Final Project: The UofT Club Finder

University of Toronto
Faculty of Information
Bachelor of Information
INF452: Information Design Studio V: Coding
Student Name: Caitlyn Hundey, Qing Zhang, Mary Zhao
Date Created: 2024-11-13
Date Modified: 2024-12-05

Description

This program helps the user find clubs and events at the University of Toronto. It first scrapes the clubs and events from the Student Organization Portal and saves it to JSON files. Then, the user can navigate to 4 main screens:

1. The home page, where the user can refresh the data at any time and see how big the database is.
2. The calendar page, where the user can view events posted on the SOP website.
3. The club page, where the user can filter by campus and category to see a list of potential clubs they would want to look at. Each club has its own page.
4. The favourites page, where the user can see a list of clubs they've liked.

NOTE: UofT has a lot of clubs (about 1000+), so when you first launch the program, it can take a while (up to 10 min). After that, the data is saved and it won't take as long to launch. **Alternatively**, you can find a small demo of this program here where we only look at 30 clubs (you also need to zoom out to see the full screen in this demo).

Purpose of Application

We built this program to help users find clubs they might want to join and sort through them. We noticed a lot of students have trouble finding relevant information on the SOP website, so we made sure to only show key information about a club or event such as its name, description, location, and contacts. We also made it easier to compile a list of clubs someone might be interested in through the "favourites" feature.

User Interface and Accessibility Features

While building our program, we made sure to consider different socio-cultural aspects. In particular, we looked at support for users with disabilities. Below is a list of all the choices we made to make our program more inclusive:

- Ensuring a high level of contrast (WCAG AAA standard)
- Sans serif fonts to make text easier to read (we used Arial and Helvetica)
- Minimal layouts to not overwhelm users and make it easier to follow

- A blue colour scheme, which symbolizes trust within many Western cultures and is considered to be an inclusive colour
- Larger buttons to make it easier to click for those with motor limitations
- Helpful feedback and error handling. Each time the user interacts with something, we make sure the screen updates properly. We also warn the user if they make a big change such as removing an item from the favourites list.

Installation

1. Ensure you have python installed (check this link for further details).
2. Use the package manager pip to install the following packages:
    a. requests (`pip install requests`)
    b. beautifulsoup4 (`pip install beautifulsoup4`)
    c. tkcalendar (`pip install tkcalendar`)
    d. ttkthemes (`pip install ttkthemes`)
3. Ensure you have the Tkinter module available. Run the command `python -m tkinter` in the terminal to check and see which version you have.
4. Download the following files within the same directory (recommended to create a new folder for this):
    a. `Calendar_View.py`
    b. `Club_View.py`
    c. `Database.py`
    d. `Favourites_View.py`
    e. `Filter_Campus_View.py`
    f. `Final_PY_Hundey_Zhang_Zhao.py`
    g. `List_View.py`
    h. `Start_View.py`
    i. `events.json`
    j. `clubs.json`
    k. `filters.json`

Usage

Run the program through the terminal or use an IDE of your choosing:

```
Python Final_PY_Hundey_Zhang_Zhao.py
```

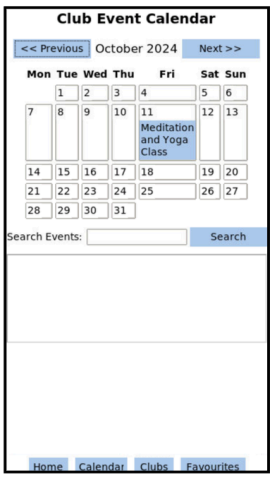
Screenshots:

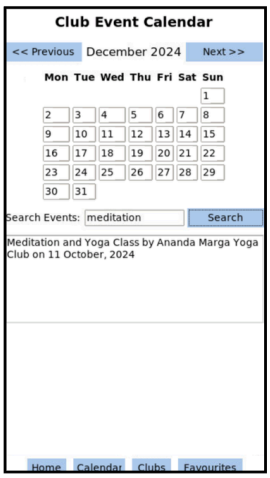
Home page

Click Yes:
Refresh the data

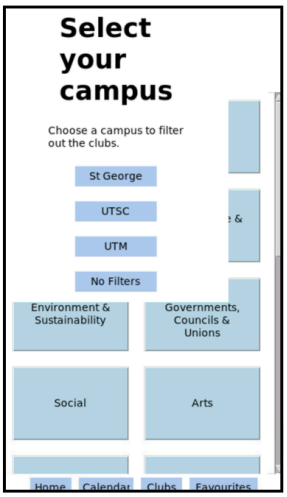
Click No:
Shows club categories

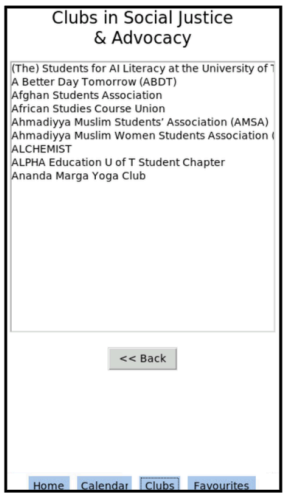
UI for the Club Event Calendar

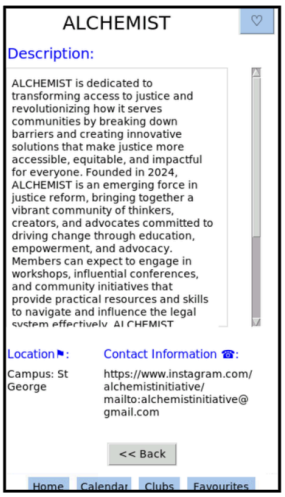




UI of the category view and individual club view







UI of the Favourites feature