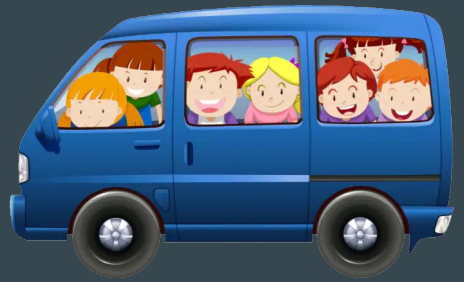
# Panther Carpooling & Parking

Milestone 1



# Team Members


- Austin Phillips — aphillips2022@my.fit.edu
- Hunter Smith — jsmith2022@my.fit.edu
- Jacqueline Torres — jtorres2020@my.fit.edu
- Jason Smith — hsmith2021@my.fit.edu

# Faculty Advisor and Client


- Dr. Philip Chan — pkc@cs.fit.edu

# Overview of Milestone 1

- Select technical tools for database, front end, and back end
- Select technical tools for code version and control testing
- Resolve technical challenges
- Create documents
  - Requirement
  - Design
  - Test Plan
- Overall Progress of Milestone 1
- Expectation of Milestone 2

# Technical Tools

**Database, Front End, and Back End**

- Database
  - SQLite
- Front and Back End
  - Blazor Server Application
  - C#

**Code Version Control and Testing**

- Integration testing
  - Azure and Github Integration
- Unit testing
  - bUnit
- Performance testing
  - Visual Studio Builds
- Version Control
  - Github

# Technical Challenge

**Challenge**: Accessing Florida Tech tracks account API

**Resolution**: Email verification of school email

# Requirements

# Functional Requirements

1. Expansive User Profile
    - Basic information
    - Location information
    - Carpooling Schedule
    - Vehicle information (Drivers only)
    - Carpooling Preferences
    - Friends List
2. Creating Group Recommendations
    - Considers User information
    - Driver automatically suggested
3. Group Formation
    - Using system recommendations
    - Manually form group
4. Trip Lifecycle
    - Before, during and after trip

# Interface Requirements

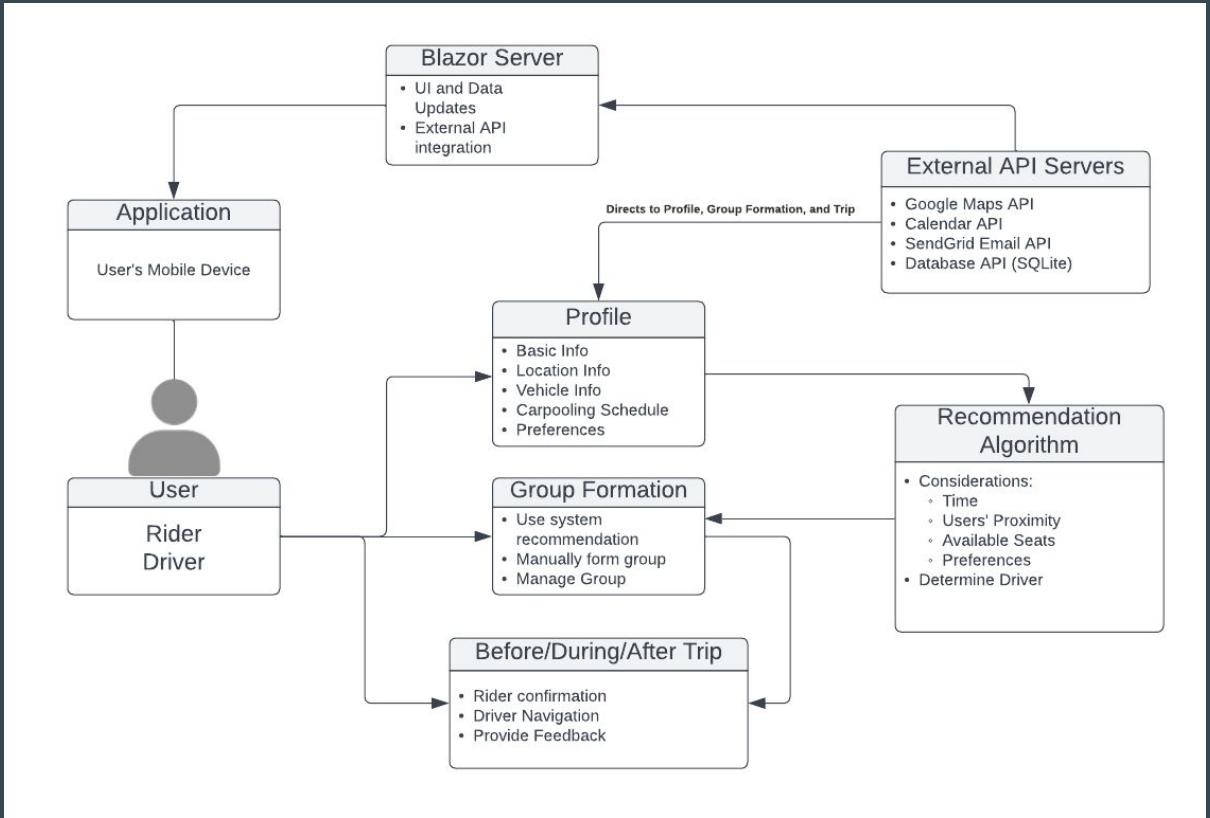
- Functional on web and mobile
- Light and Dark mode
- 2 Interfaces
  - Rider
  - Driver
- System Administrator View
  - Groups, Users, Available preferences

# Security Requirements

- Florida Tech Email Address Required
- System Admin Access
  - Database information
  - Reports
- Block Users
- Rider Pick-Up Confirmation
- Linking to Florida Tech Safe app
  - Contact Local Authorities
  - Share Location with Authorities

# Design

# System Architecture Diagram



# Test Plan

# Demos

# Calendar API

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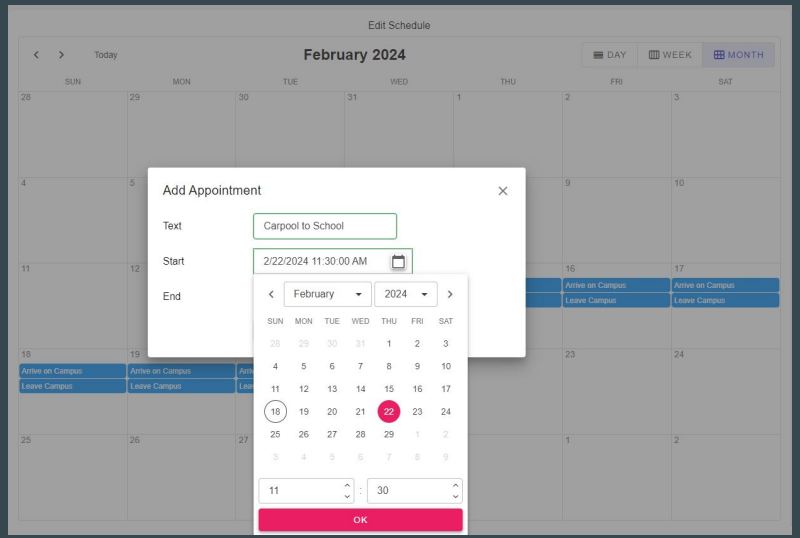


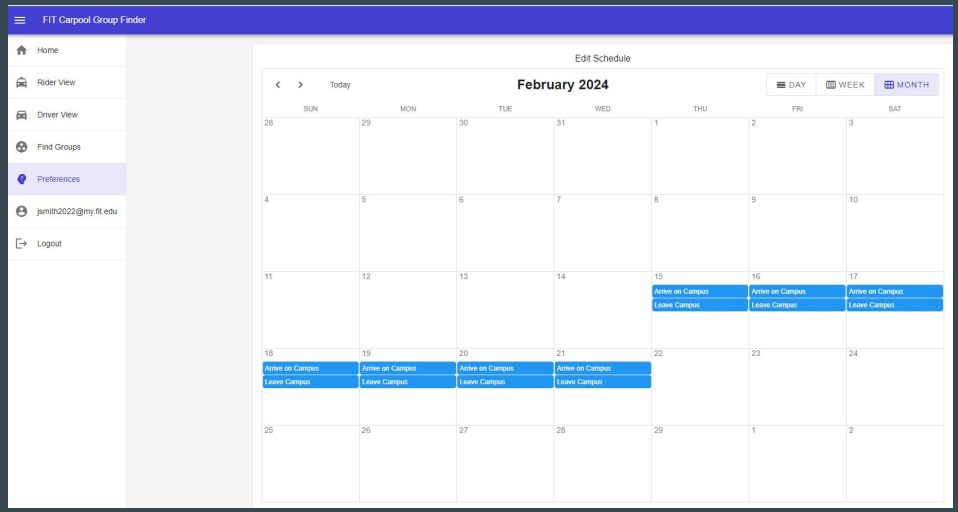

# Google Maps API

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# Progress Matrix of Milestone 1

| Task | Completion | Austin | Jason | Jacqueline | Hunter | To do: |
|---|---|---|---|---|---|---|
| Technical tools- database, front end, back end | 100% | 25% | 25% | 25% | 25% | N/A |
| Technical tools - code version control, testing | 100% | 25% | 25% | 25% | 25% | N/A |
| Technical challenges | 75% | 55% | 15% | 15% | 15% | Implement Florida Tech email account verification |
| Requirement Document | 90% | 15% | 55% | 15% | 15% | Implement Advisor Feedback |
| Design Document | 90% | 15% | 15% | 55% | 15% | Implement Advisor Feedback |
| Test Plan Document | 95% | 15% | 15% | 15% | 55% | Update for new requirements |

# Milestone 2

- Develop and test user interface for first half of user profile setup (input schedule, location, other preferences)
- Develop and test second half of user profile (friendlist, privacy, user statistics...)
- Develop and test database integration into the web application
- Develop and test routing/map integration using assumed groups

# Thoughts, Questions, Suggestions?