Marauder's Map

University of Winnipeg Interactive Campus Map

Team: Mischief Managed.

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Problem Description

Navigating the University of Winnipeg Campus, despite its relatively small size, can be quite a challenge. Different buildings have their own "almost hidden" nooks and corners that consist of classrooms, bookshelves, and even department offices. Furthermore, some departments have a few classes or offices inside what appears to be in the general vicinity of another completely unrelated department. Finding the way to these classrooms/offices can be outright impossible without someone pointing the way. For example, the geology lab on the 5th floor is only accessible by going through an unmarked door at the very back of Bernice's quiet reading room.

Furthermore, different floors within a building don't necessarily follow the same floor plan or numbering system. The official map of the campus (available online) only marks the names of the different buildings. A student is left to their own devices to find their way around the maze-like interiors. On the map there are no indicators for how the floor is laid out, or showing where the bathrooms and water fountains are located (and they are located differently on each floor). The pathways or routes to different sections are also not shown on the map.
For students with mobility issues, finding their way around is a big challenge. They often need to take long detours, and have little to no signage for guidance as to where accessible entry points are. People with vision impairments also have great difficulty navigating the campus due to poor signage.

Our solution to this problem is to create an interactive map with an app. The app will have a search function, and easier visual identification for rooms, paths, etc. An accessibility mode can help disabled people navigate routes that require accessible entry points.

Proposed Solution

Our intention is to improve the experience of students, staff, and visitors by helping them find their way around the University of Winnipeg campus. We will implement a user-centered approach to this design problem and iterate through the stages of the design process. First by empathizing with the user and understanding their needs and requirements with qualitative research methods like target user interviews. Design alternatives will be created with different methodologies such as brainstorming, and early low-fidelity prototypes will be produced. The design will be tested and modified repeatedly with different techniques. At any point in the process new needs/requirements or designs may be discovered and thus the progression for this project will not be linear.

A user-centred approach is appropriate for this design problem because the users of our app are our main stakeholders. Ideally, we would like to make it as easy and efficient as possible for the users to navigate the campus.

Currently, we have decided on an interactive mobile application that will include a very detailed map of the entire campus - mapping out different buildings, floors, classrooms, hallways and accessibility options. The app will feature simple and easy to use interactive maps with a searchable database of the different classrooms, hallways, and buildings. The app will also provide the functionality to get directions to classrooms/offices etc. Thus, making it easier for users to get to their destinations quickly and efficiently. Users with mobility issues can use the accessibility mode to navigate the campus with alternative entry points. We also intend to use actual photographs to serve as landmarks, and possibly a form of augmented reality to show navigation in real time using the mobile camera.

Possible users and study participants

We are focusing on the current students, visitors, possible future students as well as university staff (to some extent) as our users. For our study, we will try to include many different stakeholders. However, our primary focus will be on first year students, visitors and future students.

Prototyping tools considered

- UXpin
- Powerpoint, Photoshop
- Possibly Google maps or Open Street Maps