

# **Project Tracking And Management System**

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## **CATEGORY:**

Web Application

## **PURPOSE:**

Project Management (PM) is often still time consuming and inefficient. Repeatedly updating spreadsheets, drowning in post-its and participate in weekly update meetings. That's really a waste of time and effort.

The purpose of Project tracking and management System is to help you foresee the risks and challenges that could derail the completion of a project. It applies proven methodologies and uses current software tools so you can plan, control, and monitor people, processes, and other components needed to make your project a success. It ensures that project gets completed in timely manner. And helps determine inefficient pieces of projects.

## **SCOPE:**

The application will help manage the project and assign task to different people with deadline and make sure everyone remains updated with real time information about progress of project. Project management is where all processes meet, the central focal point from which all procedures derive, are specifically defined, scheduled and organized, following which they are communicated and assigned and subsequently followed up on and evaluated. Monitoring project progress to identify potential problems in a timely manner, take corrective action and make sure projects are on track. This system can be used in Construction, Event Management, product management, Manufacturing, engineering projects and IT. This project can be customized according to needs of individual groups or clients.

## **INTRODUCTION:**

Introduction contains the following subcategories:

### **Existing System:**

Existing project management includes a set of developed techniques used for planning, estimating, and controlling activities. It use following methods to manage system:

- Gantt Chart : type of bar chart that illustrates a project schedule
- Regular Update meeting
- Use spreadsheet as time logs, requiring each member of the team to separately track their hours and record them in a **spreadsheet**.
- File approval
- Physical Reporting

### **Proposed System:**

- Project Workspace: The place to the key insights on how each of the projects are performing - at a glance to get an overview of each project.
- Reporting: This is important for all team members when it comes to updating themselves on the project as a whole
- File sharing : being able to share and organize key project documents eliminates time wasted searching for files
- Activity: a powerful feed of real-time data outlining every update made from all team members to the project in real-time.
- Tasks: A clear and simple view of the steps involved in completing the project with the dates and team members who own the tasks outlined.
- Rating: For employees based on their performances and keep their track record.
- Communication: For smooth flow of communication, team members can communicate with each other, leave comments or pull requests.

### **Advantages Of Proposed System:**

- Real Time Information: stay up to date and get the most accurate Information available. Everyone involved in the project needs to see the status and progress of the project in an instant
- Problem Identifiers: With project tracking there is no place for problems or issues to hide. Any budding issues are recognizable in an instant. This allows leaders to act and take back control of the situation.

- Team Motivation: Collaboration is a key factor of every project. If every member has clarity on their role, they can work toward the group objectives
- Easy and Accurate Reporting: Reporting is often a painful task that project managers are required to do. Senior management want an overall view of each of the projects in an instant.

## **FUNCTIONAL REQUIREMENTS:**

Functional requirements of system are explained below:

- Users must have valid User ID and password to login thus creating their individual profiles.
- Workspace to view all your projects at one place.
- User can add new Project at Workspace.
- Project Dashboard – The place to get the detail at an individual project level.
- Project Manager can send invites to team members to join the project.
- Tasks – A clear and simple view of the steps involved in completing the project with the dates and team members who own the tasks outlined.
- Reporting - This is important for all team members when it comes to updating themselves on the project as a whole.
- File sharing : being able to share and organize key project documents eliminates time wasted searching for files
- For smooth flow of communication, team members can communicate with each other, leave comments or pull requests.
- Rating System For team members based on their performances and keep their track record, for future assignment of tasks, and consideration for other projects.

## **NON FUNCTIONAL REQUIREMENTS:**

Non Functional requirements are as follows:

- Secure access to confidential data.
- Maximum Time availability.
- Better component design for smooth functioning and get better efficacy at peak time.
- Flexible architecture highly desirable for future upgradation.
- User Friendly

### **SOFTWARE TOOLS:**

- Front end : HTML , CSS ,JAVASCRIPT, React
- Back end: JAVASCRIPT, PHP, Node.js
- Database: MySQL / Firebase

### **DEPLOYMENT:**

- Heroku or AWS

### **SYSTEM REQUIREMENTS:**

#### **For development:**

- Operating System: Windows 10
- Processor : Intel i3 and above
- Memory: 2 GB RAM (Recommended 8GB)
- Internet connection

#### **Initial set up:**

- Amazon EC2: **web service** that provides secure, resizable compute capacity in the cloud.
- Amazon VPC: commercial cloud computing service that provides users a virtual private cloud, by "provision[ing] a logically isolated section of Amazon Web Services Cloud"

- Amazon route 53 :a highly available and scalable cloud Domain Name System (DNS) web service
- After receiving some suggestions and feedback, we can scale our application.