**Dream Team**

**Smart Calendar**

**Written Requirements**

***Revision History***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Authors** | **Description of Change** | **Sections** | **Rev** | **Date** |
| Henry Yang | Initial Document |  | O | 2/28/18 |
| Michael Perez | Updated format |  | 1 | 3/6/18 |
| Henry Yang | Added more information, updated format |  | 2 | 3/7/18 |

**Table of Contents**

[**1 Team Description 5**](#_gjdgxs)

[**2 Terminology 6**](#_30j0zll)

[**3**](#_1fob9te) **Smart Calendar 7**

[**3.1 Overview**](#_3znysh7) **7**

**3.2 Calendar Requirements 7**

**3.2.1 Create Task Requirement 7**

**3.2.2 View Unassigned Tasks Requirement 7**

**3.2.3 Create Free Time Block Requirement 7**

**3.2.4 Edit Tasks and Free Time Requirement 7**

**3.3 Free Time Requirements 8**

**3.3.1 Create Free Time Block Requirement 8**

**3.3.2 Delete Free Time Block Requirement 8**

**3.3.4 Invalid Modification of Start and End Times Requirement 8**

**3.4 Task Requirements 8**

**3.4.1 Set Name Requirement 8**

**3.4.2 Invalid Shift Operation Requirement 8**

**3.4.3 Delete Currently Assigned Task Requirement 8**

**3.4.4 Modify Task Due Date Requirement 8**

**3.4.5 Start Task Timer Requirement 9**

**3.4.6 Stop Task Timer Requirement 9**

**3.4.7 Remind User of Task Due Date Requirement 9**

**3.5 AND Requirements 10**

**3.6 OR Requirements 12**

# Team Description

|  |  |
| --- | --- |
| **Team Member Name** | **Email Address** |
| Eric Guzman | eg70889@csu.fullerton.edu |
| Adam Weesner | klaviam@gmail.com |
| Jesus Rodriguez | jrjssrdgz@csu.fullerton.edu |
| Michael Perez | mperez980089@yahoo.com |
| Henry Yang | hkyang@csu.fullerton.edu |
|  |  |

# Terminology

The following table defined terms used within this document.

|  |  |
| --- | --- |
| **Term** | **Definition** |
| User | Person using the application. |
| Block | Segment of time represented on the calendar. |
| Task | A voluntary activity the user must complete. |
| Ripping the bandaid | Algorithm type; assigns tasks in large, segments. |
| Slow and steady | Algorithm type; assigns tasks in small, frequent segments. |
| Free time | The time where the user is available to schedule tasks. |

# Smart Calendar

## Overview

This application will:

* Allow the user to enter their free time on a weekly basis
* Allow the user to schedule tasks to complete during their free time
* Sort the user’s tasks based on an algorithm of their choice
* Remind the user of their upcoming tasks’ deadlines

**3.2 Calendar Requirements**

**3.2.1 Create Task Requirement**

When the user clicks on a button, the system **shall** create a new empty task.

**3.2.2 View Unassigned Tasks Requirement**

When the user clicks on a button, the system **shall** display a list of unassigned tasks. The system **shall** allow a displayed task within the list to be viewed and modified independently when clicked by the user.

**3.2.3 Create Free Time Block Requirement**

When the user inputs their free time (on a weekly basis), the calendar **shall** create a free time block.

**3.2.4 Edit Tasks and Free Time Requirement**

The user **shall** be able to modify their tasks and free time through the calendar UI. The user **shall** be able to access tasks through the calendar.

**3.3 Free Time Requirements**

**3.3.1 Create Free Time Block Requirement**

Upon clicking a button to create a new block of free time, the system **shall** prompt the user to enter a start time and an end time for the block.

**3.3.2 Delete Free Time Block Requirement**

When an “X” located at the top right of each block is clicked, the system **shall** delete the block of free time.

**3.3.3 Modify Start and End Times Requirement**

When a free time block on the calendar is clicked, the system **shall** allow the user to modify its start and end times.

**3.3.4 Invalid Modification of Start and End Times Requirement**

The system **shall** prevent the user from modifying a free time block’s start or end time such that it occupies the same time segment as another free time block.

**3.4 Task Requirements**

**3.4.1 Set Name Requirement**

The user **shall** be able to click on the “Name” text field of an independently viewed task to set its name.

**3.4.2 Invalid Shift Operation Requirement**

The system **shall** prevent the user from adding time to a task such that it becomes larger than the amount of free time they have. The system **shall** prevent the user from subtracting time from a task such that it has less than or equal to 0 time remaining.

**3.4.3 Delete Currently Assigned Task Requirement**

The system **shall** delete a selected task from a calendar upon the user clicking the “Delete Task” button.

**3.4.4 Modify Task Due Date Requirement**

The system **shall** modify the due date of the currently selected task when prompted by the user when the due date is later than the current system time.

**3.4.5 Start Task Timer Requirement**

The system **shall** start the timer for a selected task when prompted by the user.

**3.4.6 Stop Task Timer Requirement**

The system **shall** stop the task timer for a selected task when prompted by the user.

**3.4.7 Remind User of Task Due Date Requirement**

The system **shall** alert the user with a message when a task is near its assigned due date. The system **shall** alert the user of the upcoming due date in intervals of the user’s choice. The system **shall** alert the user when the task due date is equal to the system clock that the task has expired and is due. Once the task is due, the system **shall** prompt the user to delete the task or modify its due date to a later date.

**3.5 AND Requirements**

The action of inputting a primary weekly schedule **shall** be taken when **all of** the following conditions are met:

* Schedule has not yet been input

The action of creating a task **shall** be taken when **all of** the following conditions are met:

* User allots blocks of free time to the schedule
* User inputs “due date”, “time”, “algorithm type” and “label” into the prompt

The action of editing the user’s schedule **shall** be taken when **all of** the following conditions are met:

* At least one (1) block of free time is allotted

The action of assigning a task to calendar **shall** be taken when **all of** the following conditions are met:

* The user has one (1) or more task in their queue

The action of adding time to the task timer **shall** be taken when **all of** the following conditions are met:

* A task is selected
* The time of the task does not conflict with other tasks

The action of subtracting time to the task timer **shall** be taken when **all of** the following conditions are met:

* A task is selected
* The amount of time being subtracted does not make the timer count less than 0

The action of reminding the user of an upcoming task **shall** be taken when **all of** the following conditions are met:

* The task falls within a user defined interval of when they wish to be reminded

The action of alerting the user when a due date is reached **shall** be taken when **all of** the following conditions are met:

* The task has not been completed by the user
* The current system time matches or is later than that of the task due date

XYZ action **shall** be taken when **all of** the following conditions are met:

**3.6 OR Requirements**

The action of unassigning a task **shall** be taken when **any of** the following conditions are met:

* The user manually deletes the task
* The system timer finishes its countdown and deletes the task

The action of starting the task timer **shall** be taken when **any of** the following conditions are met:

* The task scheduled is at the current time and the calendar executes the timer
* The user manually executes the task timer

The action of stopping the task timer **shall** be taken when **any of** the following conditions are met:

* The task scheduled ends at the current time and the calendar finishes executing the timer
* The user manually stops the task timer

XYZ action **shall** be taken when **any of** the following conditions are met: