

School of Computing & Information Sciences

Spring 2024 Capstone II Project

Commute Connect

Student: Denae Miller

Mentor: Andres Diazvictores, Product Owner

Instructor/Faculty: Dr. Masoud Sadjadi, Florida International University

PROBLEM

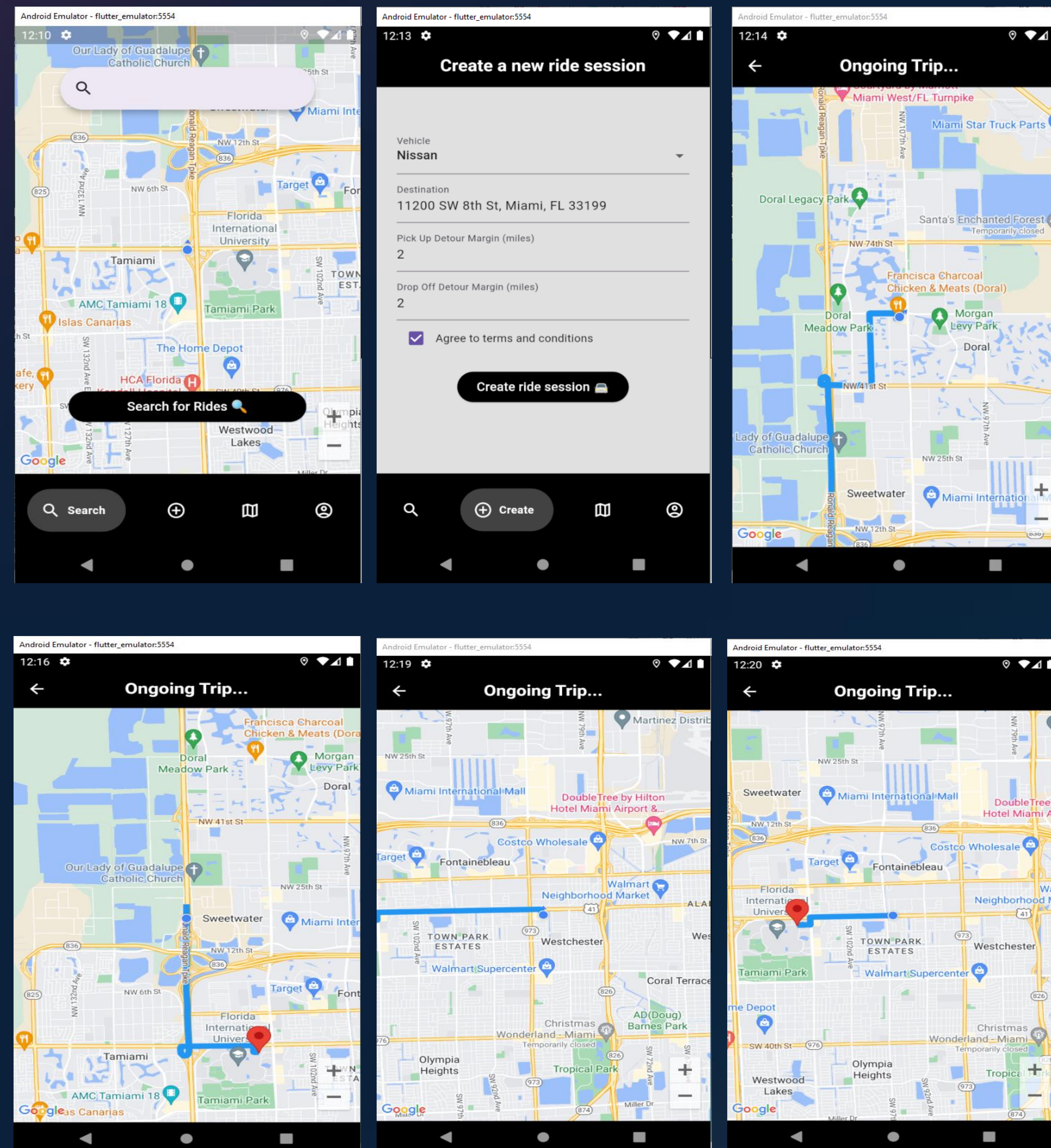
- Currently our CommuteConnect application, does not have capable functionality to handle multiple route destinations at the same time. Resulting in the application's use to be somewhat limited to one destination for any user.
- The CommuteConnect application does not have the functionality for users to see differing rides in progress on the map. Resulting in users not being informed on possible rides, in terms of easier visibility.

SYSTEM DESIGN

- Our system's backend is built on a Firebase app development platform. Firebase provides a realtime database, a form of authentication, detailed analytics, and more. Making the development of the application affordable in functionality.
- For the front end we utilized Flutter, with its primary programming language being Dart. Flutter offers an emulator and efficient forms of application testing for many developers. Allowing for our team as a whole to manage our application with precision.



APP DESIGN



IMPLEMENTATION

Implemented a google map that actively tracks the current position of a user. By clicking the “Create Ride” button, the address' credentials is used to create both a route line and icon that continuously updates as the user's location changes. The camera position remains actively on the current position of the user to ensure understandability of the directions given.

REQUIREMENTS

Various software and tools are required to test and run the application successfully when using a Windows OS or macOS machine.

- Android Studio
- GitHub
- Firebase
- Flutter

SUMMARY

In conclusion, CommuteConnect is an application with its sole purpose to help individuals share rides and ease the strain of traffic, all made from scratch. The enhancements made allows for the application to begin tracking user's destinations and provide complete directions in the process. Allowing for improved usability and efficiency for any user experience.

ACKNOWLEDGEMENT

The material presented in this poster is based upon the work supported by Andres Diasvictores. I thank Andres Diasvictores for his assistance and mentorship that I received throughout the senior design project.