



Bus Schedule Mobile App

Clients: Dr. Alan Ferrenberg and Kaylynn Borror

Members: Ayo Obisesan, Daniel Tai, Neal Wolfrant, Jaden Zaleski

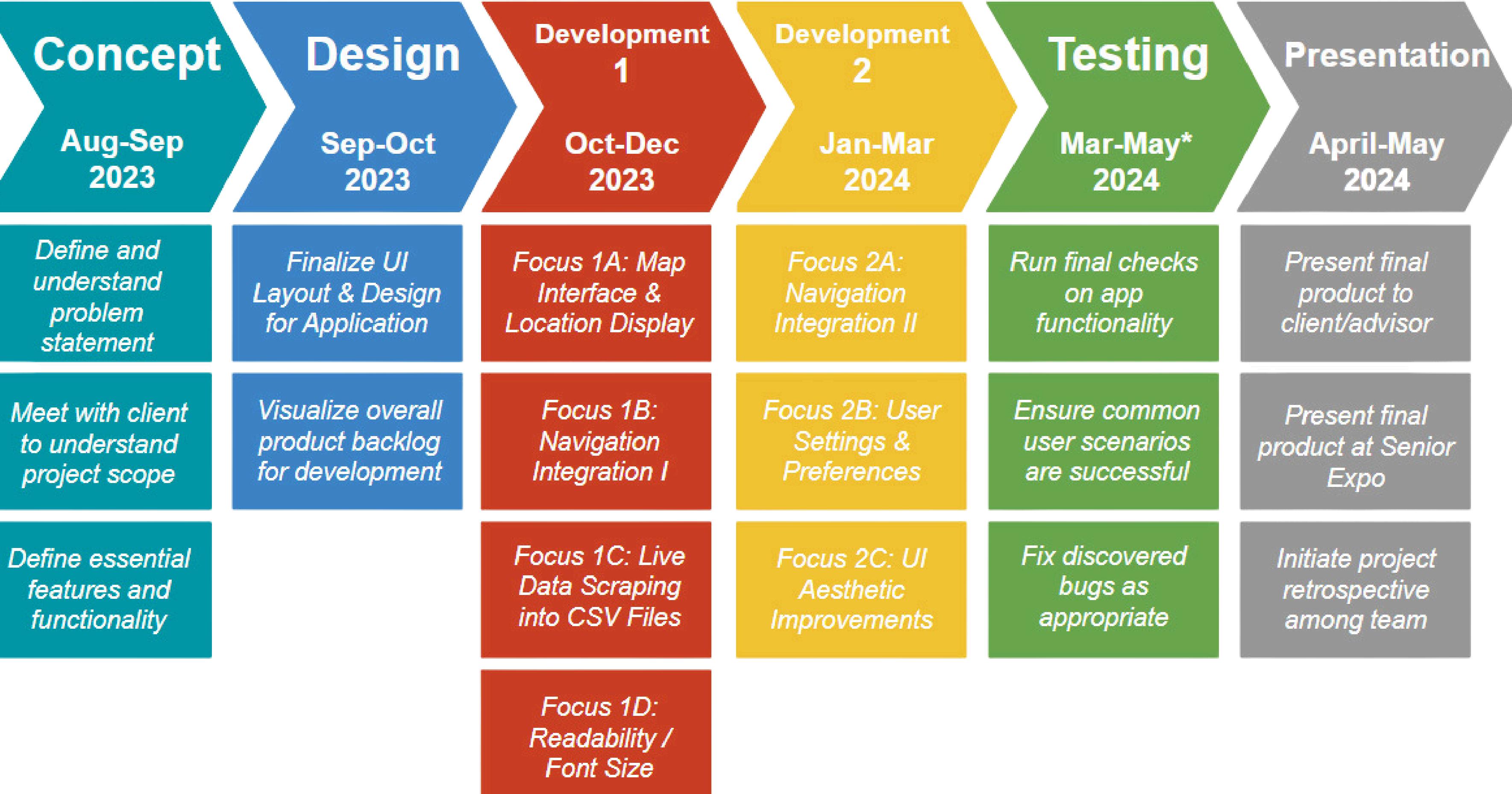
Introduction

Background: Each year, Miami University students and faculty studying abroad in Calabria face significant challenges with local transportation. Popular mapping services inadequately support bus routes and lack real-time transit information, complicating travel and detracting from the overall experience. This highlights the urgent need for a tailored, efficient navigation solution for the region.

Mission

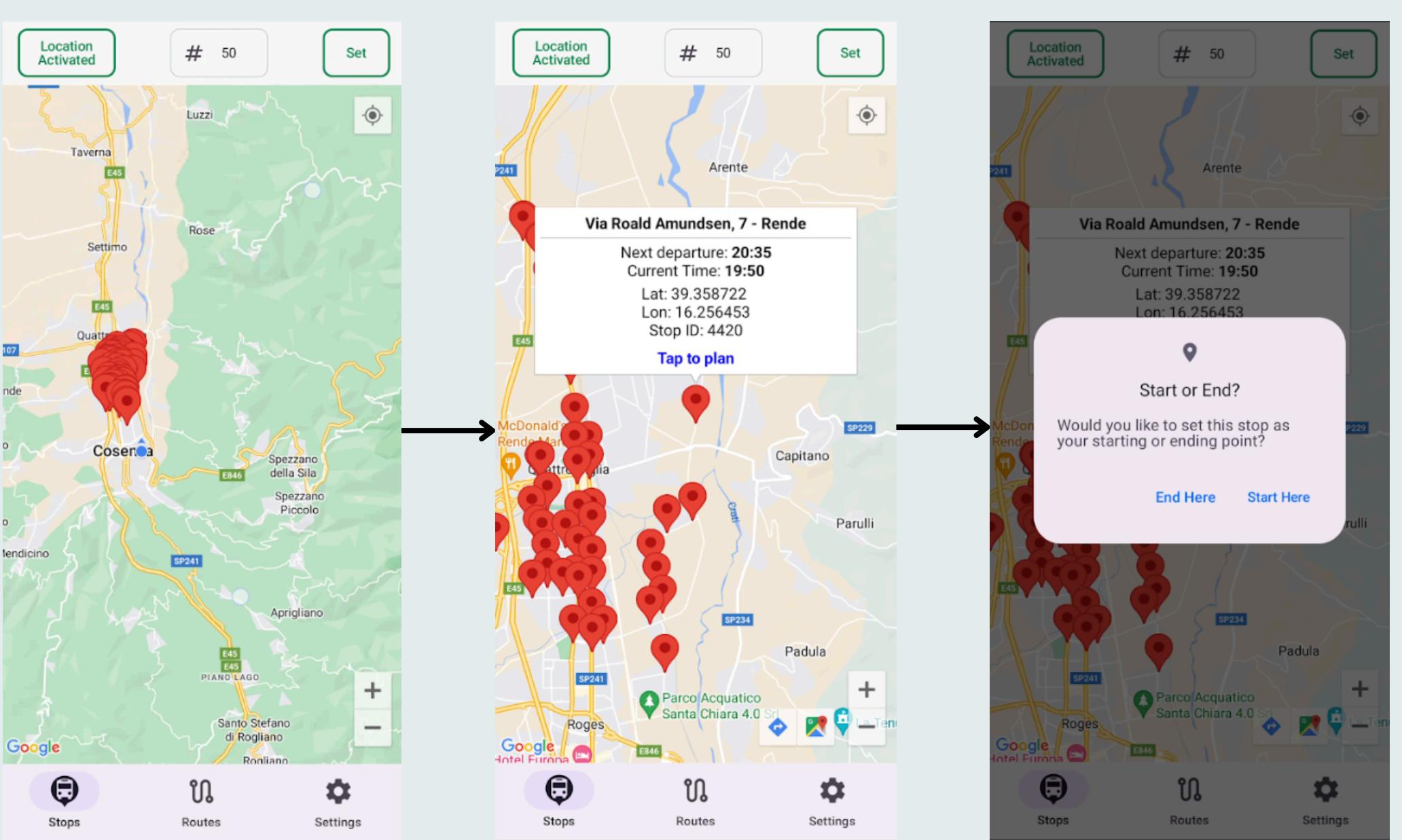
Develop a cutting-edge bus scheduling app that provides Miami University's students and faculty in Calabria with real-time, accurate, and easily accessible bus route information, enhancing their travel experience.

Milestone Chart

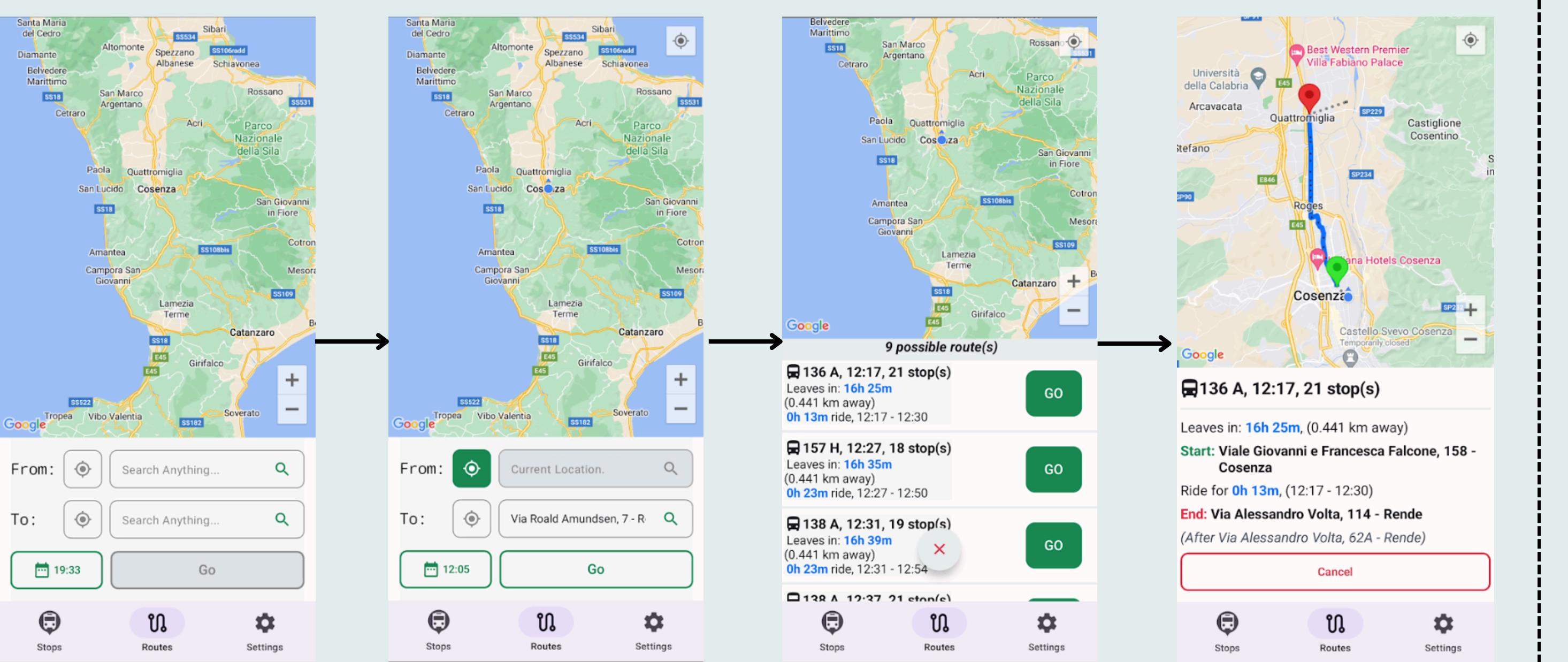


Final Product

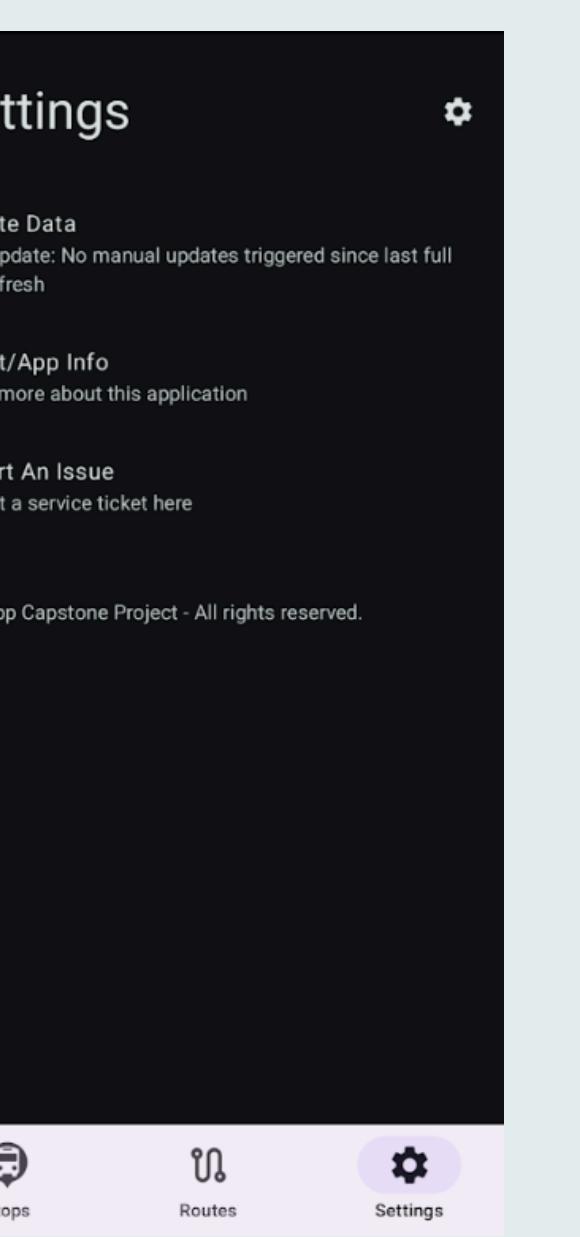
Stops Page:



Routes Page:



Settings Page:



Stops Page Key Features:

- Location activation function and indicator.
- Set the number of stops (Max: 150).
- Dynamic stops display on center of the screen.
- Display all stop details and allows tap-to-plan.

Routes Page Key Features:

- Search for location.
- Future time planning capabilities.
- List all potential routes in the next hour.
- Shows all navigation information, including walking proximity.

Routes Page Key Features:

- Manually update data.
- About and app info.
- Error reporting.

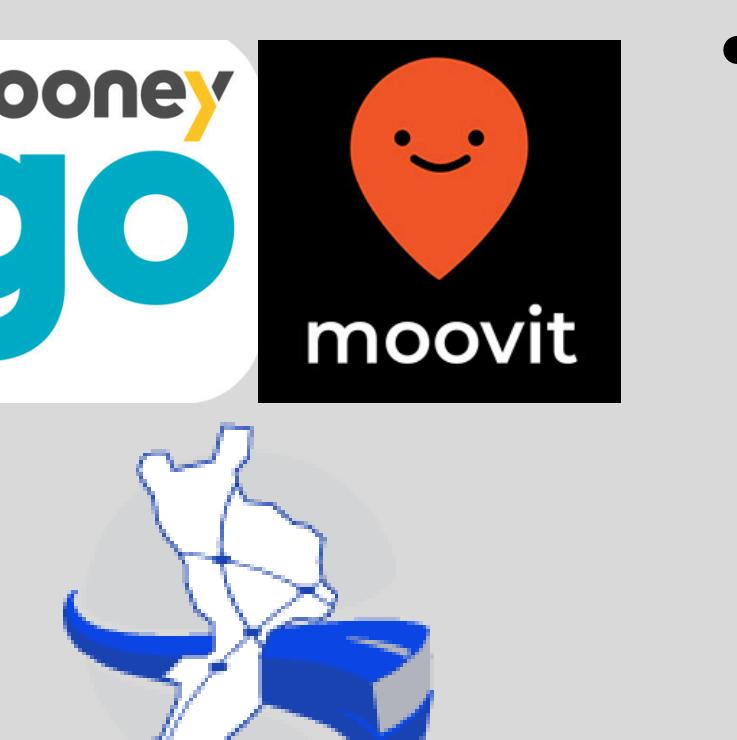
Error Handling and Validation Checking

Route Validation:

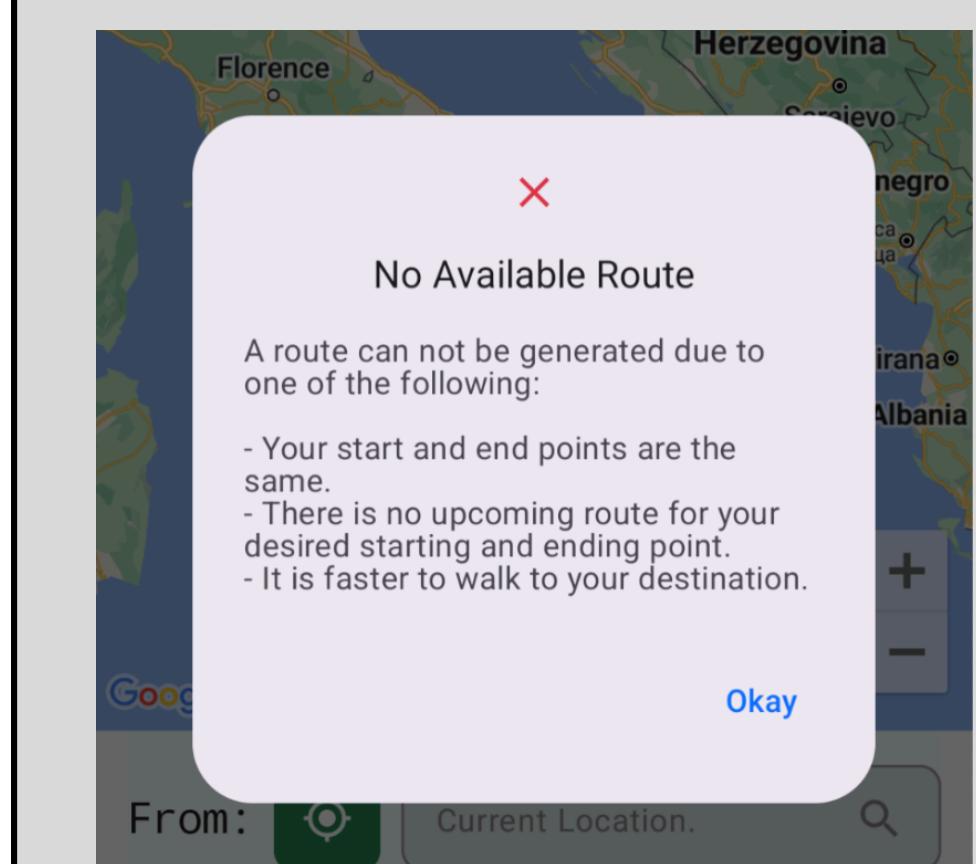
- Error dialog appears when:
 - Start/Stop locations are the same
 - No availability based on selected time
 - Faster to walk to end destination

Location Validation:

- Any attempt to generate a route or access location checks to see if the location is enabled. If location isn't enabled it initiates a request to the user.



- Routes were validated based on static data pulled from the **CORe** website and checked against pre-existing routing applications like **MooneyGo** and **Moovit**.



Future Work

Enhance Accessibility Features:

- Improve font size settings to enhance readability and accessibility for users requiring larger text, ensuring the app remains user-friendly for all demographics.
- Add support for different platforms, namely iOS.

Performance Optimization:

- Allocate time to refine app performance, focusing on speed and responsiveness to provide a smoother user experience. This includes thorough bug hunting and fixing sessions to enhance stability and functionality.

Advanced Route Plotting:

- Continue development on route plotting capabilities, overcoming existing limitations to offer more flexible and efficient navigation options that cater to diverse user needs.