**Map App - README**

This is a Religious Tourism app – it finds and displays religious places and other areas of interest for the religious tourist to any place. I cannot use Place Picker for this app since I only want specific places to be displayed. Apparently the ability to filter results in Place Picker is an open issue: <https://code.google.com/p/gmaps-api-issues/issues/detail?id=8484>

Anyway, it was a nice app to write and I believe that it ticks all the required boxes. It is all in one Java class, which is not ideal. I did some work on creating different classes and calling them when needed, but this is complicated enough already without introducing new complications, so I kept it all as one class that works.

The app successfully checks for location setting and prompts the user to turn it on. It also checks the network / connection and tells the user to check connections if there is a problem.

It has its own map API key and a browser key to enable a JSON query of Google Places.

The important private functions are:

**Function updatePlaces()** – Gets the markers, gets the current location, places a marker on current position, animates the camera and builds a query string for places of interest. It then calls function getPlaces(). Has a progress bar that keeps user informed of progress.

**AsyncTask function getPlaces()** – Makes the connection, sends the query, builds a result string. It them parses the JSON returned from Google Places, gets the location, gets the correct icon, gets the name, calculates the distance from current location, formats the distance string, and then adds the marker with icons, name, distance to the map.

This app uses the current location, it uses Google Maps to show current location and other locations of specific interest in the vicinity, and it calculates distance between current location and these neighbouring locations. It shows the name and distance calculation when the relevant icon is touched. It checks that the location settings are enabled, and prompts the user to turn it on. It has its own API key and Browser key.

Note: Also had to enable multidex support while generating signed APK.