User Documentation

Slug Park
Brain Swans
11/30/15

Objective

The application is designed solely to help the user quickly and conveniently find any available parking spot on campus.

Functionality

- How To Install:
  Visit Google Play Store on any Android device running Android OS 4.1 or later.
  Search for application, download, install.
  Choose application from application drawer.
  Select and run by tapping on icon.

  The application consists of three main layout screens.
- Application Launch Screen.
  - The Application Launch Screen will only be shown when the application first launches. Display application logo art.
  - On Long Press, easter egg with a list of member names will appear.
- Main Screen
  - Progress bars display capacity of all parking lot locations.
  - User may choose any location presented.
  - On selection, the user will be greeted to a third screen, consisting of Google Maps portion (with navigation), and progress bar representing the occupancy of the chosen lot.
- Map & Capacity Meter Screen
  - Upper portion of screen will display the map of chosen parking lot.
  - Lower portion of screen will display the capacity meter of chosen parking lot.
  - Information about the capacity of any parking lot is relayed from the database.
  - Capacity of chosen parking lot is updated in real time.
  - Application refreshes every few seconds to keep information up to date.

Technical Aspects:

Current information displayed in application is fetched from Firebase database. Other forms of implementation would work as well. If this project is to be continued, the main priority would be to incorporate real parking sensors to deliver information, rather than the mock app currently employed. In order to successfully propel this project to a higher level, contact parties that the team has been communicating with, and establish a healthy relationship to start and maintain a partnership.

TAPS, Placemeter, and David Turner, the manager of Project Management in ITS, are who we've maintained contact in case we wanted to continue the project and move to include hardware sensors. Placemeter would provide us with a specific camera that would be used to sense the direction a car is traveling in and out of a parking lot and also to provide us with the data to increment/decrement our counter. We'd need permission and assistance from TAPS in order to install the cameras within the parking lots. David Turner is interested in implementing our app with the UCSC Mobile Website, and has expressed interest in taking over the project.