Software Requirements Specification

For

TaskRise Web Application

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GitHub Link: https://github.com/KothapalliHemanthSimha/task-rise

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1. Introduction

TaskRise is a task management tool which is designed to help users in managing and organizing tasks in an efficient way for best productivity.

1.1 Purpose

This is a Software Requirements Specification document for TaskRise web application. Its purpose is to describe functional requirements, features and other important requirements for this application.

1.2 Document Conventions

This document is used as a guide for those who want to understand the existing features of the program and for those who want to develop future components of the program.

1.3 Intended Audience and Reading Suggestions

This SRS document is mainly for

- Developers, who want to improvise the program with new features efficiently.
- Testers, who find the bugs and errors of the program and report them back to developers to make improvement.
- Customers, who are keen to know about the features and capabilities of the TaskRise website.

1.4 Product Scope

TaskRise is a practical organizing tool for all type of users. It is used as a task management tool, in which user's tasks can be created, saved and organized in a hierarchical form. Also, a user can organize his/her tasks in different categories. Also tasks can be sorted according to their labels, date of creation, duration, priority, etc.,

1.5 References

GitHub Link: https://github.com/KothapalliHemanthSimha/task-rise

2. Overall Description

2.1 Product Perspective

TaskRise is a web application suitable for all users interested in organizing their tasks and can be used on any browser or system. It is free and is suitable for most demanding users who can adapt it to their own personal.

2.2 Product Features

The main features of TaskRise are:

- User Authentication
- Creating new tasks
- Adding Pomodoro Timer to the tasks
- Editing already existed tasks and their attributes
- Creating new labels for tasks
- Editing existing labels
- Priority ordering of tasks
- Deleting already existing tasks
- Mark a task as completed
- Display completed tasks

2.3 User Classes and Characteristics

The program is built on for a set of individual customers who can use TaskRise for specific works and for productive management of time. They can be of any age and have some basic knowledge of computer or mobile use without requiring any special technical skills and experience.

2.4 Operating Environment

TaskRise is device independent and browser independent web application without any special requirements, i.e., it can be used on Windows or any UNIX like operating system.

2.5 Design and Implementation Constraints

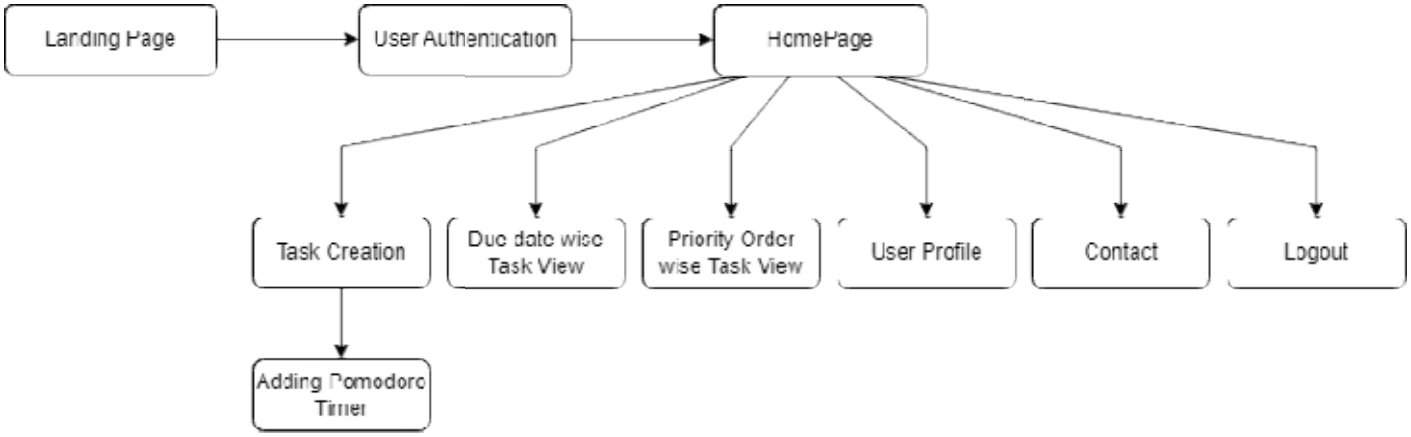
This application is not meant for design by others (other than company's developers). Also, it is necessary to accept and agree to the terms and conditions of the license of the application.

2.6 Assumptions and Dependencies

There are no conditions for using TaskRise in our system beyond the existence of a graphics card and a graphical interface to use the program.

3. External Interface Requirements

3.1 User Interfaces



3.2 Hardware Interfaces

TaskRise works with any Laptop or Desktop. Only a network connection is required for it to work.

3.3 Software Interfaces

In order to work properly, TaskRise uses MongoDB for all the user data in its database engine, so that user can save his tasks and backup them in that database.

3.4 Communications Interfaces

TaskRise needs to have an active internet connection to work effectively.

4. System Features

In this section, the features of the TaskRise application are described analytically.

4.1 User Authentication

- **Description**: In this feature, it is described the procedure of creating a new account, and signing in using that account details.

- **User**: User has to choose “Start For Free” button and then a pop up window shows up, with the empty fields of the User details, in which the user need to add his/her valid credentials. If there is already an account in the database regarding those credentials, then new account won’t be created. After creating the account, the user can login into it using those valid credentials.

- **System**: System must show up a pop up window, when the user chooses”Start For Free” button. When the user presses it, system must display a window, in which user enters their details. Then system must check if the account related those details is already present or not. If not, create a new account with those credentials.

- **Constraint**: The User’s credentials must be valid.

4.2 New Task

- **Description**: In this feature, it is described the procedure of creating a new task, completing task’s fields and adding task in and existing label.

- **User**: User has to choose “+ (Add Task)” button and then a pop up window shows up, with the empty fields of the task and the label, in which the task will be added in. If there is not already a label, user should create a new one by pressing new label if required. User must definitely complete the field with the name of the task, as it is mandatory. User should mention task’s complete description, set the priority of the task, define the due date, and set the task as completed. If required, user can also add a Pomodoro timer to a task for mentioning about the duration the user can work on a task for a day.

- **System**: System must show up a pop up window, when the user chooses “+ (Add Task)”. When the user presses +, system must check if the “task name” field is completed. If it is not, it should not allow the user to continue to add task without completing in the pop up window. Also system, must not allow the user to add a new task if there is not an available date. Finally, the system must save the new task and its attributes, and then add it nested in the label.

- **Constraint**: A new task cannot be added if the “task name” field is not completed and if there is not a date to add the new task.

4.3 Edit Task

- **Description**: In this feature it is explained the procedure of editing an existing task and its attributes.

- **User**: Firstly, user must select and existing task and then choose “Edit Task” button. Then a pop up window will show up, same one as the new task creation, in which the user can edit task’s fields. User must not delete the name of the task and leave it empty, as it is mandatory. User can also edit the description, reset the priority of the task, redefine the due date, and set the task as completed.

- **System**: System must show up a pop up window, when the user chooses “Edit task(Ctrl + E)”. When the user presses edit, system must check if the “task name” field is completed. If it is not, it If it is not, it should not allow the user to continue to add task without completing in the pop up window. Also system, must not allow the user to be able to press “Edit task”, if a task has not been already selected. Finally, the system must save the edited task and its edited attributes, and move it in a new label, if the user has changed the task’s label.

- **Constraint**: Edited tasks cannot be saved if the new name of it is empty and if there is no task selected before user chooses to edit task.

4.4 Delete Task

- **Description**: In this feature, it is described how the user can delete as task.

- **User**: User selects a task. Then chooses “Delete task” and a dialog box shows up, asking if he wants to delete the selected task. If user answers “DELETE”, then this task will be deleted, else the delete command will be canceled.
- **System**: When user chooses “Delete task”, system shows up a dialog box asking the user, if he wants to delete the selected item. If user answers “DELETE”, system deletes the selected task, else system cancels this action.

- **Constraint**: There must be a selected task before user chooses delete task.

4.5 Mark Task Completed

- **Description**: In this feature, it is described the procedure of marking a task as completed. Every task must have a radio button on its left side, to make it clear if the task is completed or not.

- **User**: User selects a task and then chooses “Mark task completed”. After completing this action, selected task’s radio button should be checked. Also, user can straight check the radio button by them.

- **System**: When user chooses “Mark task completed”, the system must check the radio button of the selected task and save this task as completed.

- **Constraint**: There must be a selected task, which is uncompleted, before user chooses mark task completed.

4.6 Mark task uncompleted

- **Description**: In this feature, it is described the procedure of marking a task as uncompleted. Every task must have a radio button on its left side, to make it clear if the task is completed or not.
- **User**: User selects a task and then chooses “Mark task uncompleted”. After completing this action, selected task’s radio button should be unchecked. Also, user can straight uncheck the radio button by them.
- **System**: When user chooses “Mark task uncompleted”, the system must uncheck the radio button of the selected task and save this task as uncompleted.
- **Constraint**: There must be a selected task, which is completed, before user chooses mark task uncompleted.

4.7 Labels

- **Description**: In this feature, the user can add specific labels to the tasks for segregating them according to their label names.
- **User**: User adds a label to a task while creating or editing it.
- **System**: Whenever the user adds a label to the task, then the new label will be created if not present already, and then add that task and any new tasks with that label under that label.
- **Constraint**: The label name must not be empty.

4.8 Priority order

- **Description**: In this feature, the user can add specific priority among the four priority orders for the tasks to segregate them according to their priority order.
- **User**: User chooses a priority order among the four options for a task while creating or editing it.
- **System**: Whenever the user adds a priority to the task, then the system adds that task under that priority order.
- **Constraint**: The priority must be selected.

4.9 Show completed tasks

- **Description**: In this feature, it is described how users can show the completed tasks.
- **User**: User chooses “Show Completed tasks”.

- **System**: When user chooses “Show Completed tasks”, system must show any task that is completed in the task list. User must not be able to choose show completed tasks, if these tasks are already shown.

- **Constraint**: Completed tasks must be hidden, so that user can choose show completed tasks.

4.10 Profile

- Description and Priority: In this feature, it is described how users can view their profile.

- User: User chooses “Profile” icon on top right corner of web page.

- System: Whenever user chooses “Profile” icon on top right corner of web page, the system fetched the information, statistics and activity of the user from the database and displays it in the website.

- Constraint: The user must contain an account in the website.

4.11 Logout

- **Description**: In this feature, it is described how users can logout from the application

- **User**: User chooses “Logout”.

- **System**: When user chooses “Exit”, system must save anything that has not been saved yet, and then close the application.

- **Constraint**: There are no constraints.

4.12 Contact

- **Description**: In this feature, it is described how a user can know more details and avoid confusion about the application.

- **User**: User chooses “Help and Information”.

- **System**: Whenever User chooses “Help and Information”, the system redirects it to the help page, in which there will be a search bar, in which we can search our queries to get relevant information.

- **Constraint**: There must be an active internet connection.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

TaskRise is a program with minimal memory requirements, disk space and processing power. The program aims to provide the user ease and functionality without any charge.

5.2 Software Quality Attributes

TaskRise is mainly described by the ease of use, the handy organization tools, the portability and the practical interface.