

Project Title: Project Management System Development

Problem Statement:

Klick Inc. struggles with managing multiple projects simultaneously. Their current process of tracking tasks, managing resources, monitoring budgets, and communicating with team members is inefficient and prone to errors. The company needs a centralized Project Management System to help their teams organize work, **assign tasks, monitor project progress, track budgets, and improve communication among team members and stakeholders.**

Your task is to develop a Project Management System using React for the frontend and Laravel for the backend. The system should allow the company to create and manage projects, assign tasks, track progress, and generate reports. The project should be developed over a 5-sprint development cycle by a team of 5 members, each with defined roles and responsibilities.

Team Composition and Roles

1. Project Manager – Oversees project progress, manages sprints, and ensures the team meets deadlines.
2. Frontend Developer – Develops the React components and user interface.
3. Backend Developer – Implements the Laravel API and database structure.
4. Tester/QA – Tests the system, identifies bugs, and ensures quality.
5. Documentation Specialist – Prepares technical documentation and user guides.

Sprint Plan

Sprint 1: Project Setup and Basic Structure (1 Week)

- ✓ Set up the project environment (React and Laravel)
- ✓ Create user authentication (register, login, logout)
- ✓ Set up the database structure (projects, tasks, users)
- ✓ Create basic UI components (login, dashboard)

Deliverables:

- User authentication working
- Database schema created
- Basic UI for login and dashboard

Sprint 2: Project and Task Management (2 Weeks)

- ✓ Create CRUD (Create, Read, Update, Delete) for Projects

- ✓ Implement task creation, assignment, and updating
- ✓ Add task statuses and priorities
- ✓ Develop backend API for project and task management

Deliverables:

- Working project and task management
- API for projects and tasks
- Basic task workflow

Sprint 3: Resource and Budget Management (2 Weeks)

- ✓ Create resource allocation feature (assign team members to tasks)
- ✓ Develop budget tracking and actual expenditure feature
- ✓ Implement time tracking for tasks
- ✓ Add progress tracking and Gantt chart visualization

Deliverables:

- Resource assignment working
- Budget tracking functional
- Progress tracking UI

Sprint 4: Collaboration and Communication (2 Weeks)

- ✓ Implement task comments and notifications
- ✓ Add file upload and sharing feature
- ✓ Create real-time status updates and activity feed
- ✓ Add role-based access control

Deliverables:

- Working communication system
- File sharing functional
- Role-based permissions enabled

Sprint 5: Reporting and Finalization (2 Weeks)

- ✓ Create project progress and budget reports
- ✓ Implement risk and issue tracking
- ✓ Perform full system testing and bug fixing
- ✓ Finalize user documentation and deployment

Deliverables:

- Reports and analytics working
- Risk and issue tracking functional
- System deployed and documented

Grading Criteria:

Functionality – How well the system meets requirements (40%)

UI/UX – Clean and responsive interface (20%)

Code Quality – Proper structure and documentation (10%)

Team Collaboration – How well the team worked together (20%)

Presentation – Final project demonstration and Q&A (10%)