

Fresno State Interactive Navigation Map

ABSTRACT

Maps are the symbolic representation of places on the earth surface. It provides information about the world in a visual way. Location and maps-based apps offers a compelling experience on mobile devices. They provide guidance to the users of a particular place, providing them directions and other important information regarding that place.

My aim will be to creating an Android Application for depicting Fresno State campus map with directions. As, currently we have printed University maps on paper or on boards located on various places on the campus. Printed maps may not be available all the time and reading and getting directions from the paper maps is again a tedious job. Aim to features a searchable, scrollable list of building departments and landmarks for the benefits of visitors, students, faculty and staff.

PROBLEM DESCRIPTION

Current web model of Fresno State Campus map just marks location of interest. It lags in the following functionality:

1. Does not provide navigation to any buildings.
2. Does not provide any information related to departments like office hours, room numbers.

CHALLENGES

1. Storing large volume of data is a big challenge.
2. Searching a particular data and representing in graphical way is a tedious task, to attain this I had done research on fast searching algorithm.
3. Generating google key was difficult.
4. For navigation I have to link with Google Maps

APPROACH

The application has been developed using Android Studio. It is compatible to android latest version 6.0 Marshmallow. Application has been integrated to Google maps and will use Google maps API to provide information.

Following features has been included in the applications:

1. Locations and navigation to major landmarks, University Dinning, ATM, Food court, different departments, international student office, library etc.
2. Provide information about dinning hours location, menu.
3. Locations of parking lots.
4. It will show various options related to what you search with its distance from your current location (in this way one can choose place with shortest distance).

METHODOLOGY

Developed in Android Studio

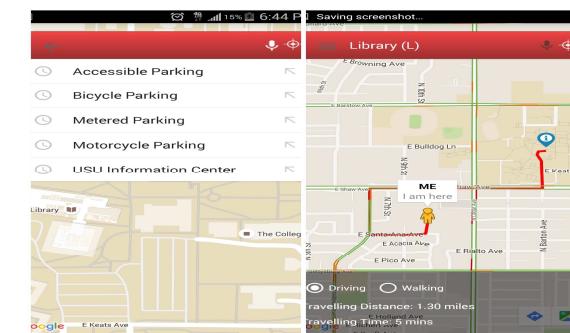
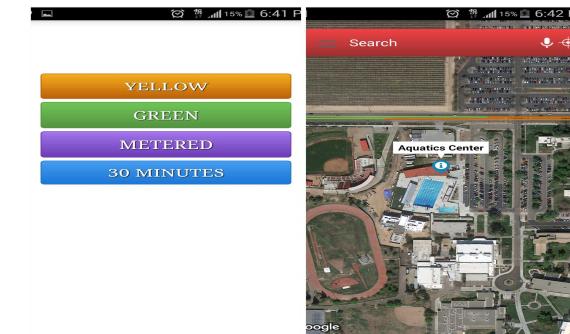
Version 1.5.1

Google API use

Compiled SDK version – API 23 Android 6.0 (Marshmallow)

Build Tool version 23.0.2

Compatible with Phone and Device running on Android Operating system



FUTURE WORK

1. Launch the app when click on event location in Android browser.
2. It will have links to various departments site from where office hours and professors room number can be obtained.
3. Provide information of upcoming events by linking to Fresno state.edu site.
4. Provide navigation to major rooms in a building and also provide information about floor number of the rooms.