

Getting a Maps API Key for Google Maps

Updated June, 2013

This document will show you how to obtain a Maps API key from Google, Inc. A key is required to use the Google Maps API on an Android device. This process is required to complete the activity in Chapter Fourteen.

Please note: Recently, Google has moved to a new version of the Maps API, and will no longer allow you to create a (v1) Maps API key. In order to complete the map activities within the *TeenCoder: Android Programming - First Edition* course, please follow the updated directions within this document to obtain and use a v1 Maps API key.

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Note: All red highlights below are added for emphasis and are not present on the actual pages!

Let's Get Started!

Using interactive maps in an Android program is a very powerful and useful tool. Google provides their interactive maps at no charge to Android developers. However, developers will have to register for an “API Key” in order to use these maps. This key value allows Google to keep track of their map information and make sure a device’s location information is not being misused by an application or a developer.

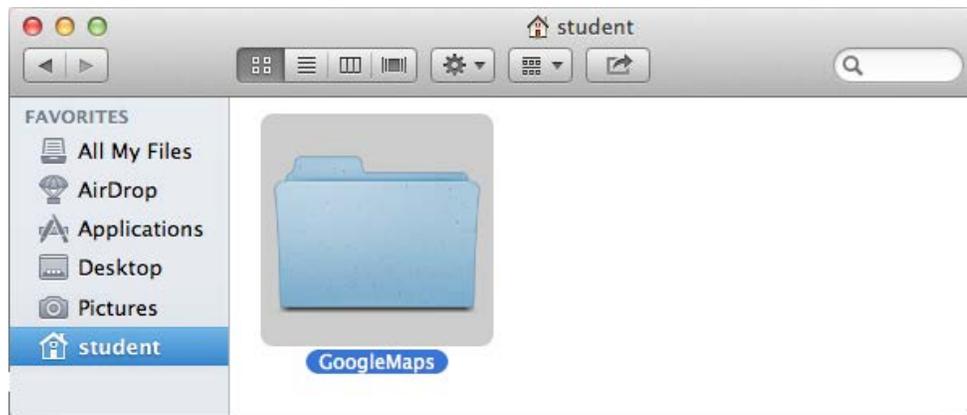
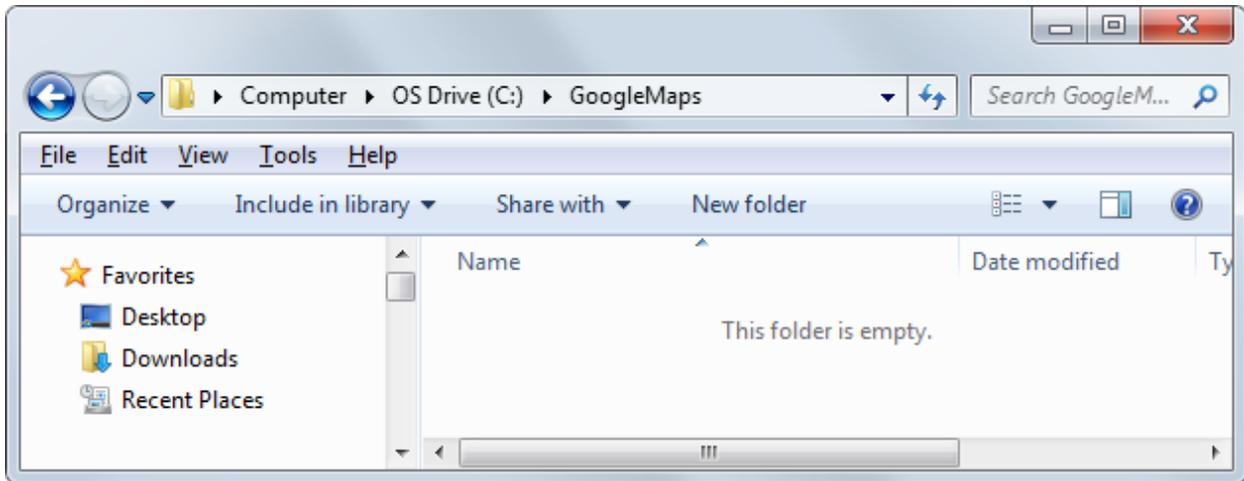
Recently, Google released “version 2” or “v2” of their Google Maps API. This newer version offers some slight enhancements over the older “version 1” or “v1” Maps API that we use in our course. Unfortunately, the newer version of Google Maps requires a lengthy upgrade to the latest versions of the Android SDK and Eclipse ADT and it does not work easily in an emulator environment. For this reason, we will continue to use the “v1” Google Maps API in this course.

Google will no longer allow programmers to retrieve new v1 Maps keys for Android applications. However, existing keys will continue to work. Therefore, to complete your course activities, this document will show you how to use a pre-created Google Maps v1 key in your projects.

Download the Map Key File

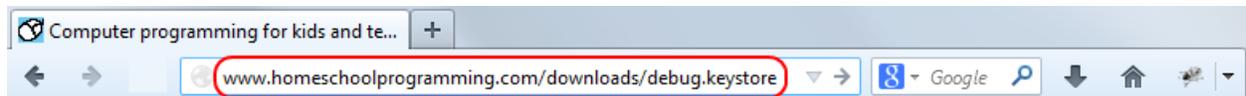
We have created a working v1 Maps API key that you can download from our website. This procedure replaces the previous method of obtaining the Maps API key from the Google website.

To begin, run Windows Explorer or Mac OS Finder and create a folder on your computer where the Maps API key will be stored. We recommend the directory name “GoogleMaps” though you may choose another location.



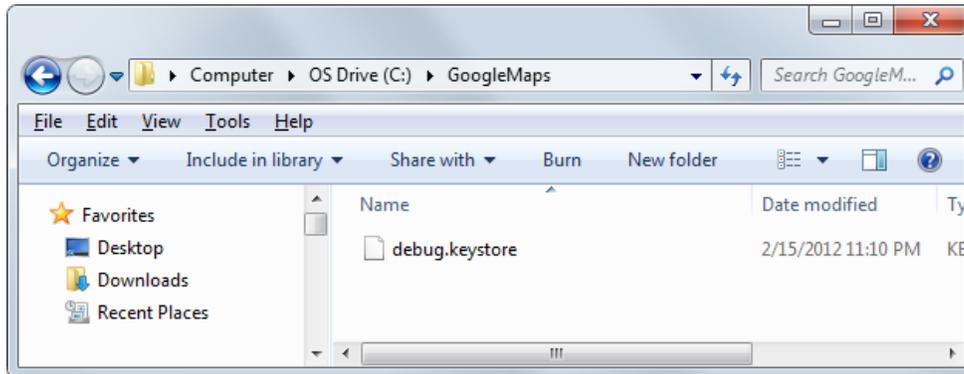
Next, launch your web browser (Internet Explorer, Firefox, Safari, etc.) and download the following file. You can type this address directly into your web browser, or navigate to the link from our “Support → Document Updates” page at www.HomeschoolProgramming.com.

<http://www.homeschoolprogramming.com/downloads/debug.keystore> (approx. 1 KB)



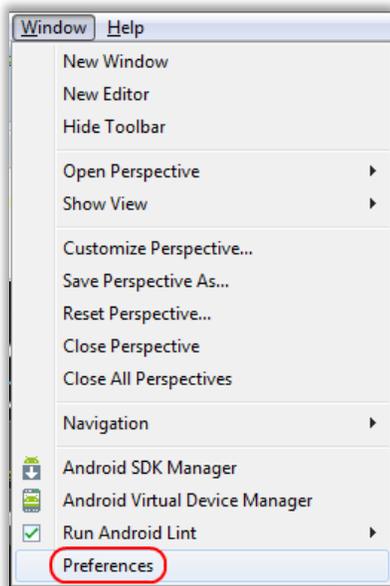
Depending on your web browser and configuration, you may be prompted for a target download location on your local hard drive, or the file may be automatically saved to a download folder. Choose your newly created “GoogleMaps” as your target folder if possible. If the file is automatically saved to some other folder, then simply copy it over to “GoogleMaps” when the download is complete.

When the download is complete you should have the “debug.keystore” file in your “GoogleMaps” directory.

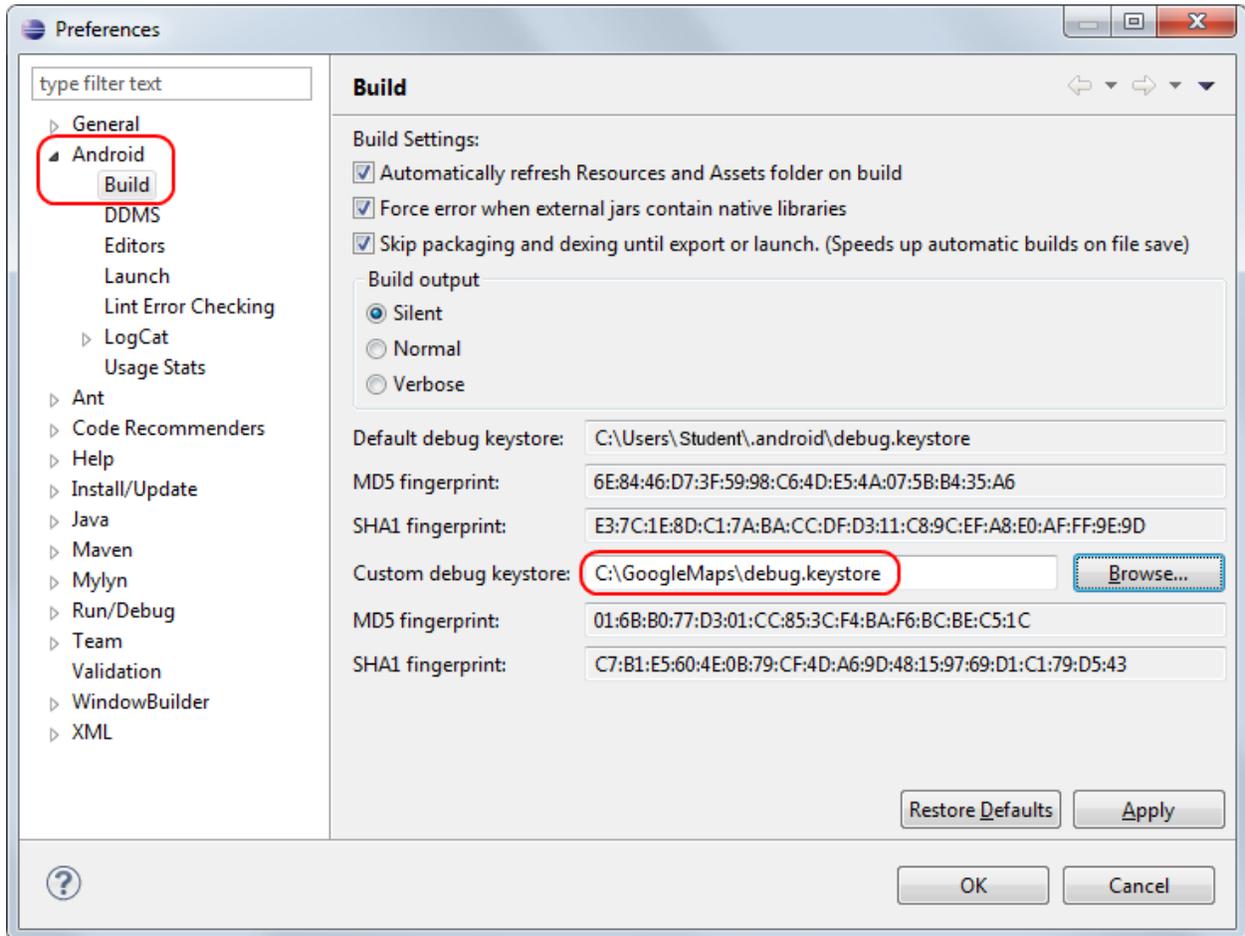


Installing the Map Key in Eclipse

To install the Google Maps API key in Eclipse, open your Eclipse software select “Preferences” from the Eclipse menu.



Once you click on the “Preferences”, you will see the following screen:



Make sure that you expand the “Android” menu on the left side of the screen and then choose the “Build” option. On the Build screen, find the box marked “Custom debug keystore” and point this location to your “GoogleMaps/debug.keystore” file. Click on “OK” and Eclipse will now use this Maps key for all your Maps activities.

Using the Maps API Key in Your Applications

The last piece that you will need to make the Maps activities function is the actual Maps API key value. To match your new “debug.keystore” file, instead of obtaining a new key from Google, use the pre-created key found in your “main.xml” file located in this directory:

“TeenCoder\Android Programming\Activity Solutions\DistanceMap\res\layout”

The key value begins “**0I_ZAP...**”. Ignore the comment about replacing that key value with your own – now that you are using our pre-created “debug.keystore”, this API key will work for you!

This value will be needed to use any **MapView** control in your code. A sample XML segment for this control is shown below:

```
<com.google.android.maps.MapView
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:apiKey="0I_ZAP... "
/>
```