# Maple Calendar

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Topics Covered
HTML
CSS
Java Servlets
AJAX
Databases and SQL
Google Calendar API

High Level Description

This calendar project utilizes the Google Calendar API to retrieve calendar information after logging in. Simple user data and that user's events will be locally stored in a backend SQL database. The SQL script is provided so that users can create the database and populate it on sign in. Utilizing the database will be necessary to take advantage of all the functionality of this calendar application, but most core functionalities will still work with only one user signed in.

Every time a user logs into the calendar app, the user's information will be stored in the database if it's not already there.

*NOTE: ALL USER INFORMATION IS ONLY STORED LOCALLY IN THE SQL DATABASE. NO USER INFORMATION IS BEING COLLECTED.*

Figure 1: Sign-In Page

Pressing the Sign in button should pop up the default Google Calendar sign in behavior.
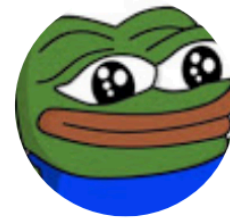
Figure 2: Logged-In Page (Landing Page after logging into Google Calendar account)
A search bar exists at the top for logged-in users. Only logged-in users can search for other users in the database.

Note: searching for other users only works if other users exist in the SQL database. In order to add users to the SQL database, you need to log into several different Google Calendar accounts from the Sign In Page. The database will automatically register each user after logging in.

| Maple Calendar | Search Friends 🔍 | Profile    Home |

## Upcoming Events

| Date | Time | Event Summary |
|---|---|---|
| September 11, 1994 | 04:05 AM | Not my birthday |
| October 26, 2018 | 5:30 PM | Algorithms Exam RIP |
| October 28, 2018 | 5:30 PM | CSCI 201 Exam |

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Figure 3: Profile Page

The user's profile page will be displayed when the "Profile button" on the top right is clicked. This Profile Page shows the upcoming events in chronological order (earliest on top) from their Google calendar. The image on the right is the profile picture and their full name underneath both taken from their Google account. If the user has no image in their Google account, a default image provided by Google will be displayed.
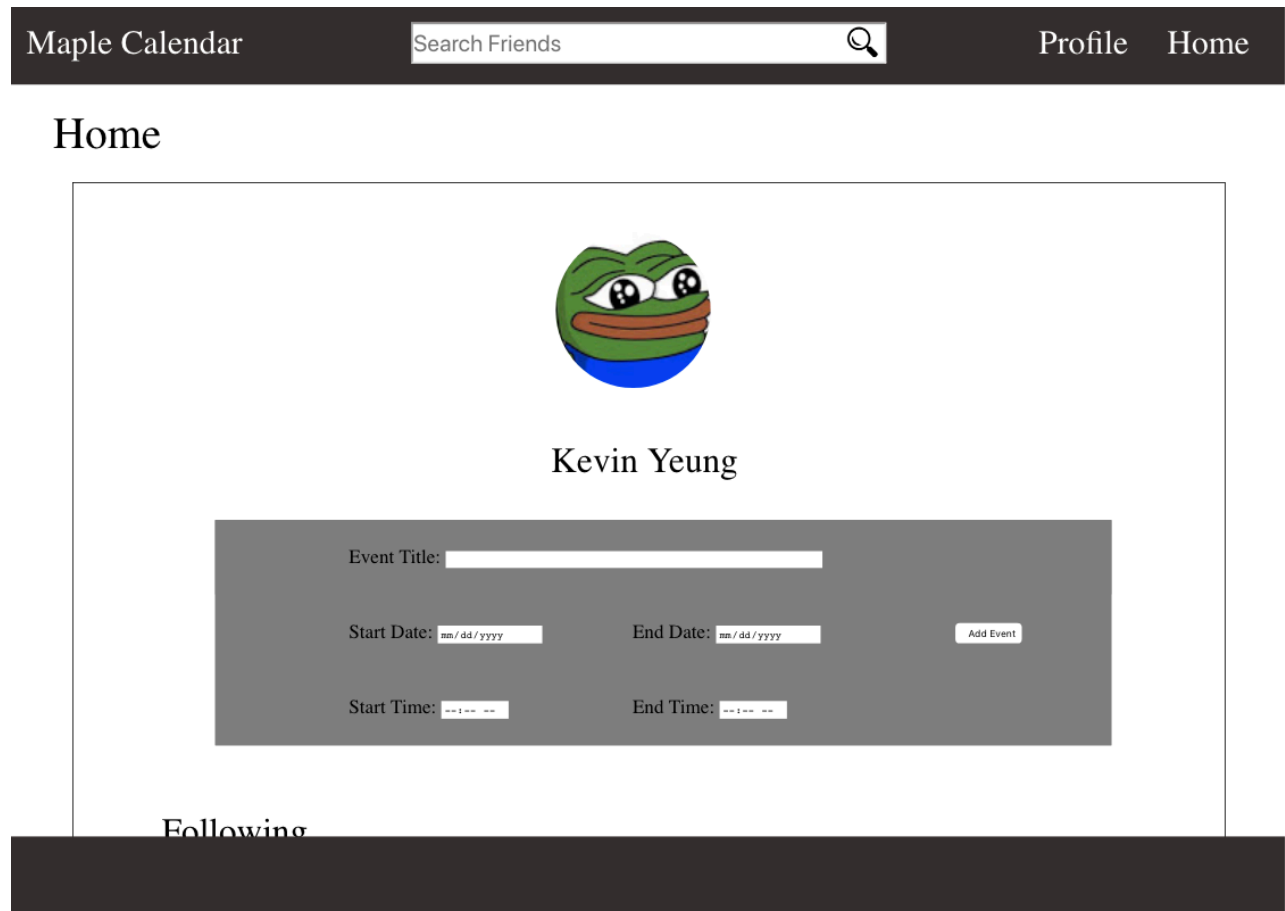
Figure 4.1: Home Page

This page will be displayed when the user clicks the "Home" button on the top right. The Home Page displays the user's profile image and name. It also has a box where users can insert a new event into their calendar. The "Start Date" and "End Date" fields should pop-up a calendar on click, that allows for easier input. Invalid inputs for all fields will not be added to the calendar and error messages will appear to notify the user which input field(s) is incorrect.

Submitting a new event will make changes to the Google Calendar. Successfully adding an event will be redirected to a confirmation page.
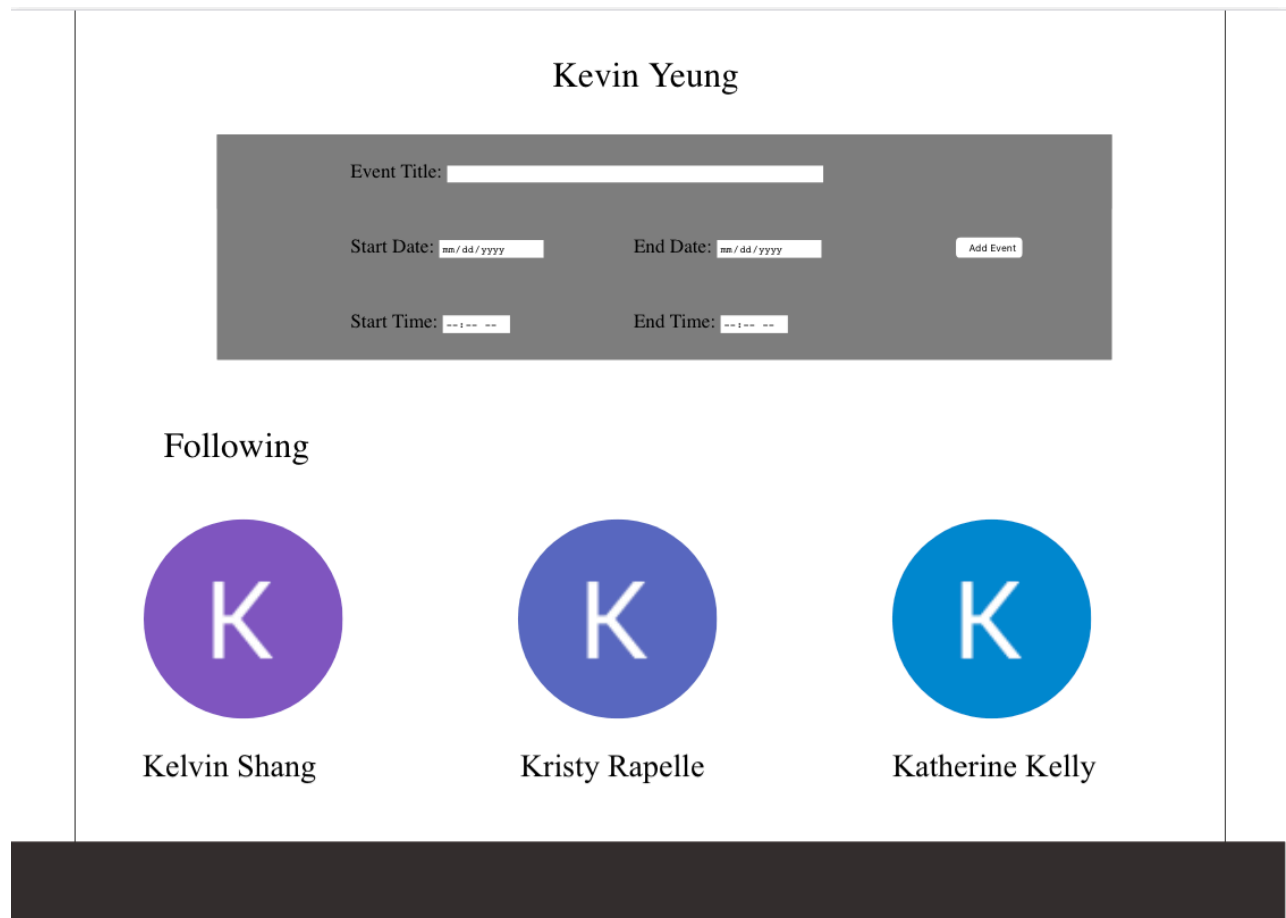
Figure 4.2: Home Page (scrolled down)
The "Following" section displays the set of users that Kevin Yeung (the user) is following. If the user follows more than three people, it will scroll vertically. Clicking on the image or name will link to that user's profile page shown in Figure 7.
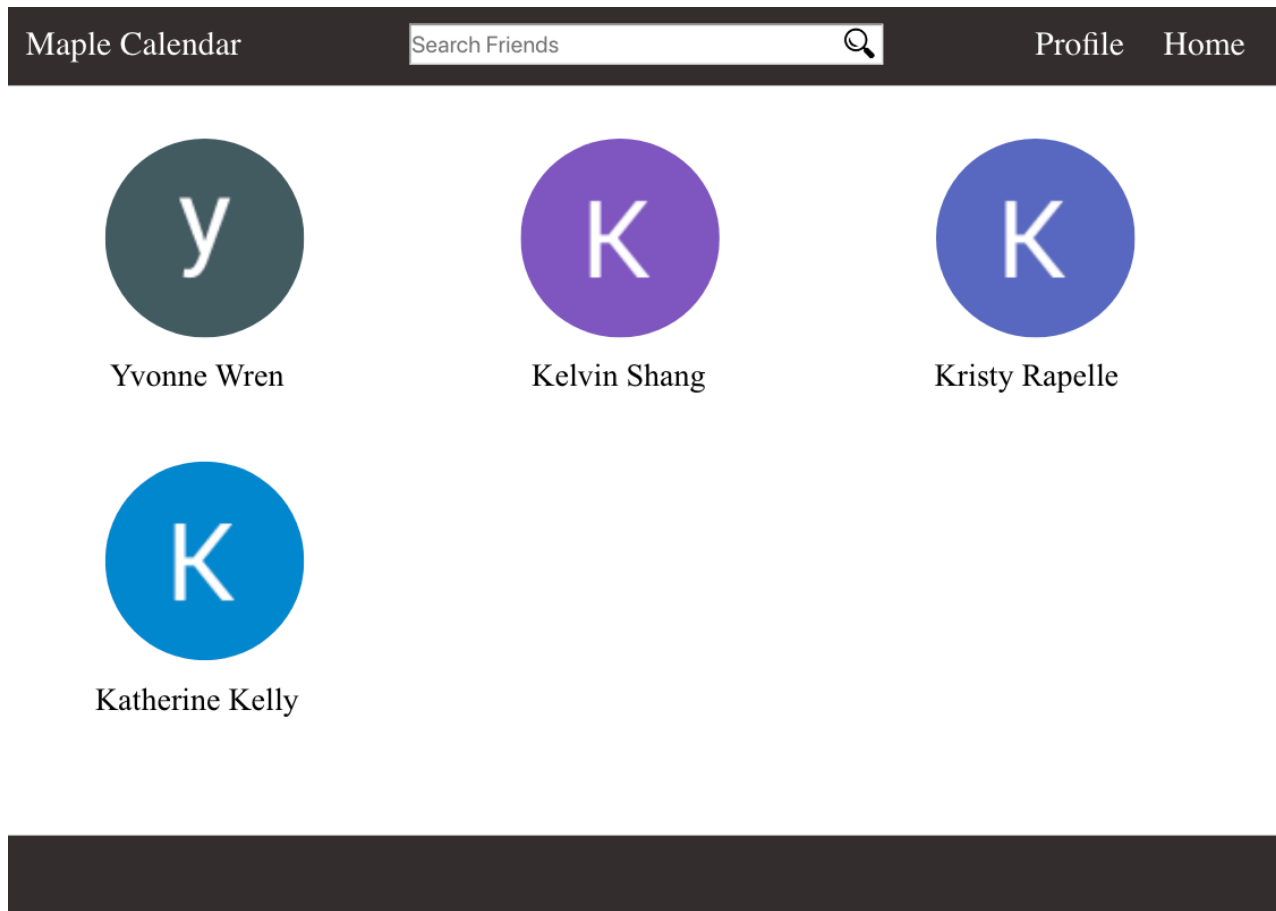
Figure 5: Search Results Page

From any of the pages with the search bar, users will be directed to this page after searching. If the user clicks the search button without typing anything, all users in the database will be displayed. If the user types "a" (without quotation marks), all users with a first or last name containing an "a" will be displayed. Similarly, if the user types "ab", all users with a first or last name containing "ab" will be displayed. If a space is provided in the query, inputs on both sides of the space character will be searched for in the database. All searches are performed case-insensitively. If no matches are found, "No Users Found" will be displayed.

Here are some examples:

- Searching for "k" would return "Kelvin Shang", "Kristy Rapelle", and "Katherine Kelly".
- Searching for "i" would return "Kelvin Shang", "Kristy Rapelle", and "Katherine Kelly".
- Searching for "YVoNnE" would return "Yvonne Wren".
- Searching for "Kelvin W" would return "Kelvin Shang" and "Yvonne Wren".
- Searching for "Kath" would return "Katherine Kelly".
- Searching for "Wren" would return "Yvonne Wren".

When the user clicks on the image or the name, if the user is not following the clicked profile, it will link to Figure 6, Friend's Profile 1, where the user can't see their upcoming events. If he is following that user, it will link to Figure 7. Friend's Profile Page 2.

**Maple Calendar**     Search Friends  🔍     Profile    Home

## Upcoming Events

| Date | Time | Event Summary |
|------|------|---------------|
| Follow Kevin to view Upcoming Events | | |

Follow

K

Katherine Kelly

Figure 6: Friend's Profile 1

Clicking on the Follow button should refresh the page to look like Figure 7: Friend's Profile 2.

## Upcoming Events

Unfollow

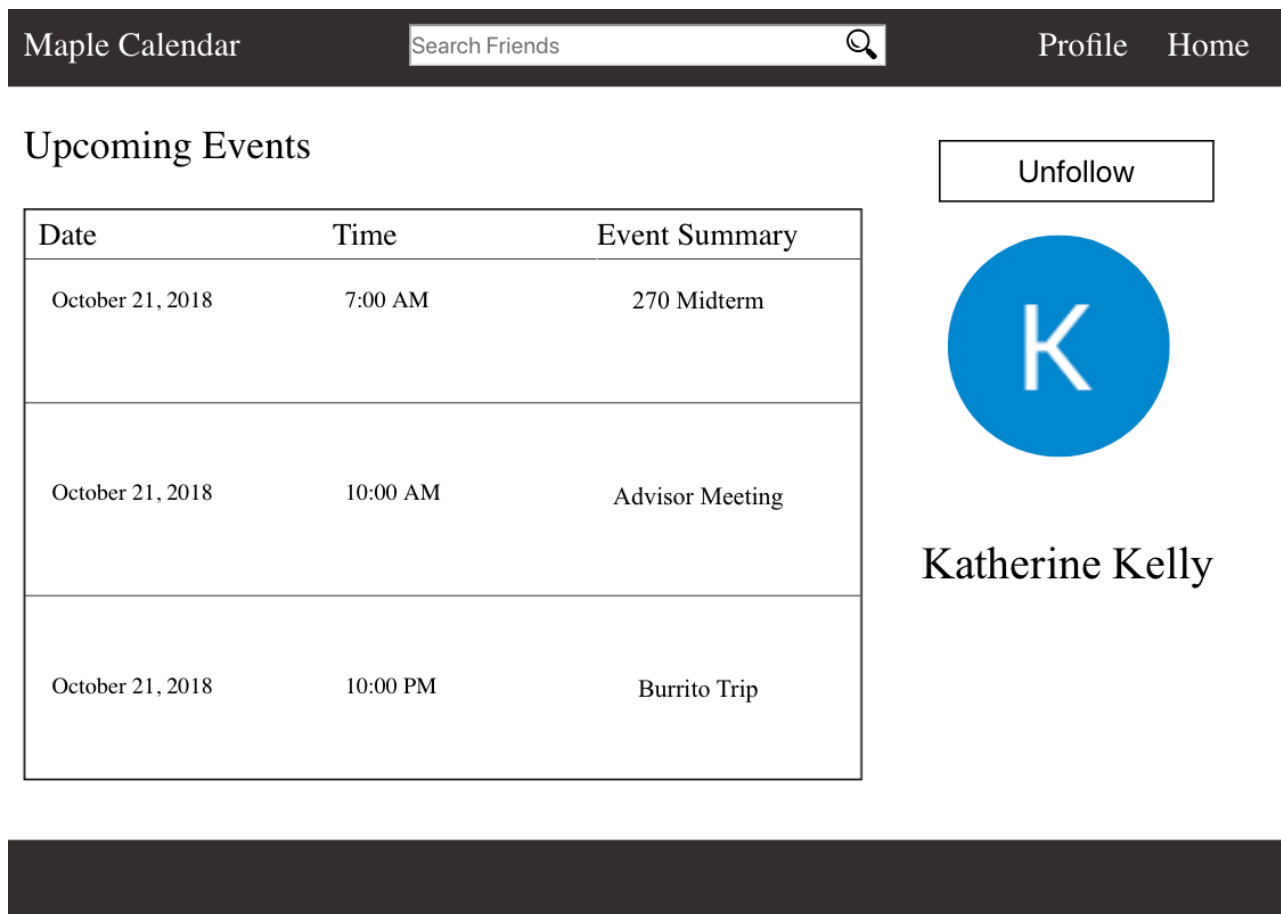| Date | Time | Event Summary |
| --- | --- | --- |
| October 21, 2018 | 7:00 AM | 270 Midterm |
| October 21, 2018 | 10:00 AM | Advisor Meeting |
| October 21, 2018 | 10:00 PM | Burrito Trip |

K

Katherine Kelly

Figure 7: Friend's Profile Page 2

If the logged-in user is following Katherine, Katherine's calendar will be displayed. Clicking the Unfollow button will change the page back to Figure 6: Friend's Profile Page 1.

If the user clicks on an event in Katherine's calendar, that event will be added to the logged-in user's calendar.