# M1 Project Management
## Software Requirements Specification

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# 1  Introduction

## 1.1  Purpose

## 1.2  Project Scope

# 2  Functional Requirements

## 2.1  Administrator Users

### 2.1.1  User Management

FR-ADM-1 The system shall allow administrators to create, edit and delete user accounts.

FR-ADM-2 The system shall enable administrators to assign roles to users (e.g., admin, project manager, team member).

FR-ADM-3 The system shall provide administrators the ability to manage user permissions and access levels.

### 2.1.2  System Configuration

FR-ADM-4 The system shall provide administrators access to system logs and performance tools.

## 2.2  Project Manager

### 2.2.1  Project Management

FR-PM-1 The system shall allow project managers to create new projects with details such as project name, description, start date, end date, and team members.

FR-PM-2 The system shall enable project managers to assign tasks to team members within a project.

FR-PM-3 The system shall allow project managers to set project priorities and deadlines.

### 2.2.2  Task Management

FR-PM-4 The system shall allow project managers to create tasks within a project, including assigning them to team members.

FR-PM-5 The system shall enable project managers to set task priorities, deadlines, and dependencies between tasks.

### 2.2.3  Team Collaboration

FR-PM-6 The system shall provide project managers with a comment feature for communication with team members on specific tasks.

### 2.2.4  Time Tracking and Reporting

FR-PM-7 The system shall allow project managers to view reports on the time logged by team members on specific tasks and projects.

FR-PM-8 The system shall generate reports detailing overall project progress, including time spent and task completion status.

### 2.2.5  Notifications and Alerts

FR-PM-9 The system shall shall allow project managers to configure project-specific alerts for key milestones or deadlines.

## 2.3  Team Member

### 2.3.1  Task Management

FR-TM-1 The system shall allow team members to view tasks assigned to them with associated priorities and deadlines.

FR-TM-2 The system shall enable team members to update the status of their tasks (e.g., pending, in-progress, completed).

FR-TM-3 The system shall provide team members the ability to organize tasks by labels and view task dependencies.

### 2.3.2  Team Collaboration

FR-TM-4 The system shall allow team members to comment on tasks to communicate with other team members.

### 2.3.3  Time Tracking

FR-TM-5 The system shall allow team members to log time spent on each assigned task.

FR-TM-6 The system shall provide team members with the ability to view their personal time logs and task history.

### 2.3.4  Notifications and Alerts

FR-TM-7 The system shall notify team members of new task assignments, task updates, and approaching deadlines.

FR-TM-8 The system shall provide team members with alerts for comments or mentions in task-related discussions.

## 2.4  All Users

### 2.4.1  Account Management

FR-ALL-1 The system shall allow users to register and create accounts.

FR-ALL-2 The system shall provide users the ability to log in and log out.

FR-ALL-3 The system shall allow users to manage and update their personal profiles, including password updates.

### 2.4.2  Communication

FR-ALL-4 The system shall allow users to communicate with other users via a chat.

FR-ALL-5 The system shall allow users to select with which user(s) they want to start a chat.

### 2.4.3  Dashboard Overview

FR-ALL-6 The system shall display key project indicators, such as task progress, upcoming deadlines, and recent activity on the user's dashboard.

# 3  Non-functional Requirements

## 3.1  Performance

### 3.1.1  Response Time

NFR-PERF-1  The system shall have a maximum response time of 1 second for 95% of user requests under normal load conditions.

NFR-PERF-2  The system shall support real-time updates for task status changes, project progress, and user notifications.

### 3.1.2  Scalability

NFR-PERF-3  The system shall handle a large volume of concurrent users without affecting performance or availability.

NFR-PERF-4  The system shall scale to accomadate an increasing number of projects and tasks without significant degradation in performance.

## 3.2  Availability

### 3.2.1  Uptime

NFR-AVAIL-1  The system shall be available 99% of the time of scheduled maintenance.

### 3.2.2  Backup and Recovery

NFR-AVAIL-2  The system shall perform automatic daily backups of all critical data, including projects, tasks, and logs.

## 3.3  Security

### 3.3.1  Data Encryption

NFR-SEC-1  The system shall encrypt all sensitive user data.

### 3.3.2  Data Privacy

NFR-SEC-2  The system shall comply with the GDPR.

NFR-SEC-3  The system shall provide users with the ability to delete their personal data on request.

## 3.4  Usability

### 3.4.1  UI Design

NFR-USAB-1  The system shall provide an intuitive and user-friendly interface.

NFR-USAB-2  The system shall ensure that common user tasks (e.g., creating a project, assigning a task) can be completed within 5 clicks or less.

### 3.4.2  Accessability

NFR-USAB-3  The system shall support keyboard navigation, and editing (e.g., deleting a task with the DEL key).

## 3.5  Reliability

### 3.5.1  Updates

NFR-RELI-1  The system shall install any available updates nightly to remain up to date.

## 3.6  Compatibility

### 3.6.1  Devices and Operating Systems

NFR-COMP-1  The system shall be compatible with different operating systems, such as Windows, macOS, Linux, and mobile operating systems like iOS and Android.

NFR-COMP-2  The system shall be compatible with device types, including desktop computers, laptops, tablets, and smartphones.