Progress Report

- Increment 2 -

Group #1

1) Team Members

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- Nicholas Ford
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2) Project Title and Description

- FSU Parking and Transportation -

This application will consolidate FSU's various transportation apps into one easy-to-read app. The app uses Starmetro's Transloc api for FSU bus data and FSU's parking api for parking garage data. The data will be represented on an Android app with two main views. The first view is for parking garage information and the second view is for bus route information. The Google Maps api will also be integrated for the parking view. This will allow users to easily identify garages on a map and find the quickest route from their current location. The bus view will show all relevant FSU busses and their predicted time until a particular stop (specified by the user).

3) Accomplishments and overall project status during this increment

- Integrated bus route java class into android project to be used next increment
- Continued researching how to implement and display bus route data which will also be integrated next increment
  - Researched and tested ways to add Google maps to display a map with marked garages
- Continued logging parking data from FSU's parking api
- Improved functionality of parking display
  - Parking tab now displays real time parking data
  - Changed UI colors to show school spirit

4) Challenges, changes in the plan and scope of the project and things that went wrong during this increment

We are still facing challenges with the Uber/Lyft api keys. Initially we wanted to integrate Uber and Lyft information into the system, but Uber and Lyft do not allow public access to their API without permission. We will focus on other aspects of the project and look into this more if we have time towards the end of the semester.

We are also trying to implement a way to fetch data from the FSU Transportation twitter account @FSUParking which is where the current app FSUTranz pulls data to display in the announcements tab. We will need further research into Twitter's API on how to implement this and display them in our application.

5) Team Member Contribution for this increment

- Joey
  - Progress Report
    - Contributed to project title/description
    - Contributed to accomplishments/challenges
  - R&D Document
    - Contributed to the use case diagram
  - IT Document
    - Contributed to programming languages
  - Source Code
    - Adjusted Bus_Routes class to be compatible with Java 8
    - Implemented Bus_Routes in the android application
    - Implemented the basic view layout for the bus tab
  - Video
    - Contributed one minute to the demo video
- Robby
  - Progress Report
    - Contributed to accomplishments/challenges in regards to the UI/Android development
    - Implemented data fetching for parking data
    - Improved UI visually
  - Source code
    - Web scraping to obtain parking data
    - UI modifications
  - Video
    - Contributed to the demo video (Nick and I worked closely together so our progress notes are pretty much similar and are combined into one video)
- Keegan
  - Progress report
    - Found and secured the API for fetching parking and bus data
    - Wrote prototype python code for reading from the parking and bus data
    - Logging parking data for data analysis.
    - Prototyping automated data analysis to pinpoint optimal times to park when the garage is busy.
  - Source code

        - Reading and processing parking and bus data
        - Semi functional python script to determine good times to park.
        - Wrote a logger for bus data
    - Video
        - Contributed one minute to the demo video
- Andres
    - Progress Report
        - Wrote up plans for next increment
        - Contributed to accomplishments
    - R&D Document
        - Functional and Non functional requirements
    - IT Document
        - Non-Execution based testing
        - Execution based functional testing
    - Source code
        - Created Map Activity that will open up a seperate Map Activity when selected
        - Activity includes method to locate the users device and display marked garages
        - Also allows you to get real time directions by clicking the Google Maps icon, which should open up Google maps on the user's device with directions to the desired garage.
    - Video
        - Contributed 1 minute to demo video
        - Put together video for the group
- Nick
    - Progress Report
        - Contributed to accomplishments
        - Contributed to challenges
    - Source Code
        - Added Recycler view to display items
        - Added Card view to recursively display items
        - Context Menu for Announcements and Information
        - Added fragment for maps
    - Video
        - Contributed one minute to demo video

6) Plans for the next increment

By the next and final increment, we should have a functioning version of our FSU Parking app up and running. We plan to meet more frequently from here on out to ensure that all of our application features run smoothly within the Android environment. We also want to work on the UI to improve on the aesthetic of the app.

7) Link to video
https://youtu.be/ZBFunoiYlEk