Software Requirements Specification (SRS)

Project: Tasks App

Version: 1.0

Date: August 25, 2025

# 1. Introduction

## 1.1 Purpose

To streamline task management and improve productivity

## 1.2 Scope

- task management

- project planning

## 1.3 Intended Audience

- students

- professionals

# 2. System Overview

A mobile application designed to help users manage their tasks efficiently.

# 3. Functional Requirements

## 3.1 User Authentication [0]

**Description:**

The application should allow users to securely create accounts and log in using their credentials.

**Priority:**

High

**Subtasks:**

- Implement user registration functionality with email verification

- Securely store user passwords using hashing algorithms

- Allow users to log in using their credentials

- Provide functionality for password recovery

- Implement session management for maintaining user login status

## 3.2 Task Creation [1]

**Description:**

Users should be able to create new tasks with customizable details such as title, description, due date, and priority.

**Priority:**

High

**Subtasks:**

- Implement input fields for task title, description, due date, and priority.

- Allow users to set different priority levels for tasks (e.g., High, Medium, Low).

- Validate user input for date format and priority selection.

- Persist newly created tasks in the application's database.

## 3.3 Task Management [2]

**Description:**

Users should be able to view, edit, and delete existing tasks.

**Priority:**

High

**Subtasks:**

- Display a list of all user tasks.

- Allow users to edit task details (title, description, due date, priority).

- Provide functionality to delete individual tasks.

- Ensure task data is persisted and recoverable.

## 3.4 Task Prioritization [3]

**Description:**

The application should provide options for users to prioritize tasks based on importance or urgency.

**Priority:**

High

**Subtasks:**

- Implement priority levels (e.g., high, medium, low)

- Allow users to assign priority levels to tasks

- Display prioritized tasks in a sorted order

- Provide visual cues for priority levels (e.g., color coding)

## 3.5 Task Reminders [4]

**Description:**

Users should be able to set reminders for tasks to ensure timely completion.

**Priority:**

High

**Subtasks:**

- Set reminder time for a task

- Choose reminder notification type (e.g., sound, vibration)

- Specify reminder frequency (e.g., daily, weekly)

- View upcoming task reminders

## 3.6 Task Completion Tracking [5]

**Description:**

The application should allow users to mark tasks as complete and track their progress.

**Priority:**

High

**Subtasks:**

- Implement a mechanism for users to mark tasks as complete.

- Display the completion status of each task.

- Show the overall progress of tasks, e.g., percentage completed.

- Allow users to filter tasks by completion status.

## 3.7 Task Categorization [6]

**Description:**

Users should be able to categorize tasks into different projects or categories for better organization.

**Priority:**

High

**Subtasks:**

- Implement a system for creating custom task categories.

- Allow users to assign tasks to existing categories or create new ones.

- Display tasks categorized by project or category in the task list.

- Enable filtering and searching of tasks by category.

## 3.8 Synchronization [7]

**Description:**

The application should synchronize task data across multiple devices to ensure data consistency.

**Priority:**

High

**Subtasks:**

- Synchronize task creation, updates, and deletions across all user devices.

- Implement a reliable mechanism for detecting changes in task data.

- Ensure data integrity and prevent conflicts during synchronization.

- Provide clear feedback to the user regarding synchronization status.

## 3.9 Notification System [8]

**Description:**

The application should send notifications to users about upcoming deadlines and completed tasks.

**Priority:**

High

**Subtasks:**

- Send push notifications for upcoming task deadlines

- Send email notifications for completed tasks

- Allow users to customize notification preferences (frequency, method)

- Implement a notification history for users to view past notifications

## 3.10 User Profiles [9]

**Description:**

Users should be able to create and manage their profiles, including personal information and task preferences.

**Priority:**

High

**Subtasks:**

- Profile creation with name, email, and password fields

- Option to update personal information

- Setting task preferences like due date reminders and notification types

## 3.11 Search and Filtering [10]

**Description:**

The application should allow users to search and filter tasks based on various criteria.

**Priority:**

High

**Subtasks:**

- Search tasks by keywords in task title and description

- Filter tasks by due date (Today, Upcoming, Past)

- Filter tasks by priority (High, Medium, Low)

- Filter tasks by status (Pending, In Progress, Completed)

- Filter tasks by assigned user

## 3.12 Collaboration Features [11]

**Description:**

The application should allow users to share tasks and collaborate with others.

**Priority:**

High

**Subtasks:**

- Allow users to invite other users to collaborate on a task.

- Enable task assignment to specific users within a collaborative task.

- Provide a shared task view that displays progress, comments, and assigned tasks for all collaborators.

- Implement a real-time communication feature within the shared task view for seamless collaboration.

# 4. Non-Functional Requirements

**1**: The application should be responsive and provide quick task completion feedback.

**2**: The application should be secure and protect user data from unauthorized access.

**3**: The application should be easy to use and navigate with a clear and intuitive user interface.

**4**: The application should be compatible with different mobile devices and operating systems.

**5**: The application should be available offline or have minimal functionality when offline.

**6**: The application should allow for efficient task organization and prioritization.

**7**: The application should be able to sync tasks across multiple devices.