TimeDrop
Software Requirements Specifications

Version <1.1>

Revision History

Date	Version	Description	Author
<10/02/2022>	<1.0>	First Draft	Sai Mittapalli, Mohamed Aql, Muhammad Momin Rahman, Abdalla Eltom
<10/09/2022>	<1.1>	Added additional functional requirements	Sai Mittapalli

Table of Contents

Software Requirements Specifications

1. Introduction

1.1 Purpose

The purpose for this document is to present a calendar system that is user-friendly that goes straight to the point when organizing the day-to-day events and tasks. The different components needed to function is explained in the rest of the document.

1.2 Scope

The software will allow the users to create an account, import a calendar from a third-party institution, and can add, remove, or edit calendar events. Users can also create a to-do list to help organize tasks in the short-term with the help of the same add, remove, or edit functions. The objective is for the user to easily use the software and organize their priorities in a clean format

1.3 Definitions, Acronyms, and Abbreviations

HTML/CSS

Hyper Text Markup Language/ Cascading Style Sheet: displays the content on the browser and how it is formatted

JavaScript

Object-oriented programming language used for web page behaviors

API

Application Programming Interface: allows multiple applications to interact with one another

UI

User Interface: What the user will see on the webpage

IP

Internet Protocol: this is how the user will send/retrieve commands through the internet

I/O

Input/Output: the different devices to input into computer (e.g keyboard, mouse) and the output that leaves the computer (display monitor, speakers)

Refer to Glossary Document (upedu_gloss.dot)

1.4 References

1. UPEDU Template Example

1.5 Overview

The continuation of this document contains the descriptions of the calendar website's specific requirements and defines each part of the requirements. All requirements are classified into categories.

2. Overall Description

2.1 Product perspective

This service will help people organize different events and tasks without other distractions preventing them from interacting with the software effectively and efficiently. The simplistic UI and functions will assist the users with their organization and prioritization of their events and tasks

2.1.1 System Interfaces

The software can be accessed on the internet and consists of different components: Login/Sign up system and calendar system.

The Login/Sign up system allows users to access the calendar or make an account if they do not have one to start. The system is connected to a database where the user's personal info and credentials is stored. Once the user's credentials are valid, the user can interact with the website by importing a calendar from any third-party institution and can add, edit, or remove events in their account. Users can also add, edit, or remove to-do lists of which the purpose is to remind tasks that are more daily tasks rather than upcoming events.

2.1.2 User Interfaces

The software's interface will include fields to login or a link to sign up, along with more fields to enter to create an account. Upon completing the necessary steps, a login (or submit) button is presented to move onto the home page, where users can import a calendar.

The calendar is then displayed on the home page, where the user can click on a calendar of their choosing and can edit the events or tasks as they like by choosing the edit button within the calendar itself. There will also be a sidebar on the homepage that will present the to-do list, where the user can also edit by clicking a button to add, edit, or remove tasks. Each event or task will be color-coded of the user's choosing to represent the different calendars imported and can be named by clicking on the button next to the respective calendar.

2.1.3 Hardware Interfaces

All requirements must run on a computer connected to the internet.

2.1.4 Software Interfaces

The software interface used by the calendar is the database that stores the user's information and credentials. This is what the user indirectly interacts with to send or retrieve information such as adding a task or importing a new calendar.

2.1.5 Communication Interfaces

All systems will communicate with the database using an IP.

2.1.6 Memory Constraints

The main memory constraint that's required is less than 500Mb of RAM.

2.1.7 Operations

The operation of the calendar software must be simplistic for the user to achieve effectiveness and efficiency. The user will carry out the operations that the system will do. Operations include logging in, signing up, adding, editing, or removing tasks in the to-do list and events in the calendar, and can edit the calendar's color and name.

2.2 Product functions

The main function of the software is to import a calendar from a third-party institution, adding, removing, or editing tasks and events. The database will store all the user's information and credentials.

2.3 User characteristics

The user must be able to know how to navigate to the website and have a good internet connection. User's must also keep track of their information provided, imported, and what their respective credentials are.

2.4 Constraints

The database will keep track of the inputs of users and will return the necessary pages to proceed into the website. The software will consist of HTML/CSS and JavaScript as the front-end and the database as the back end.

2.5 Assumptions and dependencies

The software will function if the user uses an up-to-date browser and has the I/O devices to navigate the website.

2.6 Requirements subsets

2.6.1 A cross-out system where the task is crossed out when the task is completed

3. Specific Requirements

3.1 Functionality

3.1.1 <Login/Logout + Signup System>

3.1.1.1 The user shall be able to open the login page

3.1.1.2 The user shall login with their Gmail

3.1.1.3 The user shall be able to enter their username and password

3.1.1.4 The system shall authenticate and open the user's account if authentication is successful

3.1.1.5 The system shall display an error message if authentication is unsuccessful

3.1.1.6 The user shall be able to open the sign-up page

3.1.1.7 The user shall be able to enter their email and a desired username and password

3.1.1.8 The system shall store the new user in the database

3.1.1.9 The system will create and open the user's account

3.1.2 <Django Login System>

3.1.2.1 The system takes the credentials from the user and creates an account for the user using their account

3.1.2.2 The system checks for authentication for logging in using the database

3.1.3 <Database>

3.1.3.1 The database shall store user's different calendars

3.1.3.2 The database shall store daily to-do list

3.1.3.3 The database shall store long term goals

3.1.3.4 The database shall store username/Gmail and password

3.1.3.5 The database shall store things in the proper place when new event/task is added

3.1.4 <Calendar System>

3.1.4.1 The user shall be able to open the web calendar application

3.1.4.2 The user shall be able to add a new calendar to his calendar collection on the main page

3.1.4.3 The user shall be able to name or rename a certain calendar

3.1.4.4 The user shall be able to remove a calendar

3.1.4.5 The user shall be able to edit a calendar

3.1.4.6 The user shall be able to add tasks on the daily to-do list inside a calendar

3.1.4.7 The system shall cross off a task when completed

3.1.4.8 The user shall be able to add events to a certain calendar

3.1.4.9 The user shall be able to select a certain date for a task

3.1.4.10 The user shall be able to select a certain time for a task

3.1.4.11 The user shall be able to set priority for events

3.1.4.12 The system shall add events to the daily to-do list when assigned

3.1.4.13 The system shall integrate the tasks with the monthly calendar

3.1.4.14 The main page will have different type of calendars separated by different colors

3.1.4.15 The main page will have an add button to add a new calendar, remove button, and edit button

3.1.4.16 The calendar page will have a monthly formatted calendar

3.1.4.17 The page will have a to-do list for the current day

3.2 Use-Case Specifications

- Create Account
- Login
- Logout
- View Calendar Selection and Combined To-Do List
- Create Calendar
- View Specific Calendar's Monthly View and To-Do List
- Add Task inside Calendar

3.3 Supplementary Requirements

For more details on the Supplementary Requirements refer to the Supplementary Specifications Document.

4. Classification of Functional Requirements

Functionality	Type
3.1.1.1 The user shall be able to open the login page	Essential
3.1.1.2 The user shall login with their Gmail	Desirable
3.1.1.3 The user shall be able to enter their username and password	Essential
3.1.1.4 The system shall authenticate and open the user's account if authentication is successful	Essential
3.1.1.5 The system shall display an error message if authentication is unsuccessful	Essential
3.1.1.6 The user shall be able to open the sign-up page	Essential
3.1.1.7 The user shall be able to enter their email and a desired username and password	Essential
3.1.1.9 The system shall store the new user in the database	Essential
3.1.1.10 The system will create and open the user's account	Essential
3.1.2.1 The system takes the credentials from the user and creates an account for the user using their account	Desirable
3.1.2.2 The system checks for authentication for logging in using the database	Desirable
3.1.3.1 The database shall store user's different calendars	Essential
3.1.3.3 The database shall store daily to-do list	Essential
3.1.3.4 The database shall store long term goals	Essential
3.1.3.5 The database shall store username/Gmail and password	Essential
3.1.3.6 The database shall store things in the proper place when new event/task is added	Essential

3.1.4.1 The user shall be able to open the web calendar application	Essential
3.1.4.2 The user shall be able to add a new calendar to his calendar collection on the main page	Essential
3.1.4.3 The user shall be able to name or rename a certain calendar	Essential
3.1.4.4 The user shall be able to remove a calendar	Essential
3.1.4.5 The user shall be able to edit a calendar	Essential
3.1.4.6 The user shall be able to add tasks on the daily to-do list inside a calendar	Essential
3.1.4.7 The system shall cross off a task when completed	Essential
3.1.4.8 The user shall be able to add events to a certain calendar	Essential
3.1.4.9 The user shall be able to select a certain date for a task	Essential
3.1.4.10 The user shall be able to select a certain time for a task	Essential
3.1.4.11 The user shall be able to set priority for events	Essential
3.1.4.12 The system shall add events to the daily to-do list when assigned	Essential
3.1.4.14 The system shall integrate the tasks with the monthly calendar	Essential
3.1.4.15 The main page will have different type of calendars separated by differen colors	Essential
3.1.4.16 The main page will have an add button to add a new calendar, remove button, and edit button	Essential
3.1.4.17 The calendar page will have a monthly formatted calendar	Essential
3.1.4.18 The page will have a to-do list for the current day	Essential