TomTom LBS SDK Xcode Tutorial

Welcome!

This tutorial will guide you to create an iPhone/iPad application using the TomTom LBS SDK.
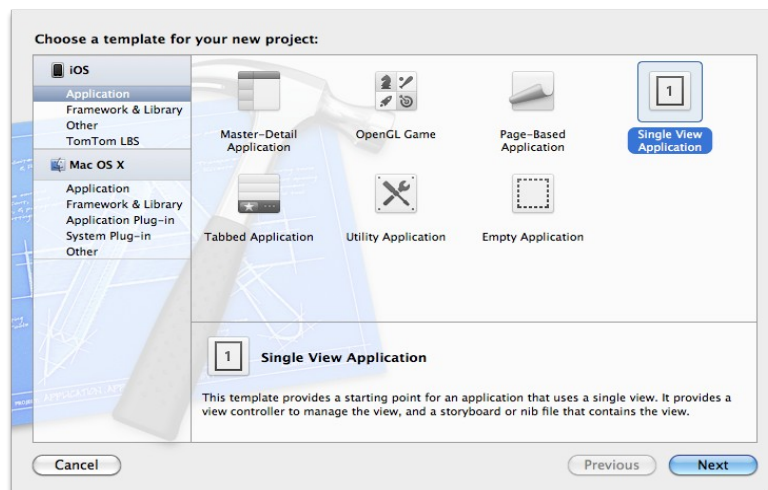
1. What you need.

   This tutorial assumes you have knowledge of Objective C and Xcode development experience. For this tutorial we are using Xcode 4.2 and the simulator will run iOS5.

   You'll need the framework folder that was in the TomTom LBS Release, of course.
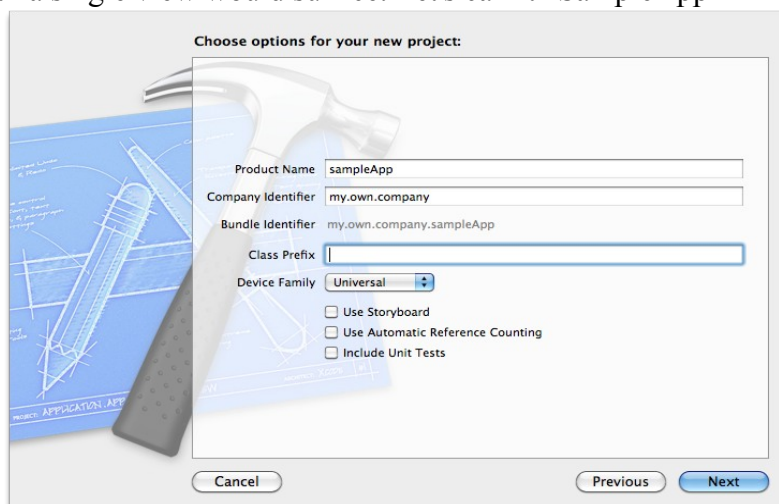
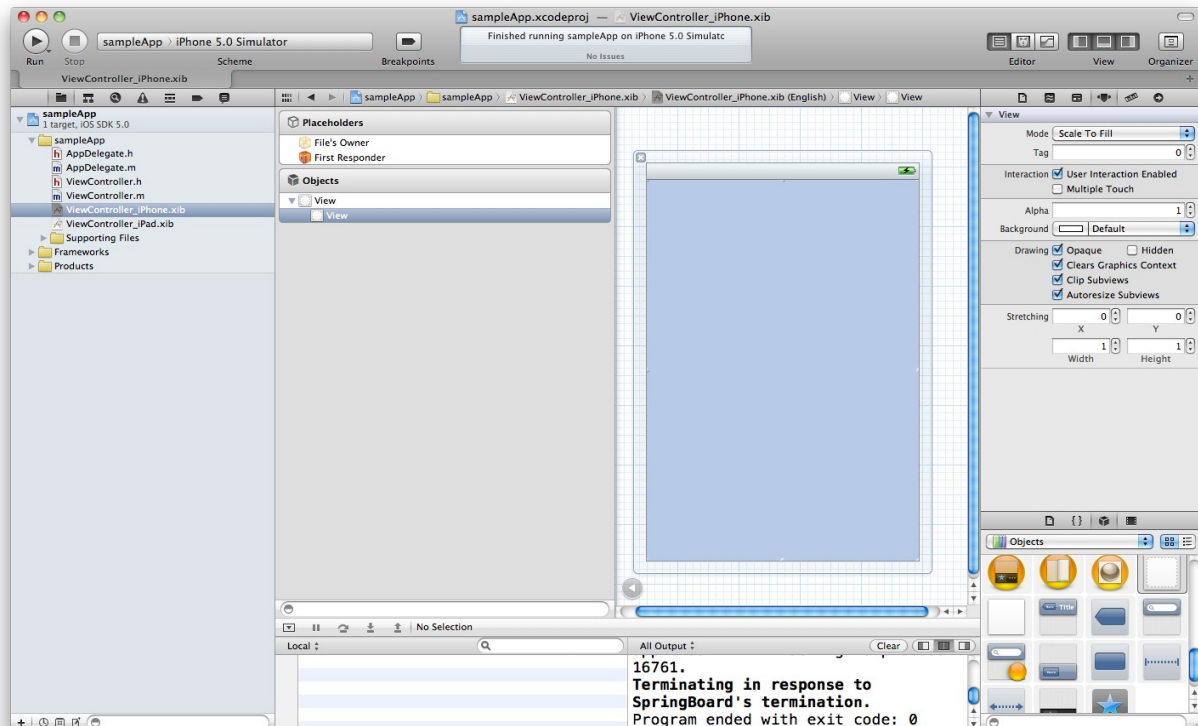   And finally have your API KEY handy.

2. Let's start!

   First, let's create a new project using the Xcode templates.


   The one with a single view would suffice. Let's call it "SampleApp"

Let's edit the NIB file, by clicking the ViewController_iPhone_xib file and adding an UIView to the main screen. Make sure that the "Clip Subviews" option is SET.
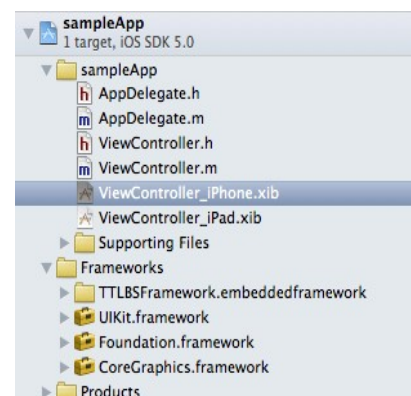

Now, let's go to our folder (SampleApp) and create a "lib" folder in it. Copy the LBS Framework folder from your download there. Your directory structure should look like this:
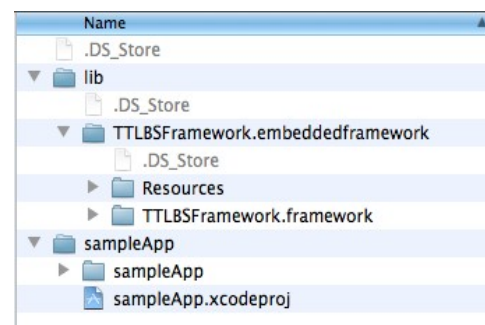

The "TomTomLBS.framework" comes from the zip file you already downloaded from **developer.tomtom.com**.

Now drag this folder into your "Framework" section in your Xcode project.

Now it would be a good time to add the Frameworks needed in our project. We need : CoreLocation,libsqlite3.dylib,libz.dylib,QuartzCore,SystemConfiguration,CoreGraphics.framework,UIKit.framework,Foundation.framework.

It should look like :
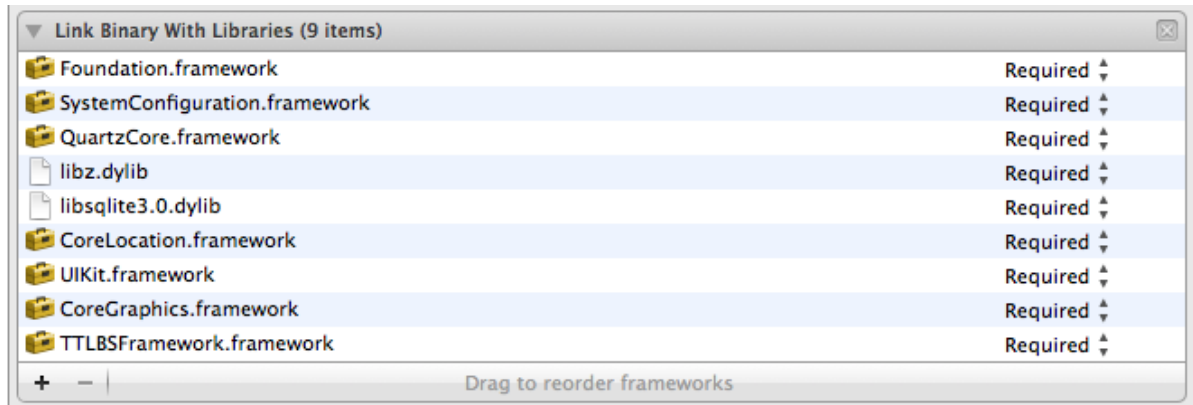
Now add the following changes in the Project Build Settings.

3. The Code.

In your "ViewController.m" file , we can start adding our code. First let's include the Framework to the file.

#import <TomTomLBS/TTLBSSDK.h>

and let's insert out API KEY in the "viewDidLoad" function.

[[TTSDKContext sharedContext] setDeveloperKey: YOUR_API_KEY_HERE];

Also in this function we can create our controller, and add it to our UIView we created a moment ago, but first let's see how big is our canvas, so we can calculate the size of our map view.

```
CGRect mapFrame = CGRectMake(0, 0,
mapCanvas.frame.size.width, mapCanvas.frame.size.height);

mapViewController = [[TTUIMapViewController alloc]
initWithFrame: mapFrame andInitialMaxConcurrentOperations: 2];
```

```
// Center the map on Amsterdam, The Netherlands.
[mapViewController centerOnLatitude:[NSNumber
numberWithDouble:52.372455] andLongitude:[NSNumber
numberWithDouble:4.894409] withZoomLevel:14];
```

And we can add it to our UIView.

```
// Add the map to the map canvas
[mapCanvas addSubview:mapViewController.view];
```

Of course we need to declare mapCanvas, mapViewController in our header file.

```
IBOutlet UIView* mapCanvas;
TTUIMapViewController* mapViewController;
```

Note the "IBOutlet" particle, We need this to connect this field (mapCanvas) to the UIView we created in the XIB file.
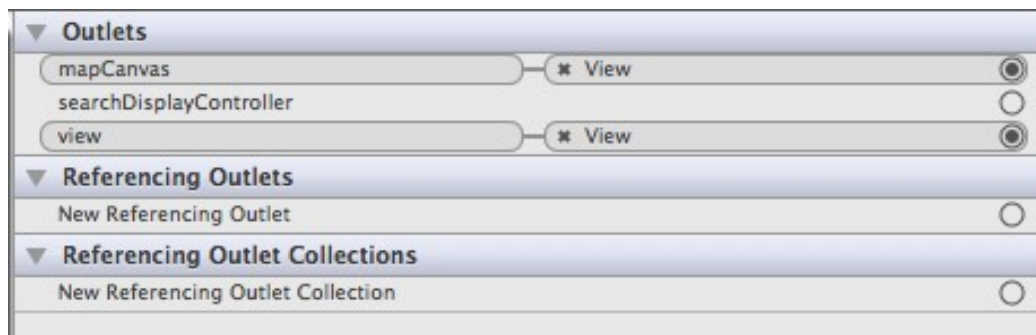
Check your "Outlets" section in the XIB file and make sure you connect the UIView to "mapCanvas".

Now if we try to run the application, we see it runs and then suddenly we could get an error.
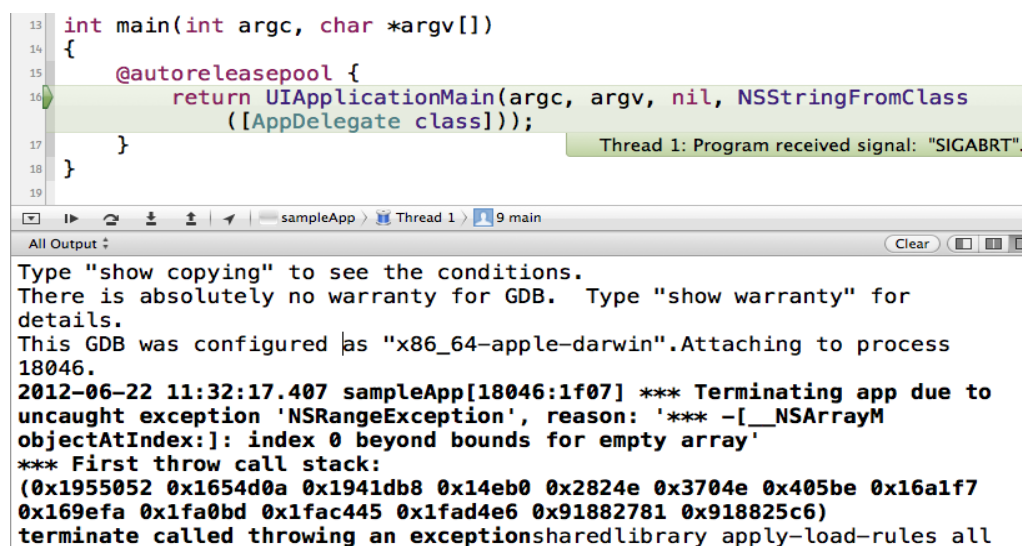

This is because we haven't updated the PLIST of our application. The SDK needs us to set the location of our LBS providers, as well as where to get the MAPS. In the user guide

attached to the release, there is a complete explanation of these values. For now we just need to add an array of properties to our PLIST file. A copy of the xml snippet follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<array>
        <string>https://api.tomtom.com/lbs</string>
</array>
</plist>
```

In this case we are specifying where the "tile.integer.base.url" should point to. This is a very important property in this file, do not skip it.

After we add this value and run again the application, we should get a nice Map View: A nicely centered map on Amsterdam.
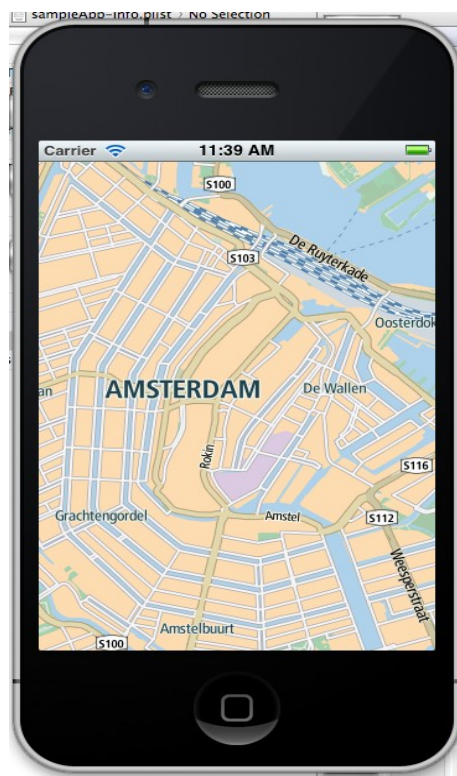
Check the other sample projects in the Release to learn how to perform Geocoding operation, Create Routes and fetch traffic information.

Good luck!