CSCI 426/526
Project Proposal
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Overview

The main objective for this project is to create a technology that aids in organizing the schedules for the computer labs and classrooms around Western's campus. Currently, the method of scheduling classrooms and computer labs is through a weekly calendar that is posted on a bulletin board outside each classroom. Because of the frequency of which classroom schedules are changed, these methods are often not up to date, and cause confusion among students and staff who are trying to reserve workspaces. The proposed technology for this project would solve this issue by using a schedule/booking website where students and staff can scan a code outside of a room and add a reservation and/or view the current reservations for each room around Western's campus. This technology would streamline the process of maintaining classroom reservations and make schedules more accessible to all students and staff.

Project Importance

The proposed technology will help create more uninterrupted work environments around campus. Currently, when a student or staff member decides to occupy an empty classroom or computer lab, they must remain hyper aware of anyone entering the room. This is because many of the current room schedule systems in place are not kept up to date. At any moment a class or club could enter the classroom, forcing those not in the class or club to pack up their belongings and leave the room. Not only does moving classrooms interrupt focus, but it also wastes valuable time.

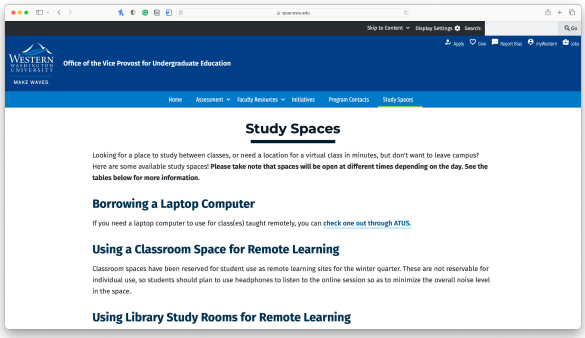
These issues can be greatly mitigated by the technology proposed in this project. With the proposed technology, any student or staff member with a mobile device will be able to quickly view a classroom schedule by scanning a QR code posted outside the room. Knowing the classroom schedule takes the mystery out of when the next club or class is going to enter the room. As a result, the staff or student can confidently determine whether the room will remain empty for an adequate time before the next reservation and make the decision to either occupy the classroom or find another. In addition to viewing classroom schedules, the proposed technology will also enable users to reserve classrooms. This feature will ensure those currently in the room won't be interrupted by those seeking a classroom. With the ability to view classroom schedules and make room reservations, this technology will help turn empty classrooms into productive work environments with limited external interruptions.

Target Users

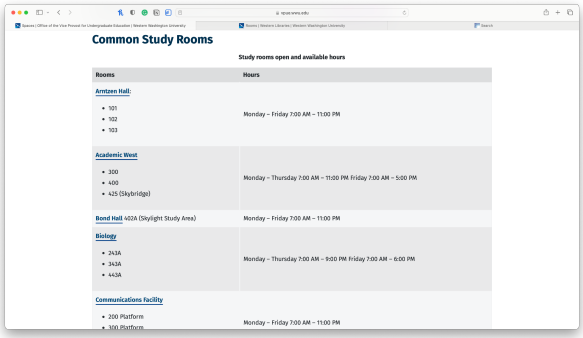
Our target users include any student, faculty or WWU guests who wants to use or reserve a room in the WWU CF Building. To note, a major part of the students who use the computer labs are CS Majors. Online students also use the CF classrooms to make up for the lack of technology at home or space to focus on schools. These needs can range from computer labs, quiet meeting spaces, whiteboards, group activities and club meetings. We plan to interview an expert to further gain more knowledge about potential users.

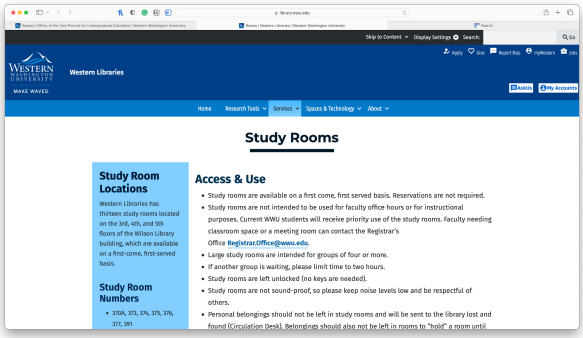
Current Systems

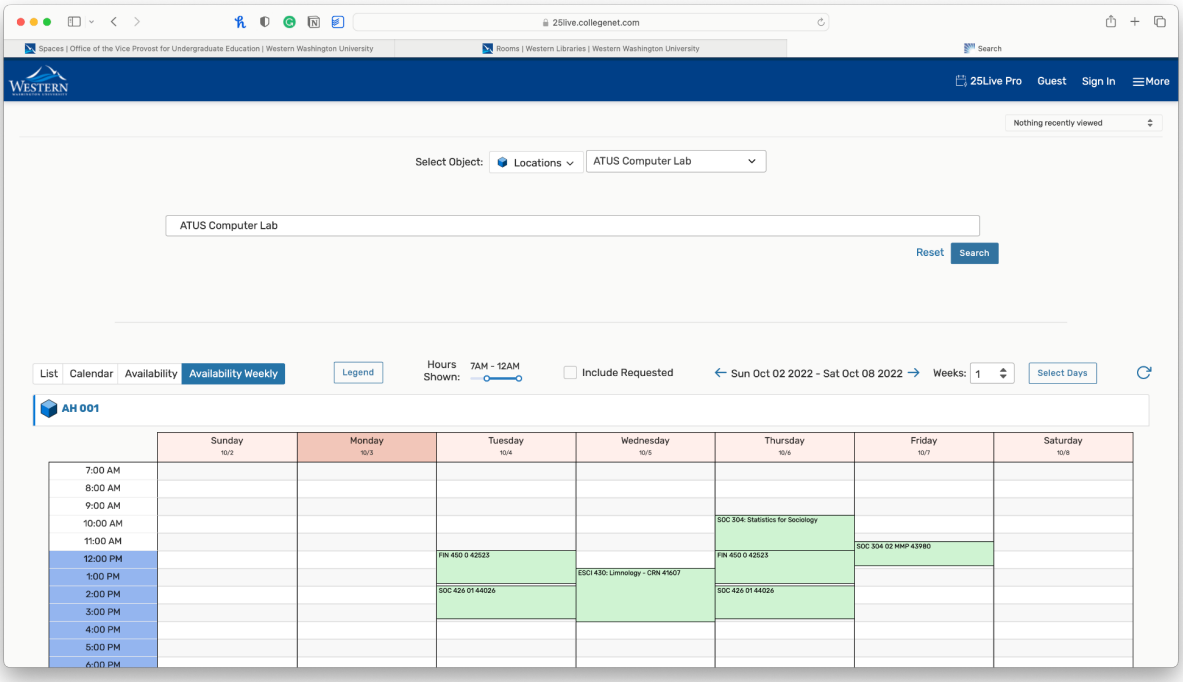
After searching for a while on WWU's website it was very difficult to find the study spots section with it being buried within their navigation. I resulted to searching on googling "WWU study spots" and was brought to the Office of the Vice Provost for Undergraduate Education's page for study spaces on campus:



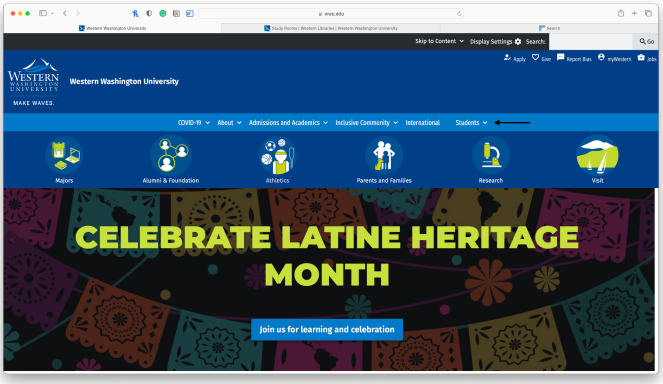
On this page it highlights their current system of essentially spreadsheet of common study rooms and classrooms available. This spreadsheet is also printed out and posted outside on doors. WWU also offers first come first serve study rooms at the library and reservations for computer labs.







We propose a plan to revamp and expand WWU's current system allowing easier access to this information and user experience reserving places on campus.



The room finder would be given an updated UI and will be accessible through the students' tab on WWU's homepage and through QR codes placed outside classrooms that correlate to their respective schedules to allow accessibility to all (i.e. broken camera or QR code malfunction). We will also implement filters that students can use to verify the classroom they reserve have the tools available to meet their needs. Students will log in through their WWU universal log in as they do currently and have a cap on their account to navigate bad characters abusing the system.

Project Completion Plan

TASK TITLE	Week 1 10/3 - 10/9		Week 2 10/10 - 10/16		Week 3 10/17 - 10/23		Week 4 10/24 - 10/30		Week 5 10/31 - 11/6		Week 6 11/7 - 11/13		Week 7 11/14 - 11/20		Week 8 11/21 - 11/27		Week 9 11/28 - 12/4		Week 10 12/5 - 12/9	
Need Finding																				
Prototyping																				
Impementation																				
Evaluation																				

Week 1 & 2 → Need Finding

- Surveying and Interviewing Western staff and students
- Creation of user personas and journey maps

Weeks 2 & 3 → Prototyping

- Gather data for app
- Design potential layout and features of the app

Weeks 4-8 → Implementation

- Code the application

Weeks 9 & 10 → Evaluation

- Final evaluation of app
- Present project to class

Timeline limitations:

- Ideally, we would have the system be used throughout all the buildings on campus, but due to the length of our project we will likely only be able to implement our system for the first floor in the Communications Facility
- Base features:
    - View room schedules
    - Reservation system
    - Be able to scan QR code that leads to the application website
    - Search criteria
- Extra features:
    - Widen the scope to all the floors in the Communications Facility
    - User log in
    - Notifications