Go On Grounds

A Technical Report
presented to the faculty of the
School of Engineering and Applied Science
University of Virginia

by

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with

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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The main objective of the “Go On Grounds” mobile application is to replace the current University Transit Service (UTS) application, TransLoc, and provide UVA students with a centralized access point on their devices to transportation services around Grounds. This application will offer real-time UTS service information and enable users to request rideshares from Safe Ride and US OnDemand, streamlining the workflow of these ridesharing drivers. In addition, the application will allow students to create, join, find, and communicate with walking and carpooling groups. With the navigation feature, the application will display the fastest routes to a destination using different transportation modes. By providing more detailed information about and improving access to transportation options at UVA, the “Go On Grounds” app aims to be a more consolidated and user-friendly alternative to existing transportation information methods, instilling confidence in the safety and reliability of travel around Grounds.

The project consisted of four phases. During the first phase, Rapid Spin, I focused on identifying the problem, which led us to choose transportation as our area of focus. Additionally, I worked on designing specific sketches, outlining the features that we wanted to include in our app. Moving on to the second phase, Contextual Inquiry and Analysis, I conducted interviews with drivers to understand better how they interacted with the TransLoc app and what issues they faced while using it. I also collected data from students to determine their needs, which helped us to develop our app further. In the third phase, Design, I engaged in an ideation process where I sketched out various designs, including the driver profile page and the walking group page, which was our novel feature. Finally, in the Prototype and Evaluation phase, I worked on prototyping specific pages, such as the login page and the walking group page, using Figma. The ultimate goal of this phase was to evaluate the app's performance, improve its usability, and ensure that it met the needs of our users.

I believe that I succeeded in achieving my goals to a great extent. The “Go On Grounds” app was designed to give UVA students a centralized access point to transportation services on their devices. The app allowed students to create, join, find, and communicate with walking and carpooling groups, promoting sustainable transportation and a sense of community. The app provided more detailed information and facilitated improved access to transportation options compared to existing methods. The focus on consolidation and usability fostered confidence in the safety and reliability of travel around Grounds. User testing and evaluation indicated that the app was well-received and met the needs of the target users. The project was a fantastic learning opportunity for me. I gained valuable experience in various aspects of app development, such as user experience (UX) design, conducting user interviews to identify their needs and preferences, and the overall process of designing an application.