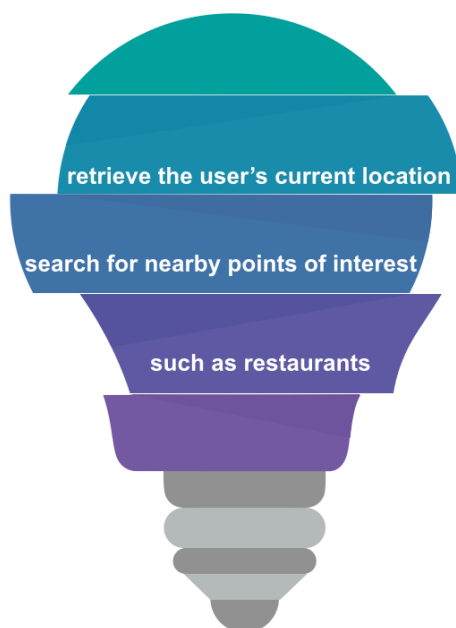


How to use the Google Maps iOS SDK

We will use the Google Maps iOS SDK to:



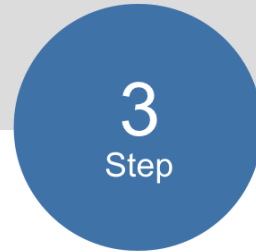
What we will do?



Use Google Maps
iOS SDK



Get the user's
current location



Search for nearby
places to eat,
drink, or even go
grocery shopping

The important elements are:

MapViewController

The main view
controller of this
project

GoogleDataProvider

A wrapper class
for making
Google API
calls

GooglePlace

A model for
place results
returned from
Google

MarkerInfoView

A subclass of
UIView that
displays details
of places

Step 1

Use Google Maps iOS SDK

Creating API Keys

Project name *
Feed Me ?

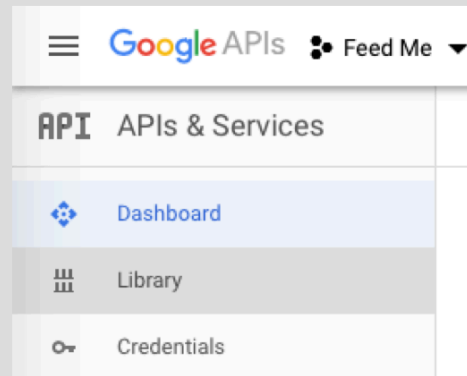
Project ID: feed-me-236410. It cannot be changed later. [EDIT](#)

Location *
No organization [BROWSE](#)

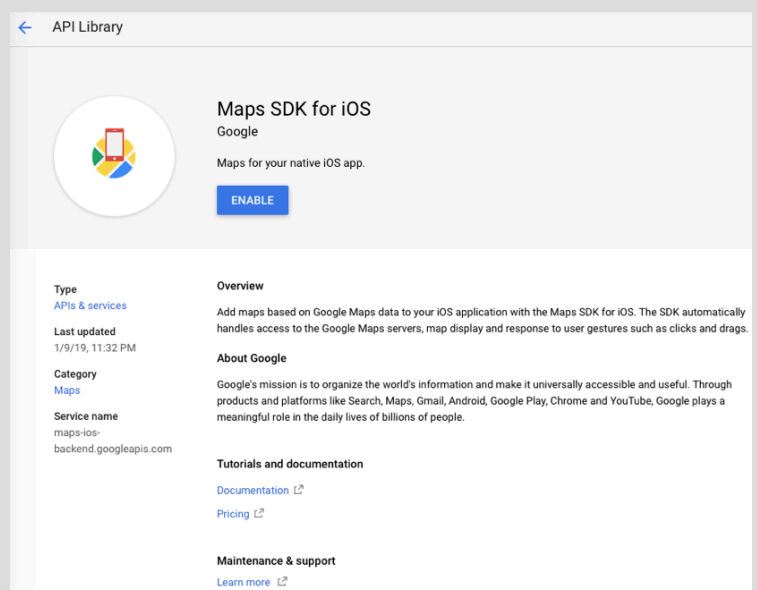
Parent organization or folder

[CREATE](#) [CANCEL](#)

Select
APIs & SERVICES

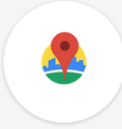


Search and enable
Maps SDK for iOS



Search and enable Places API

← API Library



Places API

Google

Get detailed information about 100 million places

ENABLE

Type

APIs & services

Last updated

1/31/19, 1:49 AM

Category

Maps

Service name

places-backend.googleapis.com

Overview

Get data from the same database used by Google Maps. Places features over 100 million businesses and points of interest that are updated frequently through owner-verified listings and user-moderated contributions.
[Place search](#) ↗ Return a list of places based on a user's location or search string.
[Place details](#) ↗ Return detailed information about a specific place, including user reviews.
[Place autocomplete](#) ↗ can be used to automatically fill in the name and/or address of a place as you type.
[Query autocomplete](#) ↗ can be used to provide a query prediction service for text-based geographic searches, by returning suggested queries as you type.
[Place photos](#) ↗ gives you access to the millions of Place related photos stored in Google's Place database.
[Places SDK for Android](#) ↗ and [Places SDK for iOS](#) ↗ allow you to build location-aware apps that respond contextually to the local businesses and other places near the device.

About Google
Google's mission is to organize the world's information and make it universally accessible and useful. Through products and platforms like Search, Maps, Gmail, Android, Google Play, Chrome and YouTube, Google plays a meaningful role in the daily lives of billions of people.

Create credentials

RPI APIs & Services

Dashboard

Library

Credentials

Credentials

OAuth consent screen

Domain verification

APIs

Credentials

You need credentials to access APIs. [Enable the APIs you plan to use](#) and then create the credentials they require. Depending on the API, you need an API key, a service account, or an OAuth 2.0 client ID. For more information, see the [authentication documentation](#).

Create credentials

click API key

APIs Credentials

You need credentials to access APIs. [Enable the APIs you plan to use](#) and then create the credentials they require. Depending on the API, you need an API key, a service account, or an OAuth 2.0 client ID. For more information, see the [authentication documentation](#).

Create credentials ▾

API key

Identifies your project using a simple API key to check quota and access

OAuth client ID

Requests user consent so your app can access the user's data

Service account key

Enables server-to-server, app-level authentication using robot accounts

Help me choose

Asks a few questions to help you decide which type of credential to use

Copy the key

API key created

Use this key in your application by passing it with the `key=API_KEY` parameter.

Your API key

AIzaSyA1W3sk1N_15wNo_cqG6S0SEnd1GpM

Copied

⚠ Restrict your key to prevent unauthorized use in production.

[CLOSE](#) [RESTRICT KEY](#)

Adding the SDK

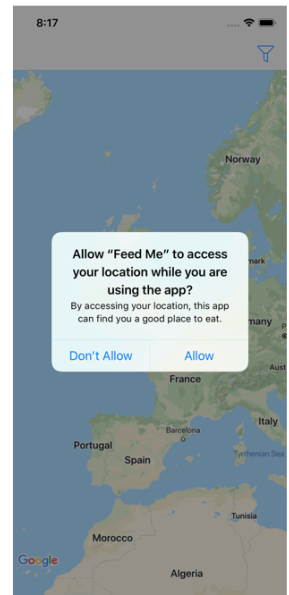
- 1 Open **Podfile** and add the pod 'GoogleMaps'
- 2 Open **Terminal** and navigate to the directory that contains your **Feed Me** project
- 3 `pod install` to install the Google Maps iOS SDK

Step 2

Get the user's current location

Getting the user's current location

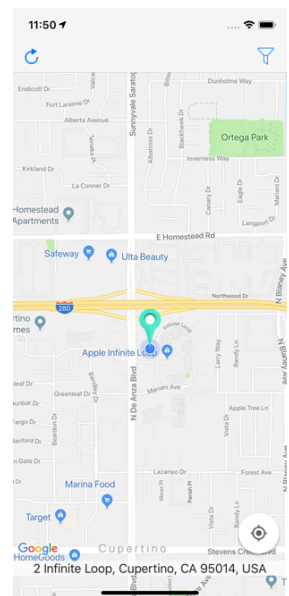
- 1 Add and instantiate a **CLLocationManager** property
- 2 Make **MapViewController** the delegate of **locationManager**
- 3 Request access to the user's location



9

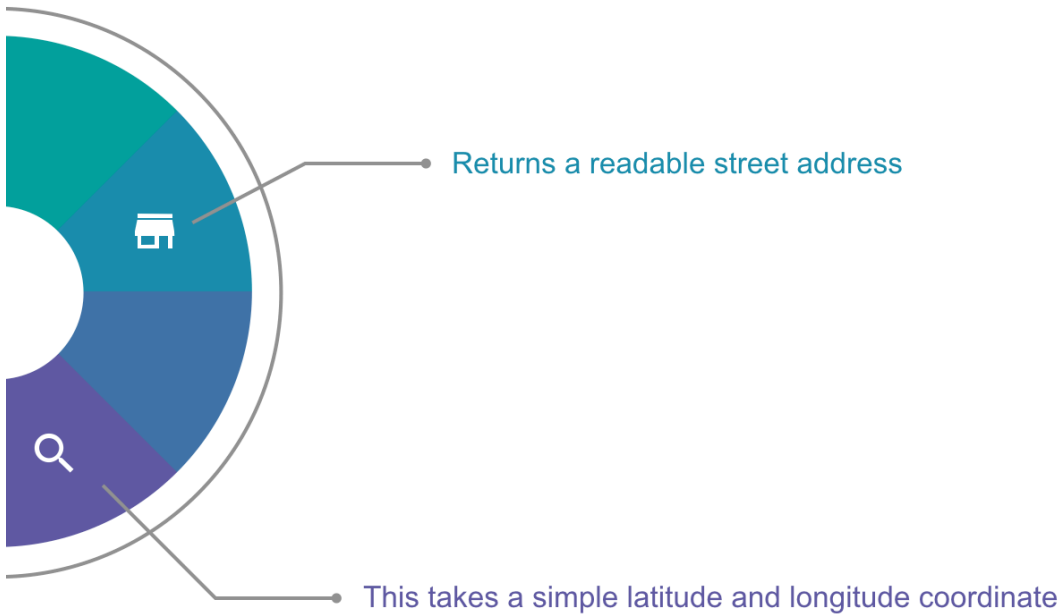
GMSMapView

- 1 **myLocationEnabled**
Draws a light blue dot where the user is located
- 2 **myLocationButton**
Adds a button to the map that, when tapped, centers the map on the user's location



10

GMSGeocoder



Step 3

Search for nearby places

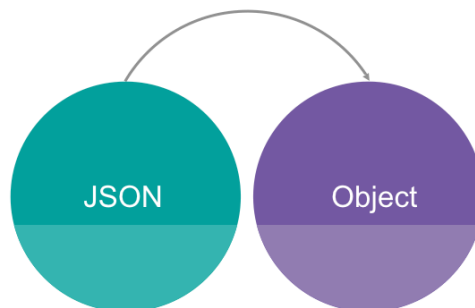
Finding Something to Eat

Google Places API

To search for
places to eat and
drink around the
user's location

13

Parsing JSON



14

JSON

Parsing JSON

Object

```
{
  "plus_code": {{" "}},
  "price_level": 1,
  "types": [
    "bakery",
    "store",
    "point_of_interest",
    "food",
    "establishment"
  ],
  "geometry": {
    "location": {
      "lng": -122.033824,
      "lat": 37.324606
    },
    "viewport": {{" "}}
  },
  "id": "e88ae99060deb1960b81b8895df64abc828bc034",
  "photos": [
    {
      "photo_reference": "CmRaAAAAr7qii_puEORMDCuE5ZfrJDjU8nPv1r0koQJ461dTnCTu9WjGxuYybsY8aIoLhMbgb5bI4Da-gNYHYxqaHH6wqTHu_15U1NoAUF113E_NqlaBdv9wv3z9_K0dGbXP1d3AEhDNuzDMg0LEpL31gNfRik60GhR3ycAzzWgOPAGdH78uGb55ixrEJg",
      "width": 2560,
      "html_attributions": [{" "}],
      "height": 1920
    }
  ],
  "scope": "GOOGLE",
  "opening_hours": {{" "}},
  "user_ratings_total": 12,
  "place_id": "ChIJtyma8621j4ARBSNbZmY8oZ0",
  "icon": "https://maps.gstatic.com/mapfiles/place_api/icons/restaurant-71.png",
  "reference": "ChIJtyma8621j4ARBSNbZmY8oZ0",
  "name": "Sheng Kee Bakery",
  "rating": 3.8,
  "vicinity": "10122-C Bandley Drive, Cupertino"
},
```

```
class GooglePlace {
  let name: String
  let address: String
  let coordinate: CLLocationCoordinate2D
  let placeType: String
  var photoReference: String?
  var photo: UIImage?
}
```

14

```
{
  "plus_code": {{" "}},
  "price_level": 1,
  "types": [
    "bakery",
    "store",
    "point_of_interest",
    "food",
    "establishment"
  ],
  "geometry": {
    "location": {
      "lng": -122.033824,
      "lat": 37.324606
    },
    "viewport": {{" "}}
  },
  "id": "e88ae99060deb1960b81b8895df64abc828bc034",
  "photos": [
    {
      "photo_reference": "CmRaAAAAr7qii_puEORMDCuE5ZfrJDjU8nPv1r0koQJ461dTnCTu9WjGxuYybsY8aIoLhMbgb5bI4Da-gNYHYxqaHH6wqTHu_15U1NoAUF113E_NqlaBdv9wv3z9_K0dGbXP1d3AEhDNuzDMg0LEpL31gNfRik60GhR3ycAzzWgOPAGdH78uGb55ixrEJg",
      "width": 2560,
      "html_attributions": [{" "}],
      "height": 1920
    }
  ],
  "scope": "GOOGLE",
  "opening_hours": {{" "}},
  "user_ratings_total": 12,
  "place_id": "ChIJtyma8621j4ARBSNbZmY8oZ0",
  "icon": "https://maps.gstatic.com/mapfiles/place_api/icons/restaurant-71.png",
  "reference": "ChIJtyma8621j4ARBSNbZmY8oZ0",
  "name": "Sheng Kee Bakery",
  "rating": 3.8,
  "vicinity": "10122-C Bandley Drive, Cupertino"
},
```