

Calendar+

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Abstract

This web application provides users with the ability to create, manage, and view personal calendars. The user will be able to create and edit events by specifying specific dates and times at which they will be occurring. The user can view their calendar by day, week, month, or even see a detailed schedule breakdown.

Tools & Technologies

- Visual Studio Code
- HTML
- CSS
- JavaScript
- SQL

Requirements

1. GUI
 - 1.1. Implemented using HTML, CSS & JavaScript
 - 1.2. Login Page
 - 1.2.1. Field for username / email
 - 1.2.2. Field for password
 - 1.2.3. Create account button
 - 1.2.3.1. When pressed, redirects to the account creation page
 - 1.2.4. Login button
 - 1.2.4.1. When pressed, logs the user in and redirects to the main webpage.
 - 1.3. Account Creation Page
 - 1.3.1. Field for username
 - 1.3.2. Field for email
 - 1.3.3. Field for password
 - 1.3.4. Register button
 - 1.3.4.1. When pressed, creates an account for the user in the database, automatically logs them in, and redirects to the main webpage.
 - 1.4. Main Component
 - 1.4.1. Monthly Calendar
 - 1.4.1.1. 7x6 grid which will be populated with dates

- 1.4.1.2. Clicking a date will bring up the event creation side panel, with the date field already filled out
 - 1.4.1.3. Events will show up within the box of the date they are assigned to
 - 1.4.1.3.1. Clicking an event will bring up the side panel to edit/delete the event
 - 1.4.1.3.2. Events will be colored if a color is chosen for them
- 1.4.2. Weekly Calendar
 - 1.4.2.1. 7x1 horizontal grid populated with dates
 - 1.4.2.1.1. Holidays will be placed at the top
 - 1.4.2.1.2. Each grid has a timeline for the day, displaying all events for the dates.
 - 1.4.2.1.2.1. Clicking an empty place on the timeline will create an event at the timeline position clicked
 - 1.4.2.1.2.1.1. As with the monthly calendar, the side panel will be brought up to edit/delete the event
 - 1.4.2.1.2.2. If applicable, a red line signifying the current time will be placed under one of the dates on the appropriate location on the timeline.
- 1.4.3. Daily Calendar
 - 1.4.3.1. Weekday and date displayed at the top
 - 1.4.3.2. The date display is followed by a timeline for that date
 - 1.4.3.2.1. The day timeline works similarly to the weekly timeline
 - 1.4.3.2.2. If applicable, a red line signifying the current time will be placed under the timeline (Only if date displayed is current date)
- 1.4.4. Yearly Calendar
 - 1.4.4.1. 4x3 grid of months
 - 1.4.4.1.1. Each month contains a 7x6 grid which will be populated with dates
 - 1.4.4.1.1.1. Clicking a date will bring up a popup that says if there are any events on that date
- 1.4.5. Schedule View
 - 1.4.5.1. Vertical list of all events contained within a given range (day, week, month)
 - 1.4.5.1.1. Date, day, time period (from, to), title of event
- 1.5. Collapsible Side Panel
 - 1.5.1. Button to create event
 - 1.5.1.1. Will switch the side panel to one that prompts for details of event
 - 1.5.1.1.1. Fields for title, description, date, time (from, to).
 - 1.5.1.1.2. Save button to confirm the event
 - 1.5.1.1.3. Delete button to delete the event
 - 1.5.2. Simplified monthly-view calendar (won't have events displayed, just a blank calendar)

- 1.5.2.1. Clicking on a date will bring the focus of the main calendar component to that specific date, depending on which view you're in.
 - 1.5.3. [Optional] Create/Toggle visibility of multiple calendars
 - 1.5.3.1. Button to create additional calendar
 - 1.5.3.1.1. Field for label
 - 1.5.3.2. Button to toggle visibility
 - 1.6. Top Nav Bar
 - 1.6.1. Button to hide and unhide the side panel
 - 1.6.2. Depending on the view, two buttons to cycle forward and backward in time
 - 1.6.2.1. Forward and backward 1 day in daily view, 1 week in weekly view, etc.
 - 1.6.3. Buttons to switch between daily view, weekly view, etc
 - 1.6.4. Button to view schedule (will display a list of all events, date and time of event, name of event, etc.)
 - 1.6.5. [OPTIONAL] Button to view settings
 - 1.6.5.1. E.g. Multiple time zones, default event duration, calendar import, etc.
 - 1.6.6. Profile icon
 - 1.6.6.1. Opens a small window under it
 - 1.6.6.1.1. Sign out button
 - 1.6.6.1.1.1. When pressed, logs the user out and redirects to the login screen
2. Account Login & Creation
 - 2.1. When logging in, the user's data will be checked against the database of accounts as described in **3.2**.
 - 2.1.1. Users may create an account if they do not have one
 - 2.1.1.1. Username must be unique and 8 characters long
 - 2.1.1.2. Password must be at least 8 characters long
 - 2.2. When logged in, a user may view their personal events
 - 2.2.1. Events will appear on the calendar as described in **1.3.1.3**.
3. Data Management
 - 3.1. Event Data
 - 3.1.1. All Event data will be stored within the database with the given attributes
 - 3.1.1.1. Date, Time(from, to), ReminderDate(optional), ReminderTime(required only if ReminderDate has a value), Title, UserID, Location(optional), Description(optional), EventColor
 - 3.1.1.2. Users will default to a basic calendar with a default set of U.S. Federal holidays
 - 3.1.1.2.1. A template will be created and copied to each user's list of events upon account creation
 - 3.1.2. Upon Deletion request, Event Data will be removed from the database

- 3.1.2.1. Deletion will occur at user request or once the event falls out of the calendar's scope of time
 - 3.2. Account Data
 - 3.2.1. User Login Data will be stored within the database with the given attributes
 - 3.2.1.1. UserID (unique integer given to users on account creation), Username, Password, Email
 - 3.2.1.2. A user's Events will be tied to their account through their UserID
 - 3.3. Server Information
 - 3.3.1. Hosted via Linode
 - 3.3.1.1. \$5 monthly plan
 - 3.3.1.1.1. Nanode 1GB
 - 3.3.1.2. Ubuntu Linux Distro
 - 3.3.1.3. Hosted from Atlanta, GA
- 4. Reminder System
 - 4.1. If an entry is found on an event's ReminderDate field an alert will occur at the chosen time found in ReminderTime
 - 4.1.1. Alerts consist of the following
 - 4.1.1.1. a small notification may appear with the title of the event in question visible on the notification
 - 4.1.1.1.1. User may simply click the button on the notification to cause it to close
 - 4.1.2. [Optional] Chrome alerts
 - 4.1.2.1. Adds events to Windows notification tray

Updated Timeline

Week of	Chad Kinnard	Bo Yang Li	Tyler Marrapese	Warren Overstreet
2/7	Server Setup	Reminder System	GUI: Login & Account Creation Pages	Designing & Implementing Database
2/14	Server Setup	Reminder System	GUI: Main Website Basic Layout	Designing & Implementing Database
2/21	Event Creation	[Optional] Multiple Calendars	GUI: Main Website Basic Layout	Linking Login & Account Creation to Database
2/28	Event Creation	[Optional] Multiple Calendars	GUI: Event Creation Side Panel	Linking Login & Account Creation to Database

3/7	SPRING BREAK	SPRING BREAK	GUI: Buttons and Dropdown Menus	SPRING BREAK
3/14	Linking Event Creation with Database	[Optional] Multiple Calendars	GUI: Schedule View	Linking Event Creation with Database
3/21	Event Deletion	[Optional] Multiple Time zones	GUI: Week View	Linking Event Creation with Database
3/28	Events day/week precision	[Optional] Multiple Time zones	GUI: Day View	Events day/week precision
4/4	Events time precision	[Optional] Multiple Time zones	GUI: Year View	Events time precision
4/11	Bug Fixing & Helping Others	Bug Fixing & Helping Others	Bug Fixing & Helping Others	Bug Fixing & Helping Others
4/18	Bug Fixing & Helping Others	Bug Fixing & Helping Others	Bug Fixing & Helping Others	Bug Fixing & Helping Others

Any time a task is completed early, that person will help another partner with their task