Google Integration

    This application utilizes Google services in multiple ways.  It allows the user to login with their Google account as well as use Google Maps to find their desired bar.  These services are accessed using the corresponding Google APIs.  The APIs handle all interaction with the Google servers containing the desired service.  This application makes use of both the Google+ API and the Google Maps Android API.

a) Setup

In order to use any APIs from Google, a project must be authorized by Google services to access them.  After selecting the desired APIs (Google+ and Google Maps Android), an API key is generated.  An API key allows the application to access the services specified by that particular key.

b) Google Account Login

Google is heavily integrated with Android devices by default.  This allows the application to receive all required information regarding the user's Google account.  A request for permission to access the user's information will pop up on the device.  The user must accept this request before the account can be connected to the application. Once the user has accepted, a login attempt is made through the Google+ API which will return whether or not the login was successful.

c) Google Maps

The map function is an important aspect of this application. Embedded maps are used for the map and direction pages. These maps are generated using the Google Maps Android API. Using a known list of bars/restaurants, the API creates a map displaying the user’s current location and the nearby venues on the list. In order for the user’s location to appear, another popup will appear asking permission to access the device’s location information. Once the user accepts, their location information will be sent to Google Maps. Because the embedded map is still hosted by Google Maps, all interaction the user performs on it is handled by Google, not the application itself.

