Chapter 11

Building a Social AR Application

In Chapter 10, we discussed marker-based augmented reality applications using the String SDK. Location-based AR applications have been available longer than marker-based AR applications due to the processing power required on a handheld device to recognize markers.

In this chapter, we’ll take a more traditional look at AR applications, and build something closer to the original apps that started the revolution on the AppStore and Android Market.

We are going to build a GPS-enabled AR application to find nearby Facebook places.

Getting Set Up

First, we need to make sure we are set up for developing an application around Facebook’s Open Graph. There are a few steps to this process. Basically, they are:

- Create a Facebook application
- Clone the Facebook iOS SDK GitHub repository
- Enable single sign-on for the application

Creating a Facebook Application

Creating an application for Facebook gives the API and your users context for permissions and data. Without an application, there would be no bounds for what you are retrieving via the Open Graph API. The Facebook application allows your users to decide what type of access they will give to your application.

Visit https://developers.facebook.com/apps. If you have worked with the Facebook APIs in the past, you should be all set up to create a new Facebook application. In the
top right of the Developer’s Dashboard there is a button labeled Create New App. Click this button and follow the instructions to set up your application. I’ve named my application kyleroche. When you’re set up, you should see something like Figure 11–1 on your app’s Dashboard.

![Figure 11–1. Set up the Facebook application.](image)

Take note of your App ID and App Secret. You will need your App ID when you set up your Xcode project.

**Cloning the Facebook iOS SDK**

Using your browser, visit https://github.com/facebook/facebook-ios-sdk to download the latest version of the Facebook iOS SDK. Clone the repository to your local machine. If you’re interested, you can run through some of the sample application. Open the Xcode project located in the sample subdirectory. Open DemoAppDelegate.m in Xcode, and locate the section of code shown in Listing 11–1.

**Listing 11–1. Set Your Facebook App ID**

```swift
// Your Facebook APP Id must be set before running this example
// Also, your application must bind to the fb[app_id]:// URL
// scheme (substitute [app_id] for your real Facebook app id).
static NSString* kAppId = nil;
```

Make sure you change nil to your Facebook App ID. There is one more step you need to complete to test the demo application provided with the SDK. Open your application’s .plist file and find the entry for URL Schemes. Item 0, of that array, needs a value of fb[your app id] to run properly. When authenticating from a native iOS application, Facebook validates the local app’s authenticity by using a URL Scheme. In iOS, URL Schemes are used to launch other native applications in context. The prefix