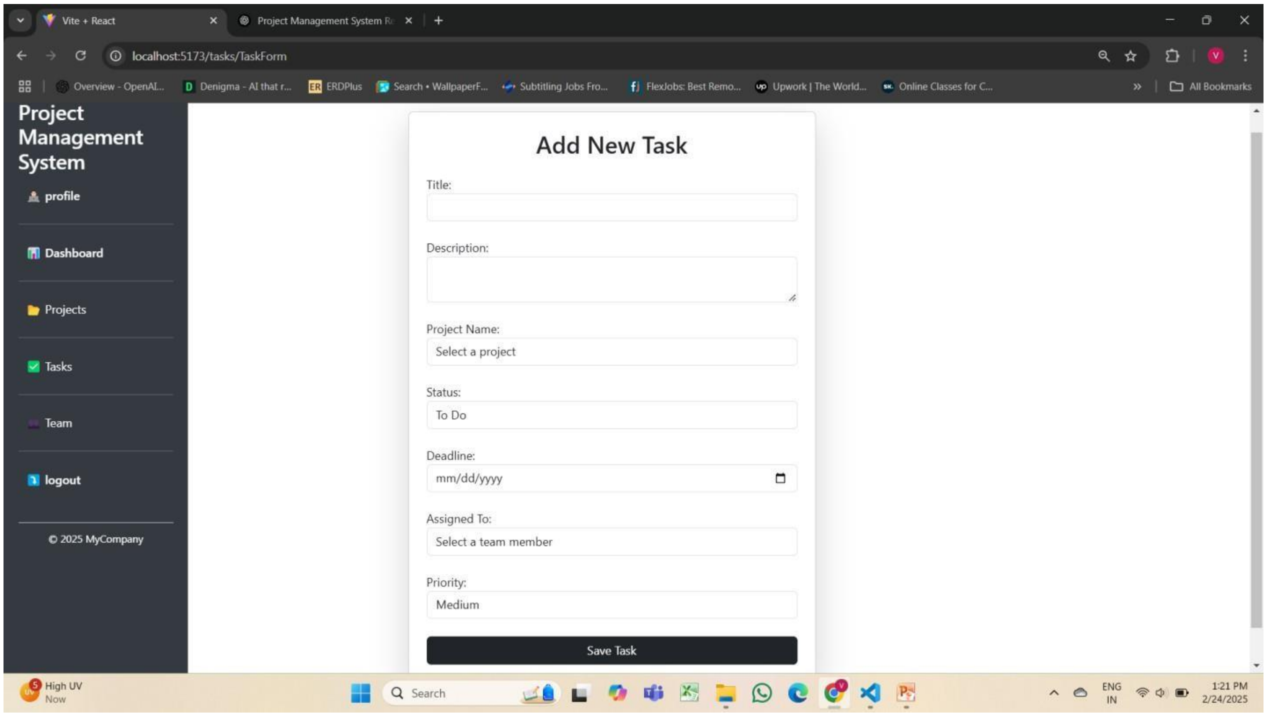
moksha Bodana
Designer

Akash rathva
Designer

DIVYANG RANA
Designer

Influencer engagement and sponsorship coordination platform

7.5 Task from page:



Add New Task

Title:

Description:

Project Name: Select a project

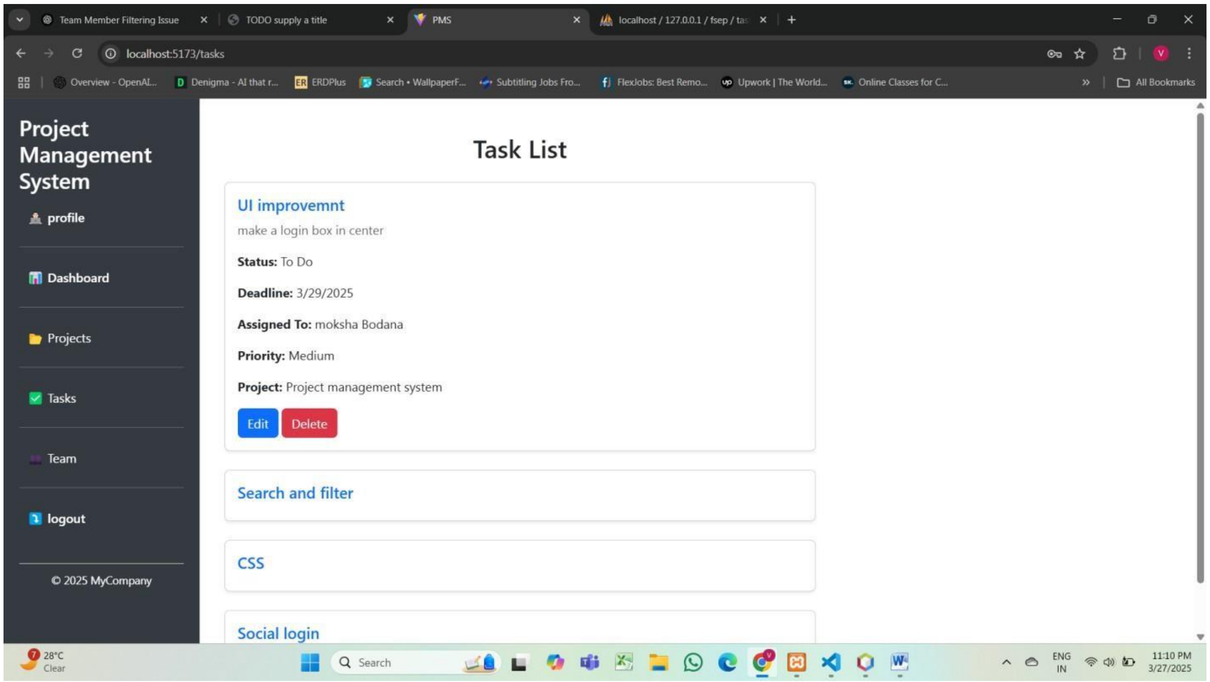
Status: To Do

Deadline: mm/dd/yyyy

Assigned To: Select a team member

Priority: Medium

7.6 Task list page:



Task List

UI improvemnt

make a login box in center

Status: To Do

Deadline: 3/29/2025

Assigned To: moksha Bodana

Priority: Medium

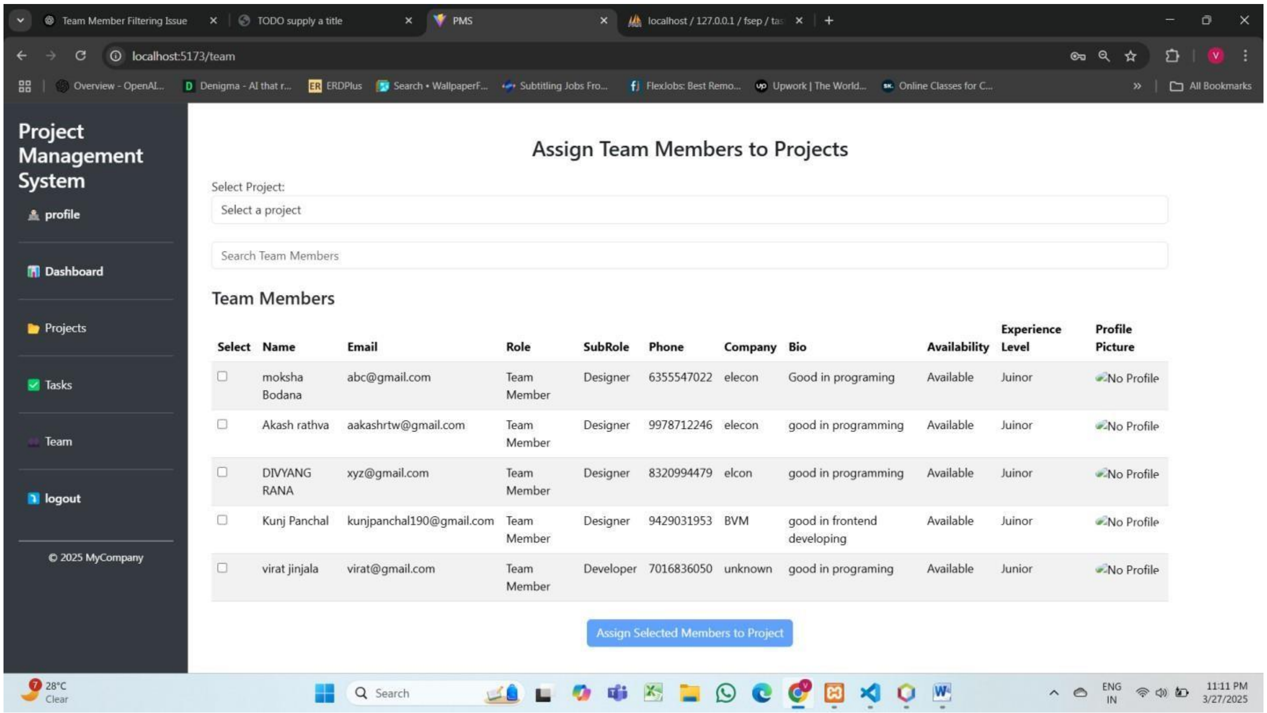
Project: Project management system

Search and filter

CSS

Social login

7.7 Team members page:



Assign Team Members to Projects

Select Project:

Select a project

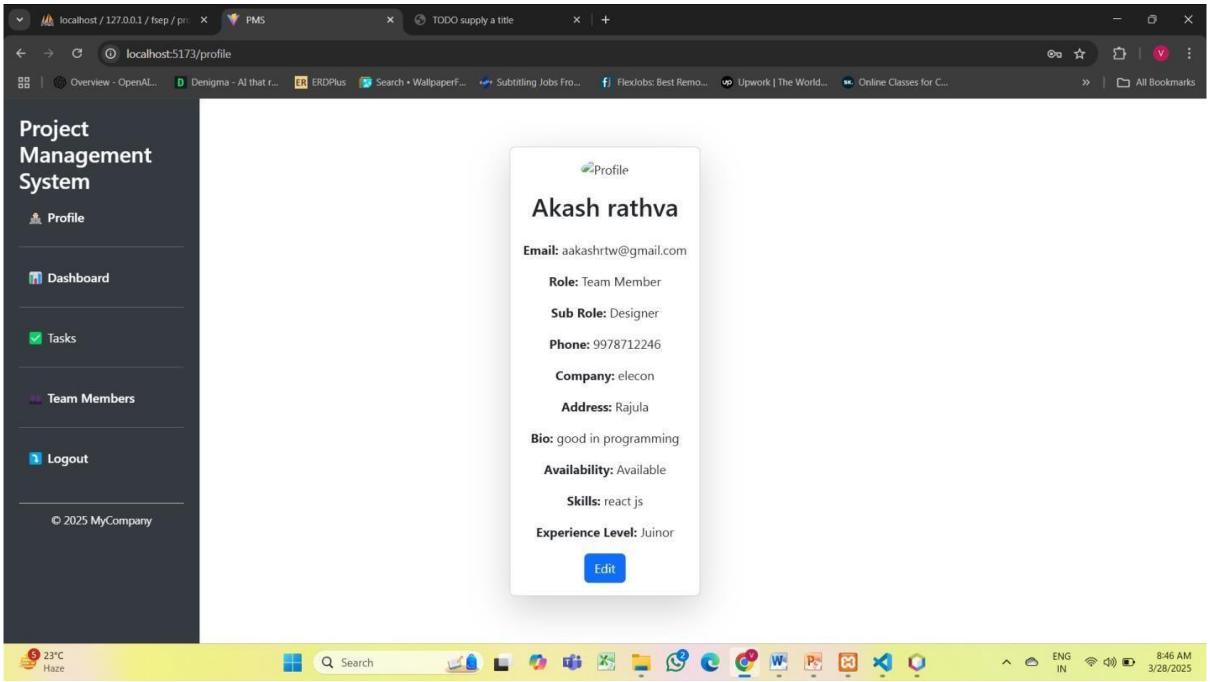
Search Team Members

Team Members

Select	Name	Email	Role	SubRole	Phone	Company	Bio	Availability	Experience Level	Profile Picture
☐	moksha Bodana	abc@gmail.com	Team Member	Designer	6355547022	elecon	Good in programing	Available	Juinor	No Profile
☐	Akash rathva	aakashrtw@gmail.com	Team Member	Designer	9978712246	elecon	good in programming	Available	Juinor	No Profile
☐	DIVYANG RANA	xyz@gmail.com	Team Member	Designer	8320994479	elcon	good in programming	Available	Juinor	No Profile
☐	Kunj Panchal	kunjpanchal190@gmail.com	Team Member	Designer	9429031953	BVM	good in frontend developing	Available	Juinor	No Profile
☐	virat jinjala	virat@gmail.com	Team Member	Developer	7016836050	unknown	good in programing	Available	Juinor	No Profile

Assign Selected Members to Project

7.8 Team member's profile page:



Profile

Akash rathva

Email: aakashrtw@gmail.com

Role: Team Member

Sub Role: Designer

Phone: 9978712246

Company: elecon

Address: Rajula

Bio: good in programming

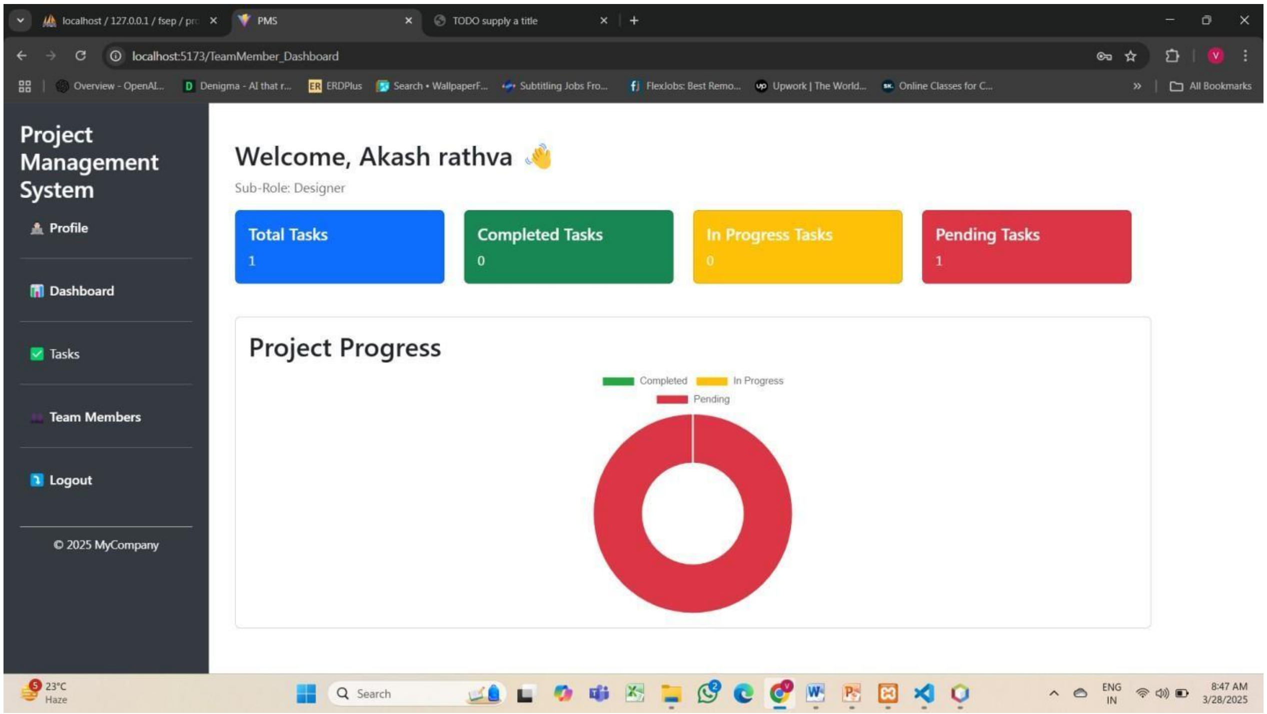
Availability: Available

Skills: react js

Experience Level: Juinor

Edit

7.9 Team member's dashboard:

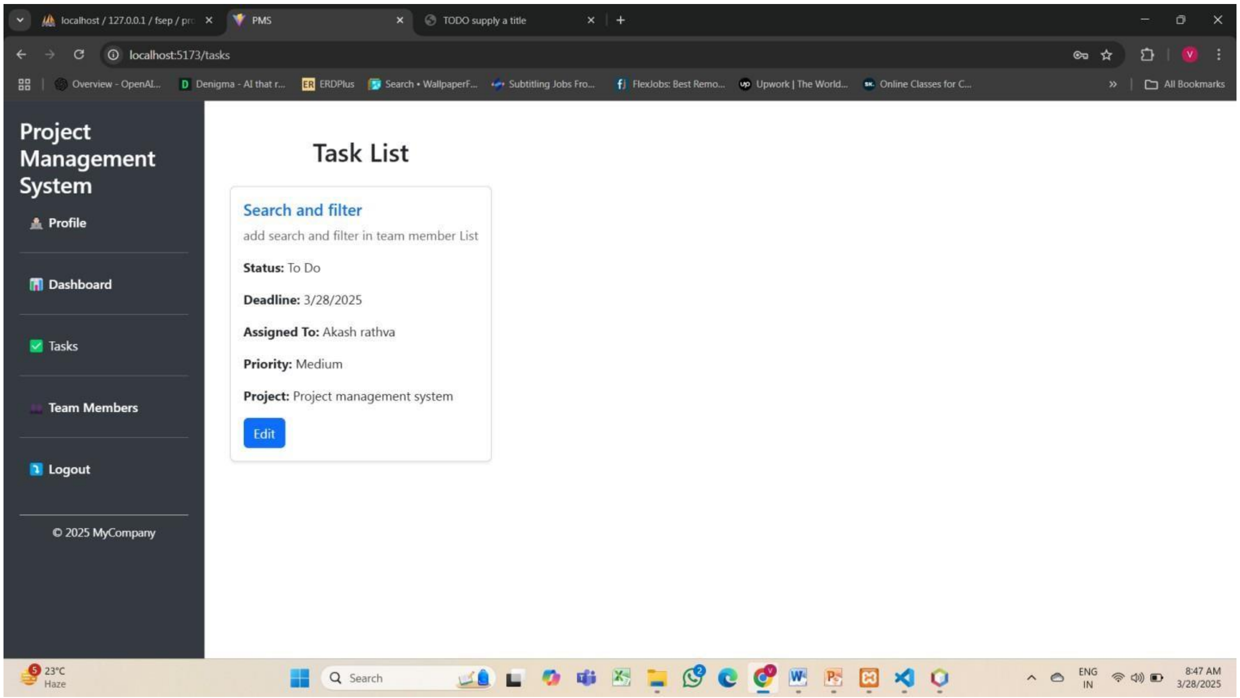


Welcome, Akash rathva 👋

Sub-Role: Designer

Total Tasks	Completed Tasks	In Progress Tasks	Pending Tasks
1	0	0	1

Project Progress



Task List

Search and filter

add search and filter in team member List

Status: To Do

Deadline: 3/28/2025

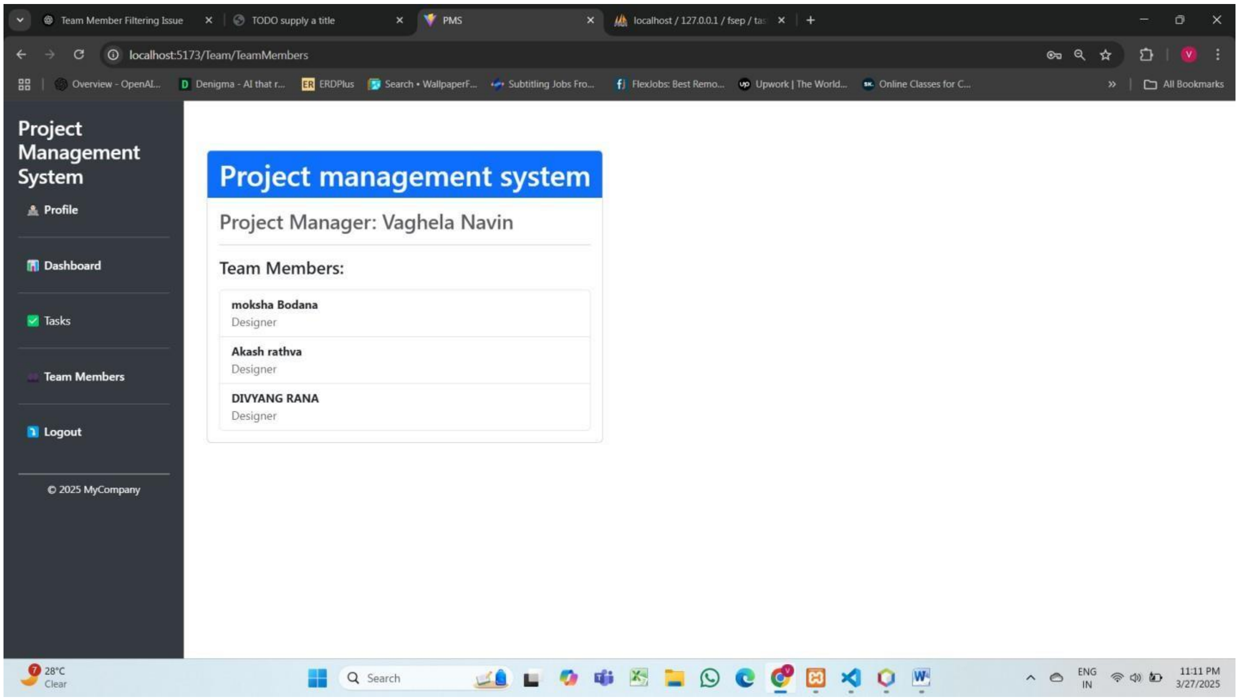
Assigned To: Akash rathva

Priority: Medium

Project: Project management system

7.10. Team member's task list:

7.10 7.12 Team member's team:



Project management system

Project Manager: Vaghela Navin

Team Members:

moksha Bodana
Designer

Akash rathva
Designer

DIVYANG RANA
Designer

8. Conclusion

Developing a **Project Management System** as a **single-page web application** using **React.js for the frontend** and **Java with MySQL for the backend** provides multiple benefits. This system is designed to **streamline project planning, task allocation, and team collaboration** efficiently. Here's a breakdown of why this technology stack is ideal for our **Project Management System**, focusing on **task management, real-time collaboration, and system scalability**.

1. Fast and Responsive Navigation

Our system is built using **React.js**, ensuring that users can switch between different sections, such as **dashboard, projects, tasks, and team members**, without experiencing page reloads. This **single-page application (SPA) approach** enhances user experience by making navigation smooth, **reducing load times**, and providing a more interactive interface.

2. Seamless User Experience

With **real-time updates**, project managers and team members receive instant notifications about **task assignments, deadlines, and project progress**. This ensures that all users stay informed, reducing delays and miscommunication. The system also allows easy task tracking, providing **visibility into project status and improving collaboration** between team members.

3. Reusable and Scalable Components

The system is built using **a component-based architecture in React.js**, meaning UI elements like **task lists, project cards, and team member dashboards** are reusable across different sections. This modular approach ensures **consistency, easier maintenance, and future scalability**. Any improvements or updates to components automatically reflect throughout the system, ensuring a **uniform user experience**.

4. Easy Maintenance and Updates

Using **Java with MySQL** for backend development ensures **secure and efficient data management**. Each system feature is built as an independent module, making it easy to **update functionalities without affecting the entire application**. Whether it's adding a new project, modifying task priorities, or enhancing security, updates are seamless, ensuring that the system remains **reliable and future-proof**.

Final Thoughts

Our **Project Management System** simplifies project tracking, enhances **team collaboration**, and ensures **timely task completion** through a **structured workflow**. By leveraging modern technologies, it provides **a secure, user-friendly, and scalable platform** for organizations to manage their projects efficiently. Whether you're a **Project Manager organizing tasks** or a **Team Member completing assignments**, this system helps keep everything **organized and accessible**.

9. References

9.1 Technologies and Documentation Links:

- **React.js:**https://react.dev/
- **HTML (Markup Language):**https://www.w3schools.com/html/
- **CSS:**https://www.w3schools.com/css/
- **Tailwind CSS:**https://tailwindcss.com/docs/installation
- **Material UI:**https://mui.com/material-ui/
- **React Router DOM:**https://reacttraining.com/react-router
- **React Hooks:**https://legacy.reactjs.org/docs/hooks-intro.html
- **JavaScript:**https://www.javascript.com/
- **GitHub:**https://github.com/index
- **Font Awesome:**https://fontawesome.com/
- **Draft.js:**https://draftjs.org/
- **React-Recharts:**https://recharts.org/
- **React Modal:**https://github.com/reactjs/react-modal