

M1 Project Management

Software Requirements Specification

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1 Introduction

1.1 Purpose

This Software Requirements Specification (SRS) document describes the functional and non-functional requirements for developing the Project Management application. This document is to be used by the members of the development team (and any other stakeholders, if there were any) to verify the correct functionality of the software.

1.2 Project Scope

The goal of this project is to create a tool for small and medium sized teams to help them plan, track and manage their projects more efficiently. This tool will include features like task management, team collaboration/communication, time tracking, and notifications.

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 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 accomodate 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 Accessibility

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.