Release Plan - GeoBus by Bus Squad (Android)

Release 1 planned for 11/25/2015. Revision 1 on 10/21/2015.

High level goals

- Display a dot on the map that shows the user's current location.
- Show bus stop locations on the map.
- Be able to see the location of a bus (UCSC shuttle or SC Metro) on a Google map in realtime.
- Tapping a bus reveals the bus's route.
- Be able to save commonly used bus routes and display those only.
- Be able to see the operating hours of the shuttle and Metro services.
- Be able to see announcements made by SC Metro or UCSC regarding shuttles.
- Get the ETA of walking to a class or area versus taking a shuttle.
- Tapping on a bus stop will display only buses that will make that stop and their ETAs if applicable.

User stories for release

- Sprint 1
    - [2 points] As developers, we want to organize into two teams so that we have an iOS and Android team.
    - [2 points] As a team, we want to meet with Kerry Veenstra, one of the Slugroute.com creators/maintaners, so that we can get the information we need for GeoBus.
    - [2 points] As a user, I want to open the app and see a campus map and my current location so that I know where I am.
    - [3 points] As a user, I want to see bus stops on the map so that I know where the bus stops are.
    - [3 points] As a user, I want to tap on a bus stop and see a text box open up so that I can get more information on a particular bus stop.
    - [13 points] As a user, I want to see one bus on the map so that I know it's possible to see the current location of a bus and see more buses get added in the future.
    - [8 points] As a user, I want to see an arrow on a bus so that I know what direction it's traveling in.
- Sprint 2
    - [3 points] As developers, we want to have started writing documentation in order for this project to carry on after this course ends.

- [8 points] As a user, I want to be able to save my favorite bus stops and routes so that I can easily see routes that are relevant to me.
- [8 points] As a user, I want to be able to see the ETA of all relevant buses for a certain stop so that I can easily see which buses are coming up for a stop.
- [8 points] As a user, I want to be able to get the ETA of walking or taking a bus to my destination so that I can tell if waiting for a bus is worth my time.
- [3 points] As a user, I want to be able to access an info sheet so that I can get information like the operating hours.
- [8 points] As a user, I want to be able to search for a bus stop and display its buses and other relevant route information so that I can see if I should wait at that stop for a particular bus.
- [3 points] As a user, I want to see all active shuttles updating in real time in order to determine which bus best suits my destination on campus.
- Sprint 3
  - [8 points] As a user, I would like to know the current locations of any Metro buses just in case I live off-campus so that I can plan my ride home accordingly.
  - [8 points] As a user, I want to be notified when I have to leave my current location to a bus stop of my choice in order to catch the bus without waiting at a stop for very long.
  - [21 points] As a user, I want to be able to see additional information on my saved routes and bus stops so that I can more easily get an ETA.
  - [8 points] As a user, I would also like to know the route each bus is going to take just in case I don't know which bus goes where.
  - [13 points] As a user, I want to receive announcements made by UCSC/SC Metro so that I can know if there are any changes in the schedule.
  - [21 points] As a user, I want to see who else is waiting at a stop on the map, color-coded by intended route, so that I can estimate how crowded a bus may become.
  - [13 points] As a user, I want to know when a bus breaks down so that I can plan ahead of time.

Product backlog
- Show how many bike racks are available.
- Determine which bus or what set of buses will provide the fastest route to a selected destination.
- Display areas that are commonly busy based on data we can collect or crowdsourcing so people know ahead of time if a bus stop is crowded or not.
- As a user, when I tap on a bus, I want to see how crowded it is so that I can see if attempting to board that bus is worth my time.

Product presentation

See `geobus-common/documentations` on our team's GitHub for the presentation, titled `CS 115 presentation.pdf`.