CSC 431 – Spring 2025

PlanIt

Software Requirements Specification (SRS)

<Team number>

Kristashia Murray	Designer and Developer
Maya Walcott	Designer and Developer

Version History

Version	Date	Author(s)	Change Comments

Table of Contents

1. System Requirements ..... **Error! No bookmark name given.**
   1.1 Functional Requirements ..... **Error! No bookmark name given.**
      1.1.1 Task Creation ..... **Error! No bookmark name given.**
      1.1.2 Reminders ..... **Error! No bookmark name given.**
      1.1.3 Task Editing ..... **Error! No bookmark name given.**
      1.1.4 Task Deletion ..... **Error! No bookmark name given.**
      1.1.5 Task Completion ..... **Error! No bookmark name given.**
      1.1.6 Task Prioritization ..... **Error! No bookmark name given.**
      1.1.7 Task Status ..... **Error! No bookmark name given.**
   1.2 Non-Functional Requirements ..... **Error! No bookmark name given.**
      1.2.1 User Friendly Interface ..... **Error! No bookmark name given.**
      1.2.2 System Availability ..... **Error! No bookmark name given.**
      1.2.3 Response Time ..... **Error! No bookmark name given.**
      1.2.4 Reliability ..... **Error! No bookmark name given.**
2. System Constraints ..... **Error! No bookmark name given.**
   2.1 Language Constraints ..... **Error! No bookmark name given.**
      2.1.1 C programming language ..... **Error! No bookmark name given.**
   2.2 Tool Constraints ..... **Error! No bookmark name given.**
      2.2.1Development Environment ..... **Error! No bookmark name given.**
   32.2 2.3 Platform Constraints ..... **Error! No bookmark name given.**
   32.3 2.3.1Desktop Application ..... **Error! No bookmark name given.**
   32.5 2.4 Hardware Constraints ..... **Error! No bookmark name given.**
      2.4.1RAM ..... **Error! No bookmark name given.**
      2.4.2 Storage ..... **Error! No bookmark name given.**
   32.6 2.5 Network Constraints ..... **Error! No bookmark name given.**
      2.5.1 Offline Access ..... **Error! No bookmark name given.**
   32.7 2.6 Deployment Constraints ..... **Error! No bookmark name given.**
      2.6.1 Local Installation ..... **Error! No bookmark name given.**
   32.8 2.7 Transition & Support Constraints ..... **Error! No bookmark name given.**
      2.7.1Scalability ..... **Error! No bookmark name given.**
   32.9 2.8 Budget & Schedule Constraints ..... **Error! No bookmark name given.**
      2.8.1 Timeline and Funding ..... **Error! No bookmark name given.**
   32.10 2.9 Miscellaneous Constraints ..... **Error! No bookmark name given.**
      2.9.1 Information Recovery ..... **Error! No bookmark name given.**
3. Requirements Modeling ..... **Error! No bookmark name given.**
      3.1.1 Task Creation ..... **Error! No bookmark name given.**
      3.1.2 Reminders ..... **Error! No bookmark name given.**
      3.1.3 Edit Task ..... **Error! No bookmark name given.**
      3.1.4 Task Deletion ..... **Error! No bookmark name given.**
      3.1.5 Task Prioritization ..... **Error! No bookmark name given.**
      3.1.6 Task Completion ..... **Error! No bookmark name given.**
      3.1.7 Task Status ..... **Error! No bookmark name given.**
4. Evolutionary Requirements ..... **Error! No bookmark name given.**
   34.1 Functional Requirements ..... **Error! No bookmark name given.**
      4.1.1 Task Categorization ..... **Error! No bookmark name given.**
   34.2 Non-Functional Requirements ..... **Error! No bookmark name given.**
      4.2.1 Requirement Title ..... **Error! No bookmark name given.**

1. System Requirements

31.1 Functional Requirements

1.1.1 Task Creation

Title	Task Creation
Description	Users should be able to create new tasks by providing a title, description, status (not started, in progress, completed), priority (low, moderate, or high), comment(s) and due date (optional).
Priority	0
Precondition(s)	Users must be logged into the application.
Basic Flow	User navigates to task creation section --> User enters task details: title, status, due date, comment(s), priority and description -->User saves task--> Task is saved to the system.
Postconditions(s)	The task appears in the user's task list.
Use Case Diagram	3.1.1

1.1.2 Reminders

Title	Reminders
Description	Users should be able to set a specific time and date when they want their task to be completed by. Our system will have reoccurring reminders (i.e. weekly) and users will be able to edit or delete a reminder.
Priority	1
Precondition(s)	User must create a task with a completion date
Basic Flow	User navigates to task that is already created --> User enters the reminder dates, and saves the reminder -->
Postconditions(s)	The user gets a notification based on the time set
Use Case Diagram	3.1.2

1.1.3 Task Editing

Title	Task Editing
Description	Users should be able to modify task(s).
Priority	0
Precondition(s)	User must have a preexisting task.
Basic Flow	User navigates to task list --> User select task to be modified --> User modify task details --> User saves the task -->Task is saved to the system.
Postconditions(s)	The task reflects the updated information.

Use Case Diagram	3.1.3

1.1.4 Task Deletion

Title	Task Deletion
Description	Users should be able to delete task
Priority	0
Precondition(s)	User must have a preexisting task.
Basic Flow	User navigates to task list --> User select task to be deleted--> User deletes the task --> Task is deleted from the system.
Postconditions(s)	Tasks no longer appear in the task list.
Use Case Diagram	3.1.4

1.1.5 Task Completion

Title	Marking a Task as Complete
Description	Users should be able to mark a task as complete in a similar manner to a to-do list check off.
Priority	0
Precondition(s)	User must have a task that is already created
Basic Flow	User navigates to task that is already created --> User checks off complete and as a result changes from a task to-do to completed
Postconditions(s)	A visual indication shows that the task is finished (an example of this could be a checkmark)
Use Case Diagram	3.1.5

1.1.6 Task Prioritization

Title	Task Prioritization
Description	Users should be able to assign priorities to tasks.
Priority	0
Precondition(s)	User must have a task that is already created
Basic Flow	User navigates to task that is already created --> User selects task's priority
Postconditions(s)	A visual indication shows that the task is of a certain priority.
Use Case Diagram	3.1.6

1.1.7 Task Status

Title	Task Status
Description	Users should be able to assign statuses to tasks.

Priority	0
Precondition(s)	User must have a task that is already created
Basic Flow	User navigates to task that is already created --> User selects task's status
Postconditions(s)	A visual indication shows the status of the task.
Use Case Diagram	3.1.7

1.2 Non-Functional Requirements

1.2.1 User Friendly Interface

Title	User Friendly Interface
Description	The interface should be simple, intuitive and easy to navigate.
Priority	0
Applicable FR(s)	Task Creation, Task Deletion, Reminder, Task Completion.

1.2.2 System Availability

Title	System Availability
Description	Our system should have be available around 97% of the time with the other 3% involving system updates and maintenance
Priority	0
Applicable FR(s)	Task Creation, Task Deletion, Reminder, Task Completion.

1.2.3 Response Time

Title	Response Time
Description	For actions such as task creation or deletion the systems should be able to respond to user input within 2.5 seconds.
Priority	0
Applicable FR(s)	Task Creation, Task Deletion, Reminder, Task Completion.

1.2.4 Reliability

Title	Reliability
Description	User data such as tasks should be saved automatically if an unexpected error (such as a system failure) occurs.
Priority	0
Applicable FR(s)	Task Creation, Task Deletion, Reminder, Task Completion.

2. System Constraints

32.1 Language Constraints

2.1.1 C programming language

Title	C Programming Language
Description	The application will be designed using the C programming language.
Priority	3

2.2 Tool Constraints

2.2.1Development Environment

Title	Development Environment/C Compilers
Description	Since we are using the C Programming Language, we are limited to using tools that are for C specifically such as the GCC compiler.
Priority	3

2.2 2.3 Platform Constraints

2.3 2.3.1Desktop Application

Title	Desktop Application
Description	The application will be built for desktop only.
Priority	0

2.4

2.5 2.4 Hardware Constraints

2.4.1RAM

Title	RAM
Description	If a user is storing a large amount of data in memory (i.e. hundreds), if the system doesn't have enough RAM available, it could negatively impact performance.
Priority	0

2.4.2 Storage

Title	Memory Size
Description	Depending on where we decide to store data such as task deadlines, the lack of storage available can impact how our system functions.
Priority	0

2.6 2.5 Network Constraints

2.5.1 Offline Access

Title	Offline Access
Description	The application will be accessible offline, so that there won't be any issues with users who have poor internet connection.
Priority	0

2.7 2.6 Deployment Constraints

2.6.1 Local Installation

Title	Local Installation
Description	The application will be distributed as an executable file for installation.
Priority	3

2.8 2.7 Transition & Support Constraints

2.7.1Scalability

Title	Scalability
Description	Our system should be developed to accommodate more tasks so that we don't encounter significant
Priority	2

2.9 2.8 Budget & Schedule Constraints

2.8.1 Timeline and Funding

Title	Timeline and Funding
Description	The application will be completed in 2 months. There will be no funding involved in this project.
Priority	0

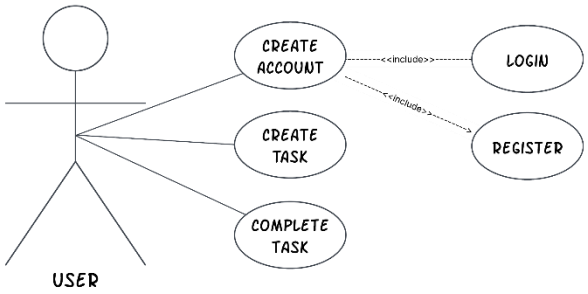
2.10 2.9 Miscellaneous Constraints

2.9.1 Information Recovery

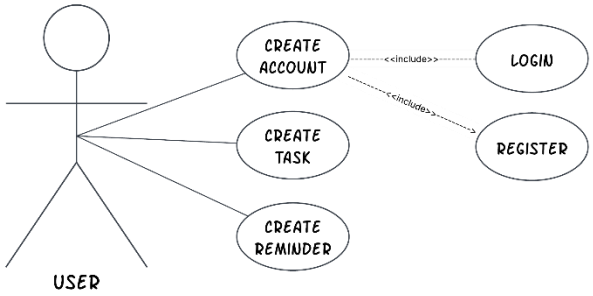
Title	Information Recovery
Description	Backups will be made regular to ensure that user data such as task descriptions and marking off certain tasks is not lost.
Priority	1

3. Requirements Modeling

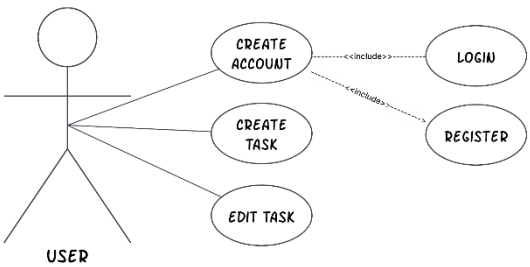
3.1.1 Task Creation



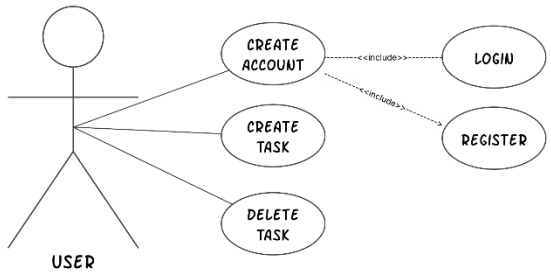
3.1.2 Reminders



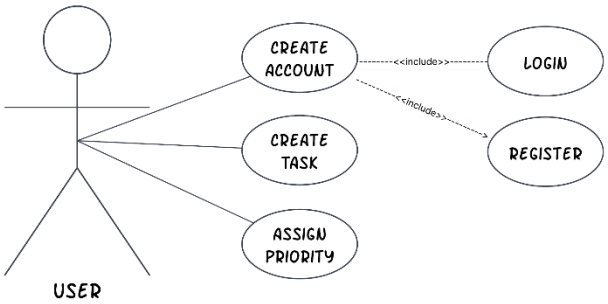
3.1.3 Edit Task



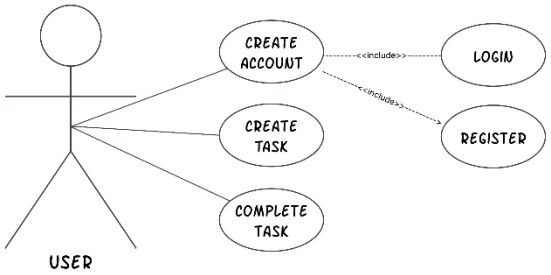
3.1.4 Task Deletion



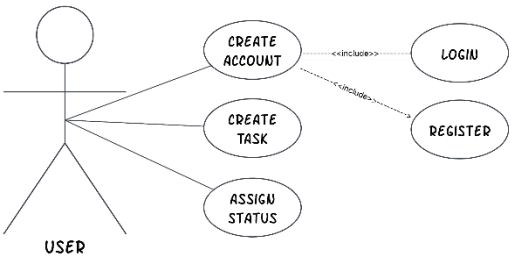
3.1.5 Task Prioritization



3.1.6 Task Completion



3.1.7 Task Status


CREATE ACCOUNT
<<include>>
LOGIN
<<include>>
CREATE TASK
REGISTER
ASSIGN STATUS
USER

4. Evolutionary Requirements

4.1 Functional Requirements

4.1.1 Task Categorization

Title	Task Categorization
Description	Users will be able to put tasks into custom categories.
Priority	1
Precondition(s)	Users must have a preexisting task.
Postconditions(s)	Tasks will be grouped into categories.
Use Case Diagram	4.1.1

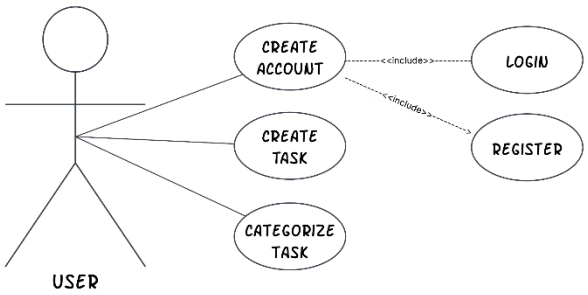


Figure 4.1.1

4.2 Non-Functional Requirements

4.2.1 Requirement Title

Title	Cross Platform Compatibility
Description	The application should be available on both web and mobile platforms in the future.
Priority	0
Applicable FR(s)	