WWU ClassFinder Mobile

This application serves to provide a mobile interface to Western's class registration system. Currently, there is no good interface (mobile or otherwise) to determine a student's schedule for next quarter. Students have to wade through an antiquated interface from the 90's, dealing with many hassles which can be easily automated with the information already available (such as schedule overlaps).

Vision Statement

WWU ClassFinder Mobile (tentative title) is aimed to help Western students register for their classes at the beginning of each quarter. It will set itself apart from the already existing methods (Web4U and ClassFinder) by providing a modern interface for doing so on the Android platform, as well as assisting students in making their schedule.

Major Features

- Display information about class registration in an organized and logical manner. Potentially cache all class information beforehand to reduce delays due to network, refreshing periodically.
- Hide classes that are not applicable to a student, i.e. classes a student has already taken, or classes that a student cannot take due to prerequisites.
- A week-long Calendar to assist in selecting classes by visualizing the schedule. The system imagined here is a student pick as many classes as possible, and any scheduling conflicts can be visualized and resolved here.

Assumptions and Dependencies

The Ideal situation would be that all the class information would be stored on an easily accessed database, so the application would simply have to connect to the database to fetch class information. Alternatively, if APIs exist then that can be used as well. If it is not possible to get access to either the database or no APIs exist, then the fallback method will be to use web-scraping to populate the fields. It is likely web-scraping will have to be used to fetch transcript data (to hide classes that are not applicable to a student) unless an API exists.

Scope of Release (In Class)

The scope of release for this class would be the capability to search ClassFinder's database for classes to add to the schedule, the ability to hide classes not applicable to the student, and a calendar system to make selecting a schedule easier.

Scope of Release (Out of Class)

It is not likely that the application will be continued to be worked on out of class by the same group. But if the app gains enough popularity and traction among students, it is possible that Western may continue to work on this project by handing it off to other people. Possible improvements include (which will also require changes to the backend if not already implemented), APIs to access a student's transcript to check classes already taken or to grab schedule data.

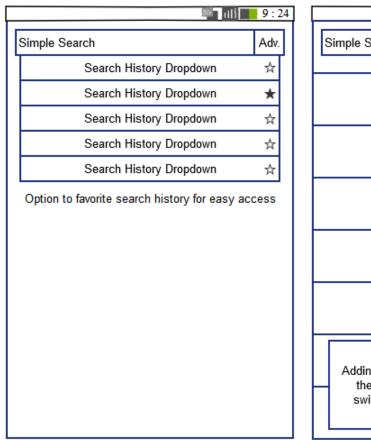
Operating Environment

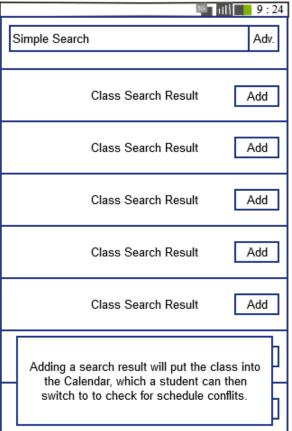
The operating environment is Android. It is possible that a database might be needed on the device to cache class information, but that remains to be seen how fast the other websites are. Transcript information will probably have to be cached. All other information will be pulled from Web4U or ClassFinder.

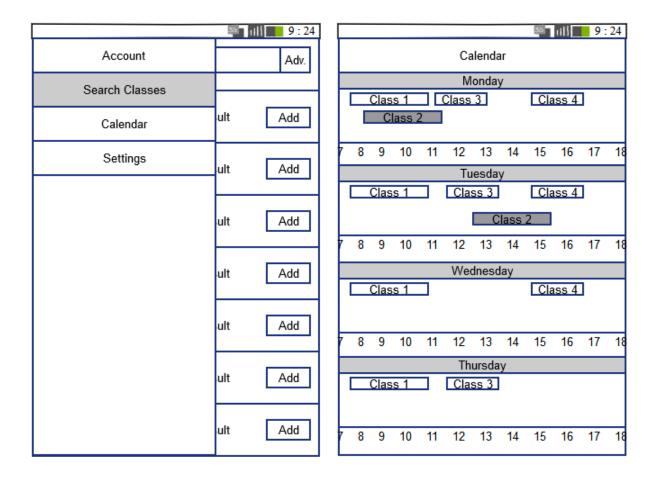
Competitive Analysis

The competitors of this app would be Web4U and ClassFinder. As outdated web applications, while they get the job done a lot more can be done. This idea is different in that it only shows classes relevant to the student to make selecting a schedule easier.

Mockups







Features to Implement

- 1. Search through classes by either scraping ClassFinder or accessing a database or APIs, and display the results on the screen.
- 2. Scrape a student's transcript to eliminate unnecessary classes.
- 3. Implement a calendar to visualize the schedule and find conflicts.

Appendix

This document was created using Microsoft Word and The Pencil Project.