<u>Prototype</u>

Problem Brief:

For UW students commuting by car, parking is expensive and scarce. Daily rates range from $5.00 in distant lots to $20.25 for spots on campus, while the student-designated lot is $7.85 daily with a 10-minute uphill walk. Many students park in nearby neighborhoods, risking tickets, and traffic congestion further complicates commutes, making it costly and time-consuming for those on tight schedules.

Bottom Line: UW does not have time and cost-effective parking options for students.

Questions:

Where will scooter stations be? On and off campus?

How will student's check in/out scooters?

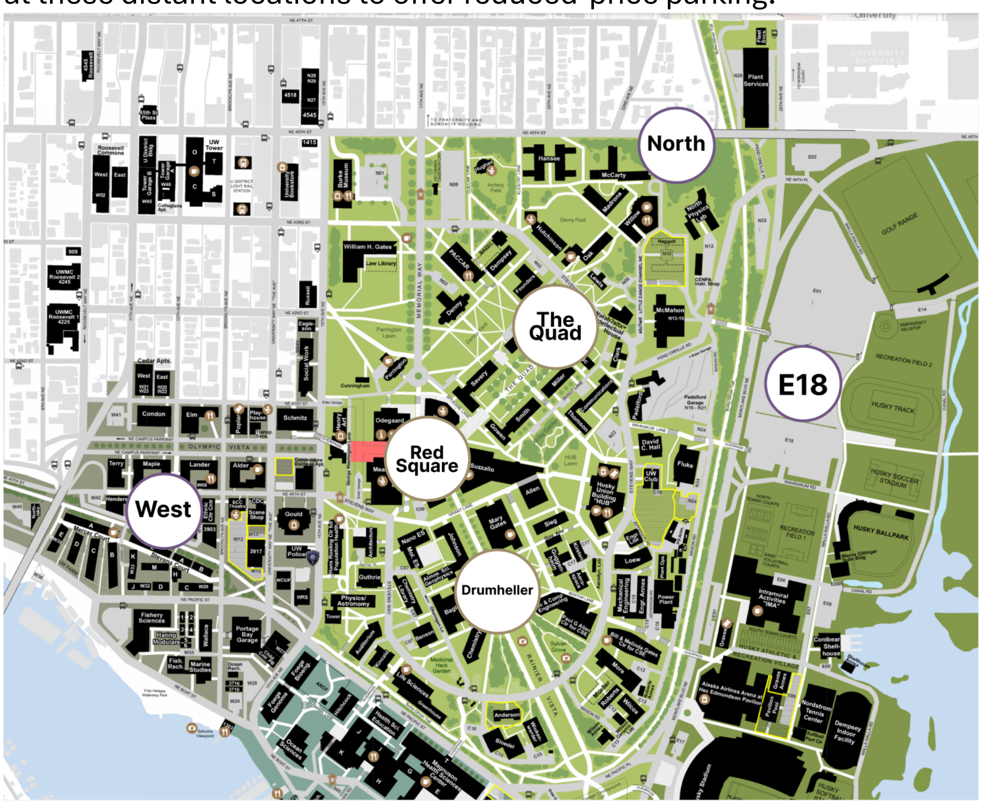
Will non-students be able to use the scooters?

How to ensure scooters are returned?

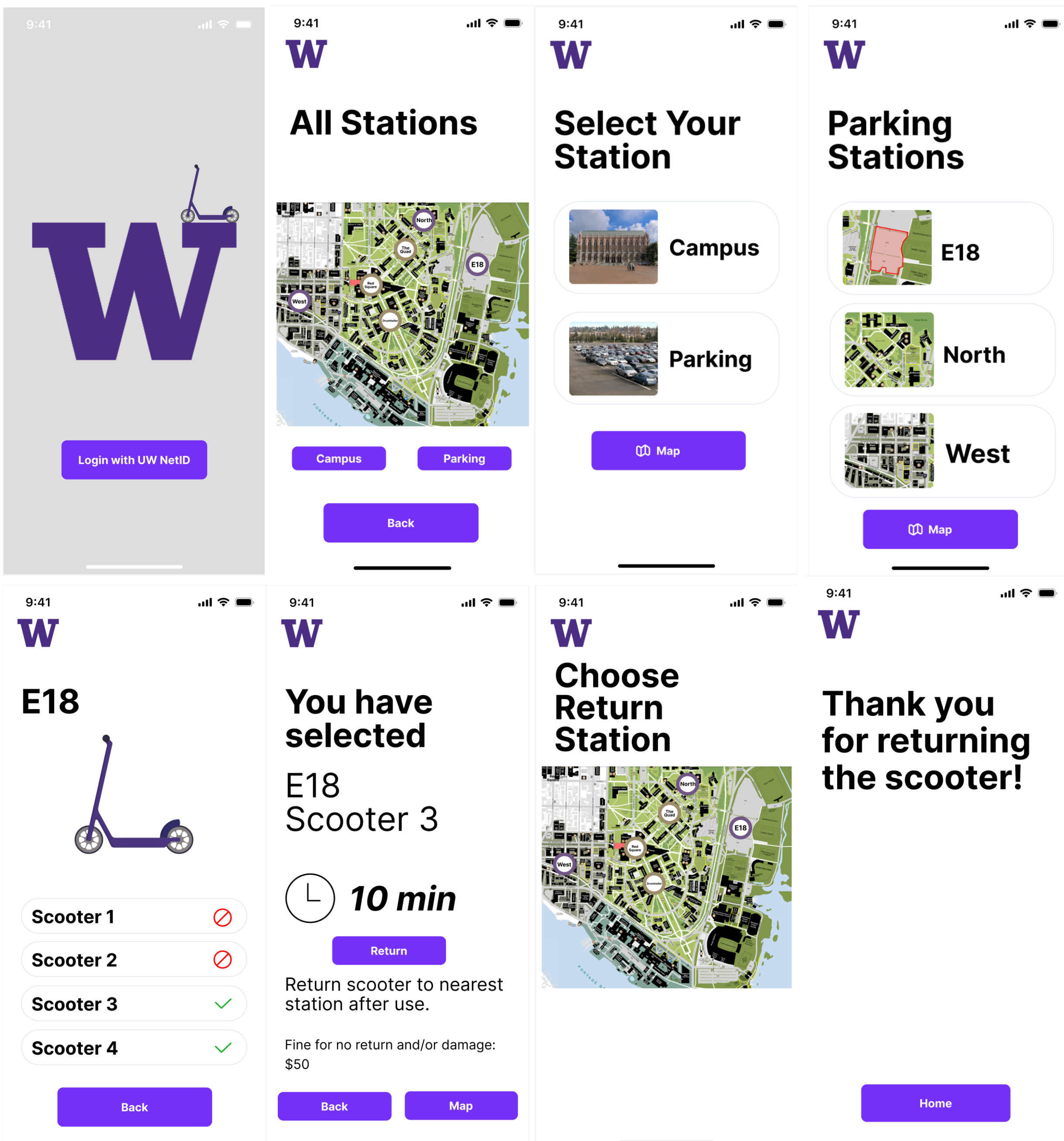
Description of Prototype + Justification:

For my solution, I've designed a two-part prototype in Figma and a Wizard-of-Oz scenario prototype.

The first part of the Figma prototype is a map showing potential scooter stations around campus and surrounding parking lots. Stations are placed in high-traffic areas like Red Square, The Quad, and Drumheller Fountain, as well as at key entry points such as North and West campus and the E18 commuter lot. Ideally, additional parking lots would be built at these distant locations to offer reduced-price parking.



The second part is a mobile app UI prototype for managing the check-in and check-out process of the scooters. Users are required to sign-in with their UW NetID to track scooter usage and ensure only students have access. The app allows users to view and select stations to find available scooters, check out a scooter to use, and check in a scooter when returning to a station. When a scooter is selected, a 10-minute time limit is set to return. Users are expected to return scooters to the nearest station or face a $50 fine. https://www.figma.com/design/TQqqujPJLSFxNalla2vFIE/INFO-360-Individual-Prototype?node-id=0-1&t=ivxN6BSUcLGV6Wxs-1



I used Figma to prototype this because it allows for an interactive, user-friendly representation of both the map and app interfaces, making it easy for stakeholders to visualize the solution. This approach also provides flexibility to adjust the station locations based on feedback and optimizes the design for the users' convenience, reducing walking time and parking costs.

Finally, to address the problem as a whole, I've written a scenario bodystorming prototyping the app and using the scooter stations. The scooter tracking system, stations, and new lots have not been fully fleshed out and are referred to hypothetically:

Joe, a UW student, parks in the new West commuter lot that charges $5.00 a day due to its distance from campus. After parking, he opens the UW Scooter app and signs in with his UW NetID. He checks his location on the map and walks to the nearest station, which is built at the edge of the lot. He selects the West station on the app and selects an available scooter to activate it. The scooter system in the app tracks Joe's UW ID to his scooter and begins a 10-minute timer on his use. The walk is estimated to be 20 minutes, but the use of the scooter should easily cut that time in half. Joe rides the scooter up the hill and on paths to Red Square where his lecture in Kane Hall is. Upon arrival, Joe has just 30 seconds left on the in-app timer. He hits the return button, selects the Red Square station, selects an empty scooter slot, and safely places the scooter at its station.