Progress Report
- Increment 3 -
Group #1

1) Team Members

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2) Project Title and Description

- FSU Parking App -

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 Google maps tab into the app
  - Custom map markers that display garage names
  - Clickable info windows over the markers that allows users to get real time directions via google directions.
- Added Renegade, Heritage, and Nite Nole bus routes
  - Changed negative predicted arrival time values to reflect the bus having just left
  - Fixed values for bus routes that aren't currently running to prevent app crashes

- Used logged parking data to give users an idea as to what times are best for trying to park in a particular garage.
  - Added an additional visual under the capacity bars to show if parking at that particular garage is feasible at the current time.

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

We ended up scrapping the Uber/Lyft implementation from our app, as it just wasn't possible to obtain their private APIs. We also decided to make an individual map tab to display the garages instead of making the garage names clickable and redirecting the user immediately to Google maps. We felt that users might want to search for a particular garage based on their current location, and so they're free to scroll through the map and pick the garage they want directions too. We were also unable to gain access to a Twitter API key, so we've instead linked to FSU's transportation Twitter via the app bar dropdown under "announcements"

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 sequence diagram
  - IT Document
    - Contributed to programming languages
    - Contributed to execution-based non-functional testing
  - Source Code
    - Added Draw_Proto class to read data from Keegan's server
    - Added heritage, renegade, nite nole routes
    - Fixed app crashes that resulted from out of bounds exceptions (when the routes weren't running).
    - Fixed negative predicted time values to display "JUST LEFT"
    - Matched bus tab's UI colors with the rest of the application
  - Presentation
    - Contributed to presentation
- 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
    - Formating of data to display to the user
    - UI modifications
    - Added the 1+ hour parking bar
  - Presentation

- - ■ Contributed to presentation
    - ■
  - ● Keegan
    - ○ Progress report
      - ■ Fully implemented garage slot prediction based on historical data.
    - ○ Source code
      - ■ Created a python daemon that periodically checks logged parking data and updates a web server with predicted data. The data is delivered to the client via http request to the website.
      - ■ Wrote a python prototype for processing the json requested from the aforementioned website.
    - ○ Presentation
      - ■ Contributed to presentation
  - ● Andres
    - ○ Progress Report
      - ■ Challenges/changes in this increment
      - ■ Accomplishments for the current increment
    - ○ R&D Document
      - ■ Functional requirements
      - ■ Contributed to use case diagram
    - ○ IT Document
      - ■ Non-Execution based testing
      - ■ Execution based non-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
      - ■ Custom markers with clickable info window that redirects to maps for directions
    - ○ Presentation
      - ■ Contribute to presentation/powerpoint

  - ● 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
      - ■ Added the maps fragment
      - ■ Linked the announcement menu option to the twitter page
    - ○ Presentation
      - ■ Contributed to presentation

6) **Plans for the next increment**

Being that this is the final increment, we should have a full working prototype with all the desired features, if prompted by the instructor to expand and/or change certain features, we'd do so in this increment.

7) **Presentation**

Presentation on December 4th, at 12:30pm in room LOV301