**HCI Project**

**OSU Shuttle app**

**Project Part 1: Introduction and Scope**

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**Project Description:**

The current OSU Shuttle app provides basic information about beaver bus shuttle routes and schedules at Oregon State University's campus. While the app serves its core function, it lacks intuitive navigation, accessibility features, and integration with nearby locations. The primary goal of this project is to redesign the OSU Shuttle app to provide a more comprehensive and user-friendly transportation planning experience. The current app mostly just displays predetermined shuttle routes and schedules, which can be difficult to navigate, especially for infrequent or new users of the system. The improved app will focus on empowering users to plan their trips more effectively by enabling users to enter current location and desired destination, and the app will provide step-by-step guidance on the best shuttle route to take, including estimated walking times to/from stops, total travel time, and schedule information. The redesigned app will prioritize accessibility, with clear visual cues, simplified navigation, and support for screen readers and other assistive technologies. In addition to the OSU shuttle system, the app will incorporate information about the Corvallis bus network, allowing users to plan multi-modal trips that combine both services.

**Scenarios:**

Scenario 1:

Abi, a sophomore at OSU who lives off-campus, needs to get to her 9am class on the main campus. She opens the OSU Shuttle app and allows it to detect her current location. The app identifies the nearest shuttle stop, which is a 2-minute walk away, and displays it on a map. The app also shows the upcoming shuttle schedule for that stop, indicating that the next blue route bus is arriving in 5 minutes. Based on the short walking distance and short wait time, the app suggests that Abi take the blue route to get to her class efficiently. With this information, Abi can quickly make her way to the shuttle stop and catch the next bus to arrive on time for her lecture.

Scenario 2:

Abi needs to get to her doctor's appointment at the Benton County Health Services in afternoon after her classes. She opens the app and searches for routes that go between class from ILLC and Benton County Health Services. The app not only displays the schedule and route for the OSU shuttle system, but also integrates information about the Corvallis LBCC bus network. It shows Abi that he can take the orange OSU shuttle to a transfer point, then connect to a Corvallis bus that will take her directly to the Benton County Health Services. The app provides the estimated travel times for this combined shuttle and bus trip, as well as the number of transfers required. Considering factors like total travel duration and convenience, the app recommends this multi-modal route as the most efficient option for Abi's commute.

Scenario 3:

Abi is running late for her 2pm club meeting on campus and needs to take the shuttle. She opens the OSU Shuttle app, which displays a map showing the real-time locations of the shuttle buses. Abi can see that the green route bus she planned to take is currently delayed by 10 minutes due to unexpected traffic. The app provides an alert about this delay and suggests an alternative blue route shuttle that is running on time and would get Abi to her meeting location more quickly. With this real-time information and guidance, Abi can adjust her plans, avoid missing her club meeting, and continue to navigate the shuttle system efficiently.

**Background of Person to be Observed:**

For the successful completion of the project our team will observe a first-year student from the College of Business at Oregon State University who, like Abi, has a strong affinity for mathematics and logical problem-solving, thrives in environments that require analytical thinking, and is eager to apply their skills in the business world without prior experience with coding or other tools.

**Usability Factors: What we know:**

* The current OSU Shuttle app provides basic shuttle route and schedule information but lacks features that would make it more user-friendly and accessible.
* Abi, as a typical OSU student, is likely to have different transportation needs and preferences compared to the average user of the current app, which may cater more to faculty and staff.
* Providing real-time information about shuttle locations, delays, and alternative routes is crucial for Abi's timely commuting. Integrating real-time updates, multi-modal transportation options, and location-based routing could significantly improve the user experience for students like Abi.
* Accessibility features, such as clear visual cues, simplified navigation, and support for screen readers, are important considerations for making the app usable for a wider range of users. Enhancing overall user experience by reducing cognitive load, providing clear instructions, and offering personalized recommendations for efficient trips.

**What We Don't Know:**

* We may not have gathered direct user feedback like the specific pain points and frustrations that users like Abi and other students experience when using the current OSU Shuttle app.
* Understanding any technical limitations or constraints that could impact the implementation of new features or enhancements. The level of familiarity and comfort that Abi and similar users have with technology and transportation apps in general.
* The best way to design the app's interface and functionality to meet the needs of users who are less familiar with the campus and its transportation system. Consideration of how new features will be introduced to users, ensuring they understand and utilize the app effectively.
* How the integration of Corvallis LBCC bus information will impact the user experience and overall usability of the app. The importance of various features (e.g., walking distance, transfer points, delay notifications) to Abi and other students' shuttle usage and overall satisfaction.
* The specific accessibility requirements and challenges faced by users with disabilities or special needs.