

**SFWRENG 4HC3: Human Computer Interfaces**

**Instructor: Danny Papagiannis**

**Proposal**

**Group 2**

**MacLib (Internal name)**

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Table of Contents

[Possible Problems 3](#_Toc83997428)

[User, Situation and Tasks and Possible User Needs/ JTBD: 3](#_Toc83997429)

[A Description of Possible Solution 4](#_Toc83997430)

[What is new or valuable about your project 4](#_Toc83997431)

# Possible Problems

Searching for a proper place to study on campus is time consuming and tedious. This is especially true when exams and midterms are coming up. In extreme cases one might end up going back home for their study session after wasting lots of time and energy looking around. In addition, even if you are someone who plans ahead usually, there is no quick and easy way to book study rooms across campus. For one thing, the reservation system isn’t centralized, meaning that you should visit different portals to book study spaces at different locations. Secondly, the user interface on these portals is far from friendly to the point of hostility.

# User, Situation and Tasks and Possible User Needs/ JTBD:

|  |  |  |
| --- | --- | --- |
| **Users** | **Situation / User needs** | **Tasks / JTBD** |
| **Students** | A student(s) need a study space within a short time period (students don’t have time to waste looking)  A student(s) need to reserve a study space in advance, and have a preference of where to study  A student(s) would like to view the availability of study spaces at a specific period of time in one place. | Instantly book the closest available study space within the application  Select and reserve an available study space in advanced within the application  Select the desired time and view a list of all available study spaces. |
| **Administration** | Monitoring students  Monitoring the building population to ensure fire safety codes are being met and not exceeded. | Users of the application can see a real time counter of the total building population. |
| **Building designers** | Building designers need to get an insight into what students need within a study space. They can monitor students and their booking habits through the app. | Monitoring traffic within the study space/ floor (ex. which  floor of Thode has the least amount of people?) |
| **Law enforcement** | A student leaves their personal belongings at their study space. While they are not present in their study space, their belongings are stolen | Law enforcement can use booking history within the app to make a potential list of suspects and increase the chances of recovering the stolen goods |

# A Description of Possible Solution

The current proposed solution relies mostly on modern technology to communicate various forms of information to the students. By implementing a Web App, we have the ability to provide a digital interface for different platforms, specifically phones and laptops. This Application will be the main gateway to access MacLib services.

MacLib will have multiple proposed functionalities. For starters, it will aggregate the study room information from different libraries into one place, allowing students to easily and quickly reserve different study rooms. Second, MacLib will be able to crowd source information regarding the traffic on different library floors. Finally, with the collaboration of the university, specific areas of individual seating can be reserved to be only used through MacLib, allowing students to reserve single seats for short periods of time.

# What is new or valuable about your project

Our project aims to solve one of the oldest problems that continues to plague institutions of higher learning - finding adequate study space. Currently, there is no standardized means of finding study space on campus, let alone a solution fit for the modern world of technology. At McMaster, and other institutions, the process of finding adequate study space can be a cumbersome process, which involves mindlessly wandering around in an effort to find the perfect spot. As a university student, this approach is extremely ineffective; it wastes too much time and energy. The most important thing in life is time, and it shouldn’t be wasted on menial things. Our app aims to eliminate time wasted on finding study spaces, by allowing users to easily access an array of information pertaining to availability of study space. In other words, students can easily open an app, and effortlessly locate their ideal study space. For instance, our app will outline areas that are Wi-Fi dead zones. These spots are perfect for students who wish to read without distractions. Furthermore, important entities like outlets will be outlined, which works well for students that need to charge their devices. The goal of our app is simple; allow users to find their ideal study space in the shortest time possible - a very simple, yet game changing idea!