Android

Android provides a rich application framework that allows you to build innovative apps and games for mobile devices in a Java language environment. Android is the name of the mobile operating system made by American company; Google. It most commonly comes installed on a variety of smartphones and tablets from a host of manufacturers offering users access to Google’s own services like Search, YouTube, Maps, Gmail and more. This means you can easily look for information on the web, watch videos, search for directions and write emails on your phone, just as you would on your computer, but there’s more to Android than these simple examples. Android phones are highly customisable and as such can be altered to suit your tastes and needs with wallpapers, themes and launchers which completely change the look of your device's interface. You can download applications to do all sorts of things like check your Facebook and Twitter feeds, manage your bank account, order pizza and play games. You can plan events on from your phone's calendar and see them on your computer or browse websites on your desktop and pick them up on your phone.

Another neat feature of Android is that it automatically backs up your contacts for you. When you set up an Android phone you’ll need to create a Google Account or sign in with an existing one. Every time you save a number to the address book of your Android phone it will be synced to your Google Account.

The benefit of this is that if you lose your phone all of your numbers will be saved. The next time you get an Android phone (or and iPhone or Windows Phone if you prefer) and sign in with your Google Account, all of your contacts and friend's numbers will be displayed in your new phone’s address book immediately, no need to transfer or back them up anywhere else.  
  
Syncing is a way for your phone to keep all your information; websites, contacts, calendar entries and apps up-to-date. This can happen over your phone's mobile data or WiFi connection, seamlessly, in the background.

Google Map Api

## What is Google Maps?

Google Maps allows you to display maps on your web site:

With the Google Map API, you can customize both the map and the information on the map.

## What is an API?

API = Application programming interface.

An API is a specification used by software components to communicate with each other.

An API may describe the ways in which a particular task is performed.

## Google API Key

Google will allow your web site to call a Google API many thousand times per day.

If you plan for heavy traffic, you should get an API key from Google. The key is free.

Google Location Api

The location APIs make it easy for you to build location-aware applications, without needing to focus on the details of the underlying location technology. They also let you minimize power consumption by using all of the capabilities of the device hardware.

#### Geofencing APIs

Lets your app setup geographic boundaries around specific locations and then receive notifications when the user enters or leaves those areas.

* Simple but powerful APIs: Allows batch addition and removal of geofences. Ability to manage multiple geofences at the same time. Ability to filter alerts for both entry and exit or entry only or exit only.
* Optimized for battery: Adjusts location updates based on user’s proximity to the geofence and user’s modality (still, walking, driving, and so on).