Task Management and Project Collaboration Platform

Introduction: -

This document provides a comprehensive overview of the Task Management and Project Collaboration Platform, developed using React, Tailwind CSS, TypeScript, and other modern technologies. The platform enhances team productivity by offering project management, real-time collaboration, task tracking, and a leaderboard system.

Problem Statement: -

In modern workplaces, managing tasks, tracking project progress, and ensuring effective collaboration among team members is a challenge. Many teams struggle with fragmented communication, lack of accountability, and inefficient task allocation. A centralized, intelligent, and user-friendly project management platform is needed to enhance productivity, streamline workflows, and facilitate seamless collaboration.

Solution Overview: -

Our Team Collaboration and Project Management Platform aims to provide an integrated solution where teams can organize, track, and manage their projects efficiently. The platform will include task management, project tracking, collaboration tools, real-time updates, and intelligent automation to enhance productivity.

Features: -

1. **Authentication System**

   Secure Login/Signup system

   User authentication and session management

2. **User Dashboard**

Access to various functionalities from a centralized dashboard

Personalized interface for project and task management

3. **Project Management**

   Create New Projects: Users can add new projects

   View Project Status: Monitor progress and status updates in real-time

   Manage Projects: Edit, update, or delete projects as needed

4. **Real-Time Chatting**

   Team members can communicate instantly

   Seamless and responsive chat interface

5. **Task Management**

   Add Daily Tasks: Users can create daily tasks

   Delete Tasks: Remove completed or unnecessary tasks

   Task Tracking: Track progress and completion

6. **Leaderboard System**

   Displays team members and their performance

   Encourages competition and motivation

7. **Notifications**

   Real-time alerts for activities such as:

   New project creation

   Task assignments and updates

   Chat messages and team interactions

Technology Stack: -

Frontend: React, TypeScript, Tailwind CSS

Backend: Node.js, Express.js

Authentication: JWT (JSON Web Tokens)

Installation and Setup: -

1. Clone the Repository

   git clone cd task-management-platform

2. Install Dependencies
    npm install

3. Run the Development Server

   npm run dev

4. Backend Setup

   Configure environment variables in .env file

   Start backend server

   npm run server

Usage Guide: -

Register/Login to access the dashboard.

Create a new project and assign team members.

Use real-time chat for team communication.

Add tasks and track progress.

View leaderboard for performance metrics.

Receive notifications for project updates.

Conclusion: -

The platform streamlines project collaboration and task management by integrating real-time communication, task tracking, and user engagement features. It enhances productivity and efficiency for teams working on multiple projects.

Future Enhancements: -

AI-based task suggestions

Kanban board for task visualization

Integration with third-party tools (Slack, Trello, etc.)

GitHup Link: -

https://github.com/yashibapaics22/Project-Management