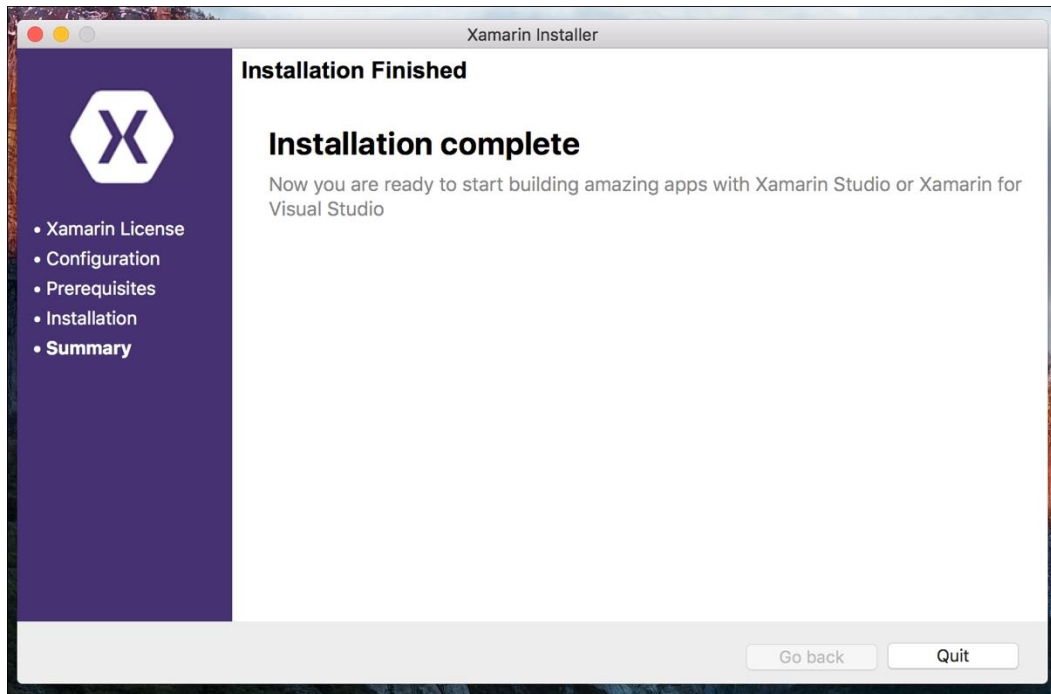
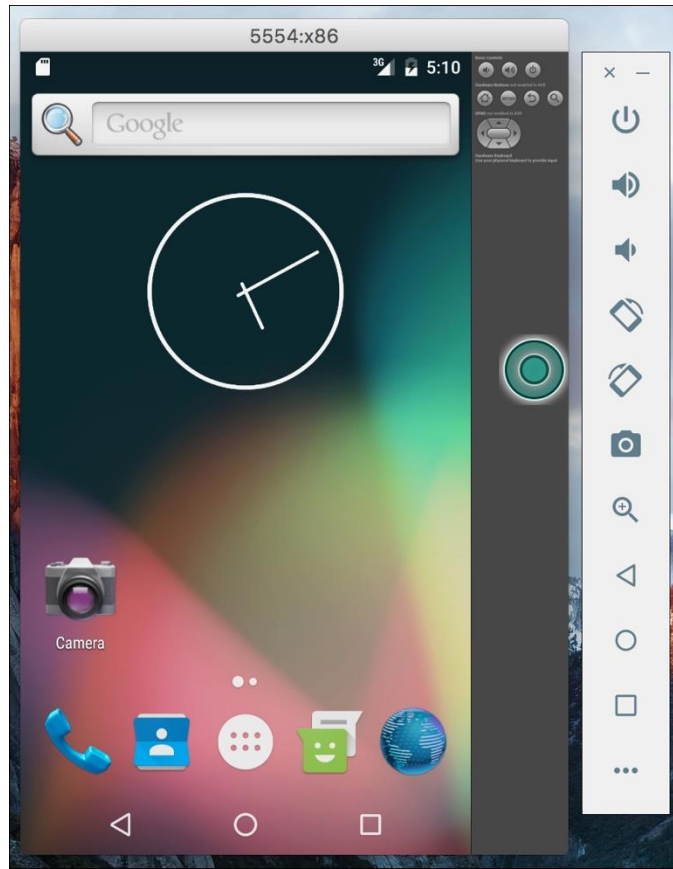
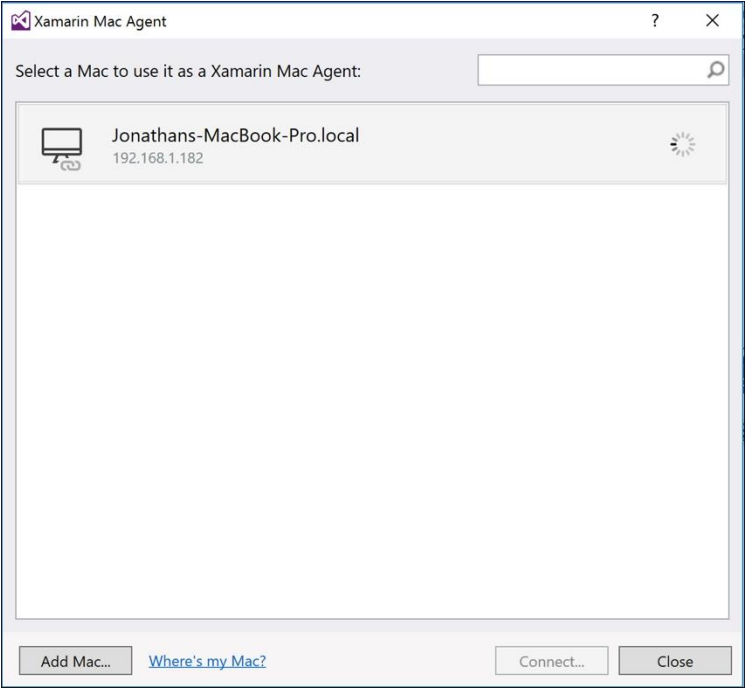
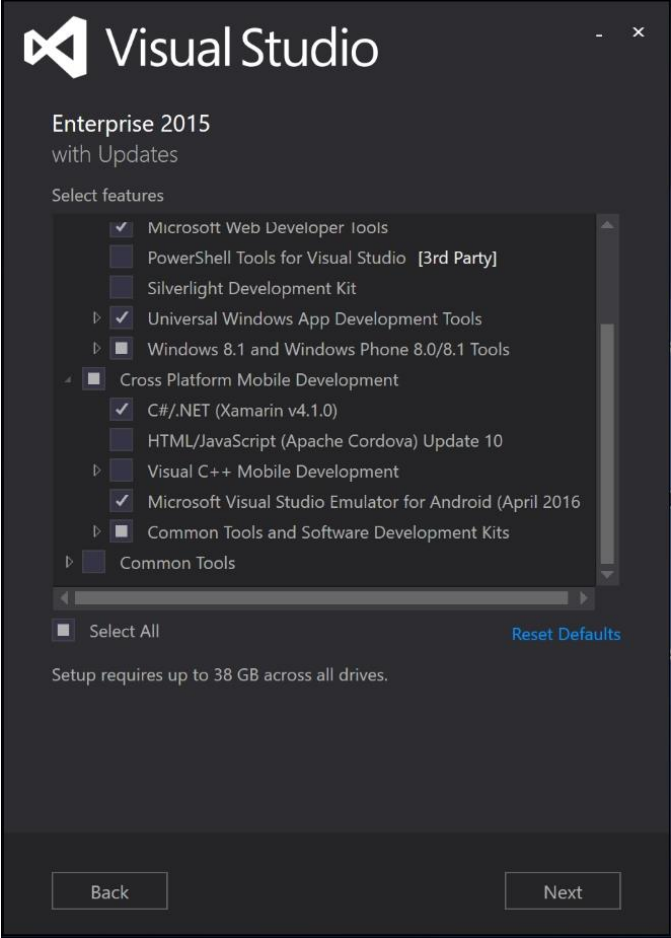


# Chapter 1: Xamarin Setup







### Thank You for Joining an Apple Developer Program

Dear Jonathan Peppers,

Thank you for joining the iOS Developer Program. You now have access to a comprehensive set of development tools and resources to assist you in developing innovative apps.

Please feel free to [contact us](#) if you have any general questions or require assistance.

Best regards,

Apple Developer Support

[Log in now](#)

### Agreements, Tax, and Banking

#### Master Agreements

#### Contracts In Effect

Contract Region	Contract Type	Contract Number	Contract Info	Bank Info	Tax Info	Effective Date	Expiration	Download
All (See Contract)	Paid Applications	MS109188090	<a href="#">Edit</a>	<a href="#">Edit</a>	<a href="#">View</a>	Oct 24, 2015	Feb 16, 2017	<a href="#">Download Agreement</a>
World	iAd App Network	MS7768795	<a href="#">Edit</a>	<a href="#">Edit</a>	<a href="#">View</a>	Jun 23, 2012	Feb 16, 2017	<a href="#">Download Agreement</a>
World	Free Applications	MS109187950	N/A	N/A	N/A	Feb 13, 2015	Feb 16, 2017	N/A

#### Transfer Agreements

Once an app transfer has been requested, the recipient's Team Agent has 60 days from the day initiated to accept the request. Contracts that have not been accepted within 60 days will be canceled. App transfers can take up to two business days to complete, depending on an export compliance review.

You have no Transfer Agreements.

[Watch the help video](#)

[View Pricing Matrix](#)

[Done](#)

Jonathan Peppers ▾ Help & Feedback ▾

**Publish an Android App on Google**

If you need help with the details, have a look at the [Getting started guide](#).

**Use Google Play game services**

Add social gaming features to your games on Android, iOS and the web. [Learn more](#)

**Are you working in a team?**  
[Invite co-workers to the Developer Console.](#)

If you are planning to create paid apps or in-app products, you'll need to [set up a merchant account](#).

Jonathan Peppers ▾ Help & Feedback ▾

**Publish an Android App on**

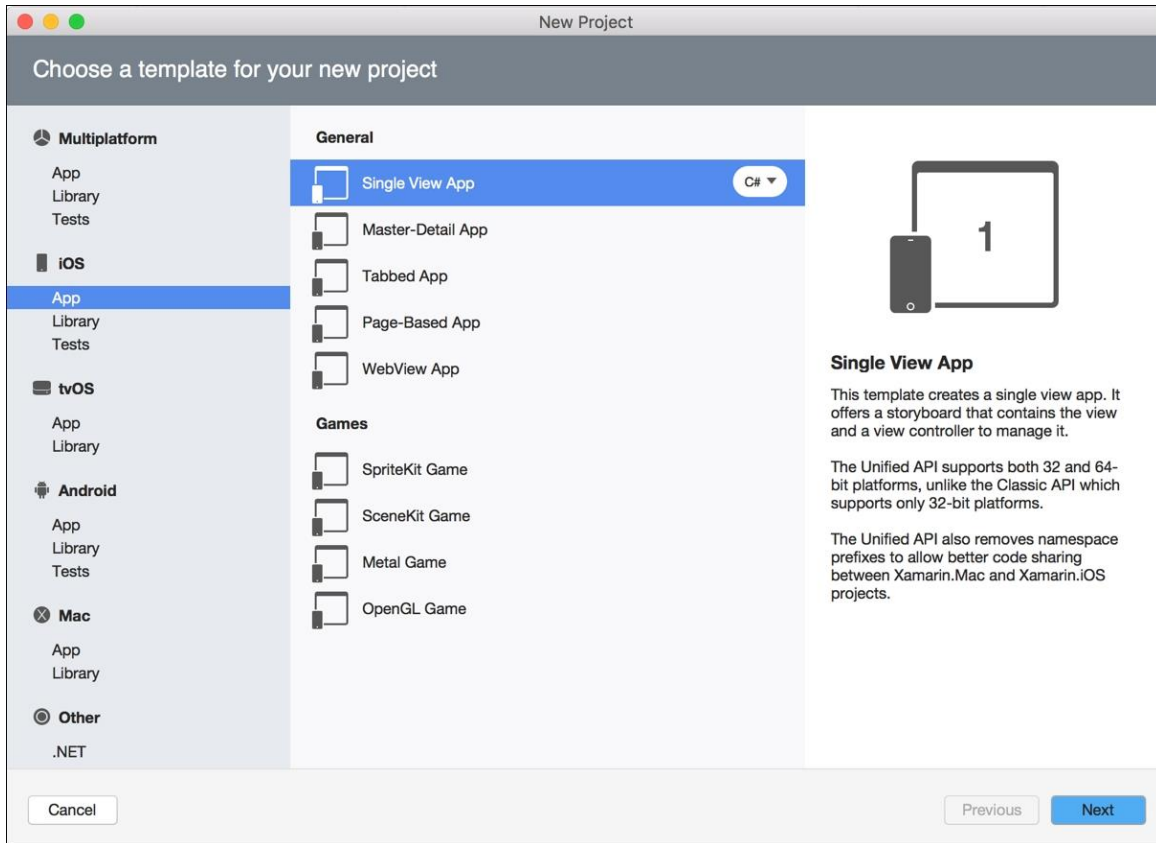
If you need help with the details, have a look at the [Getting started guide](#).

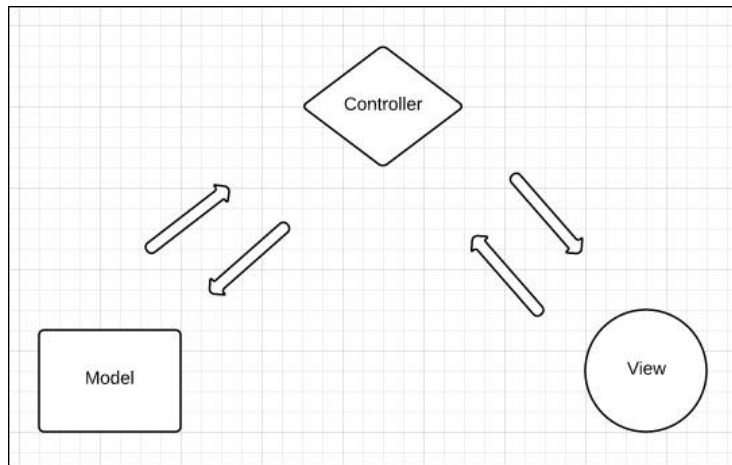
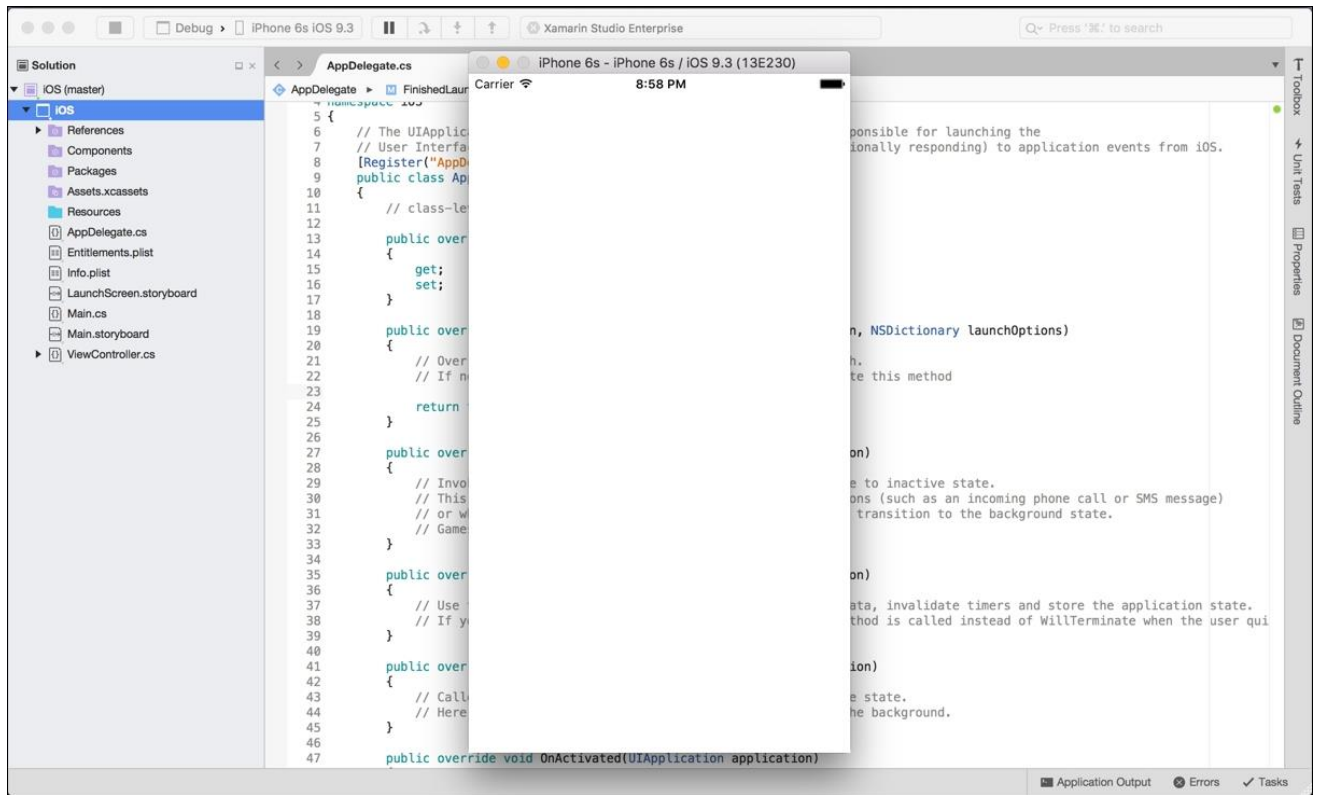
**Use Google Play game services**

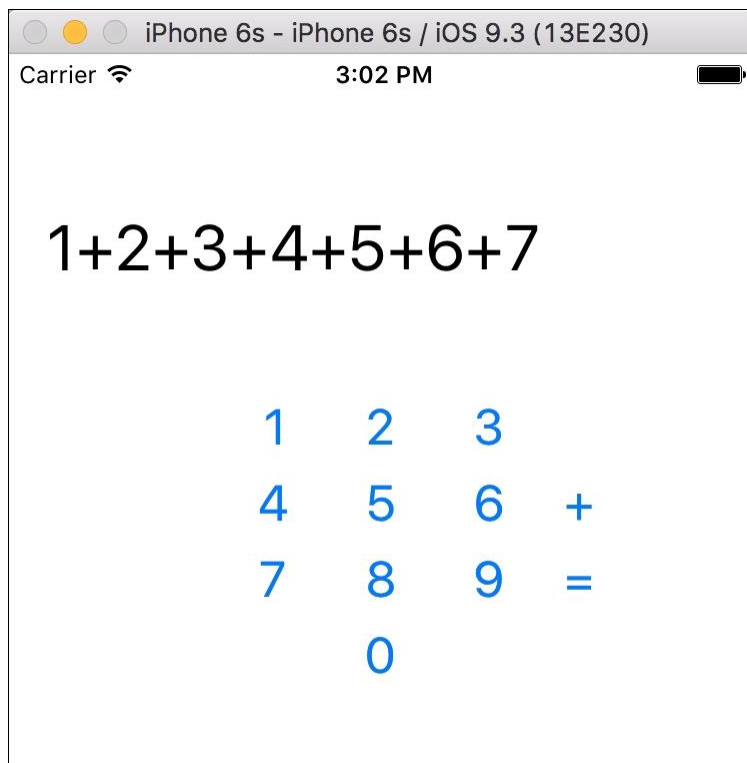
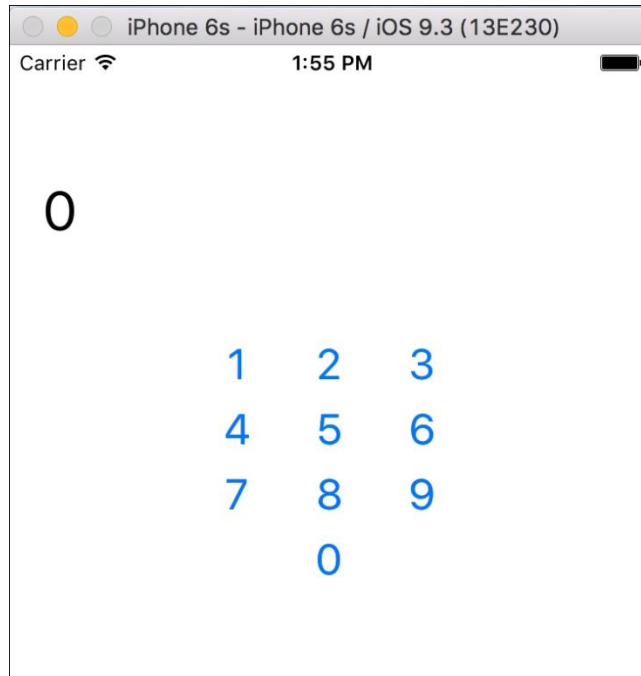
Add social gaming features to your games on Android, iOS and the web. [Learn more](#)

**Are you working in a team?**  
[Invite co-workers to the Developer Console.](#)

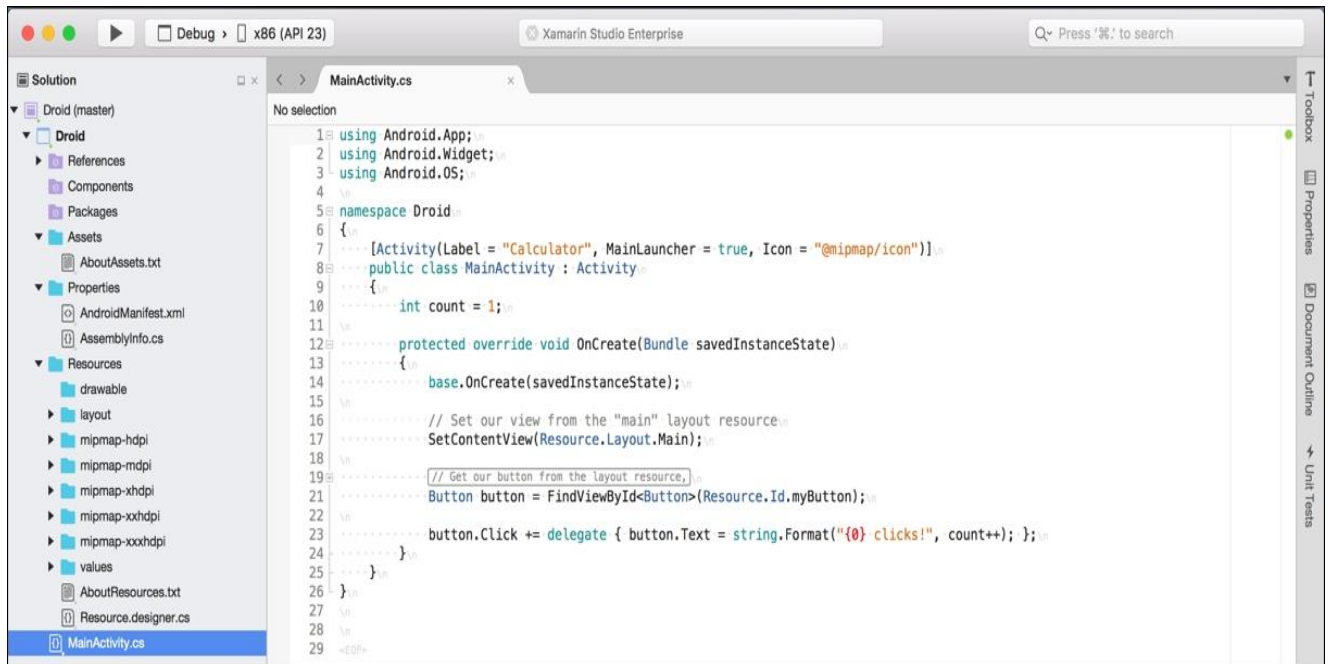
## Chapter 2: Hello, Platforms!

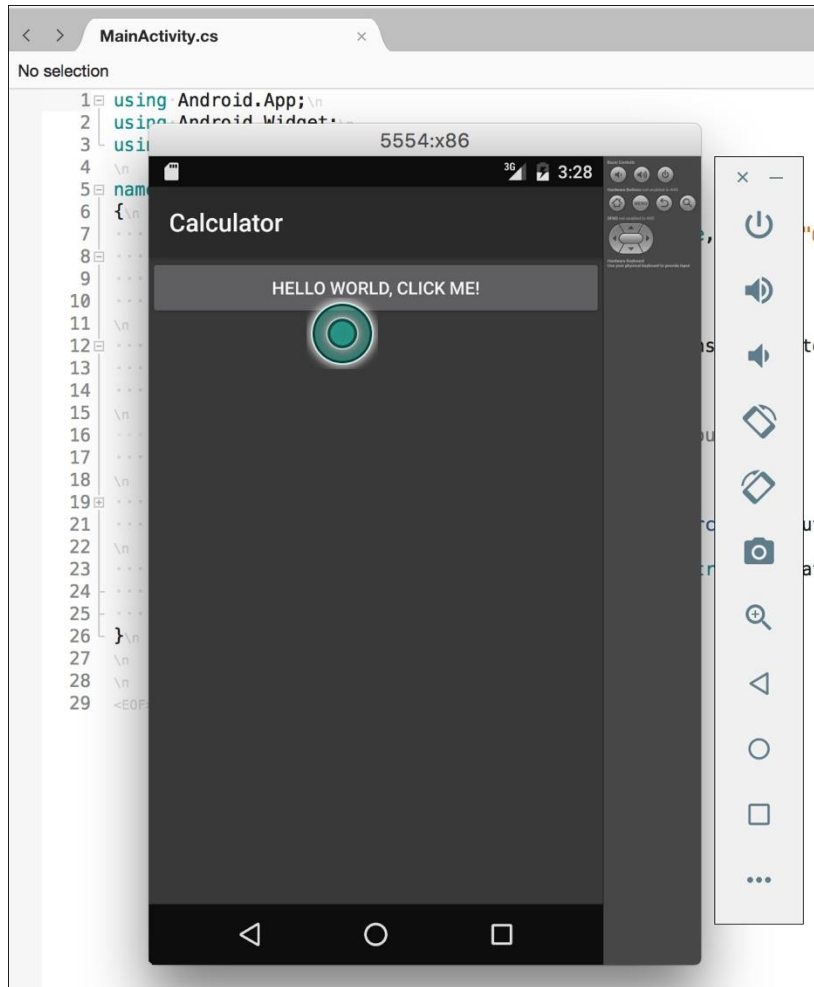


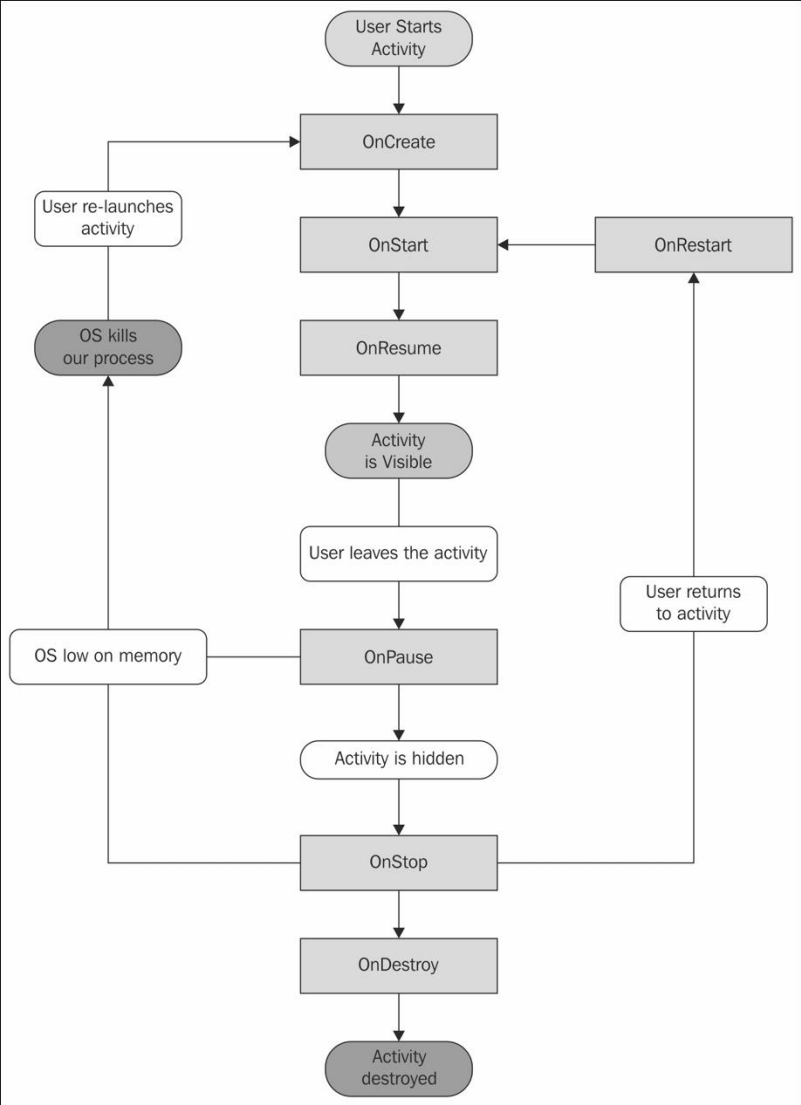


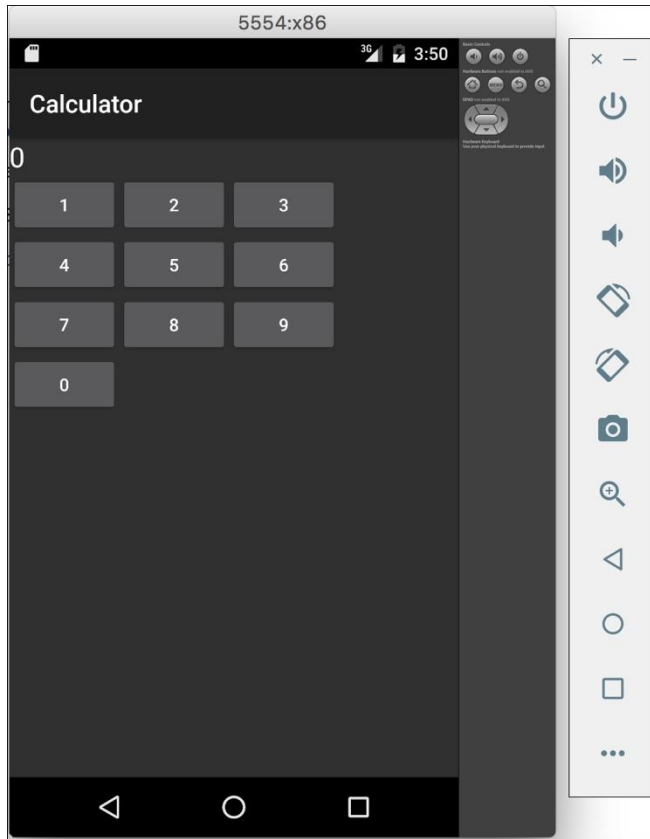


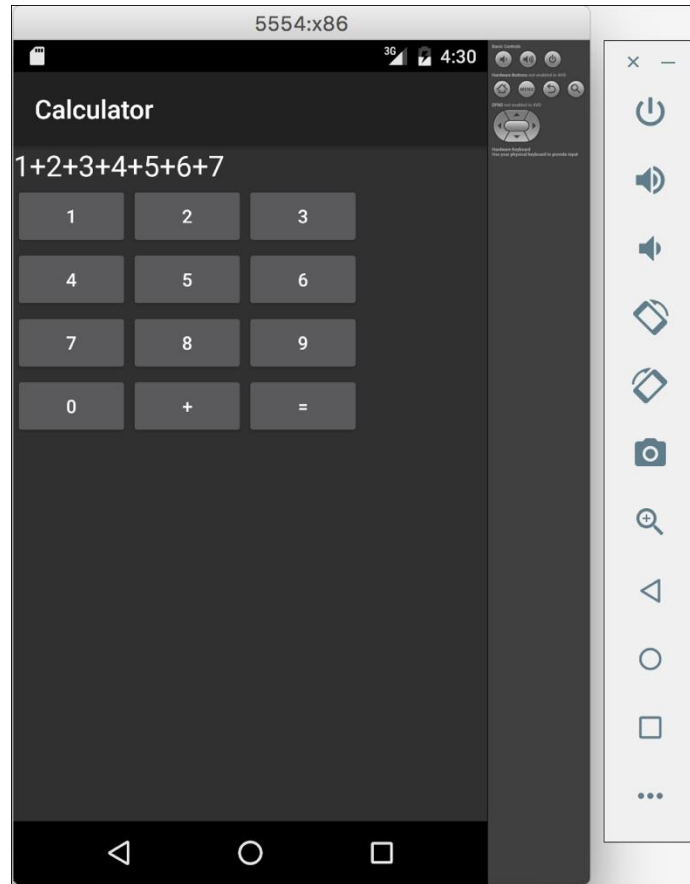




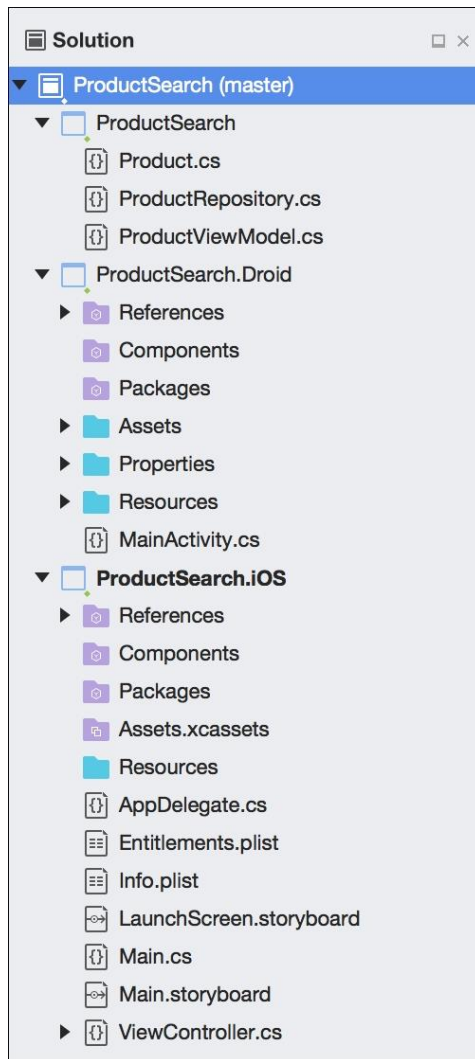
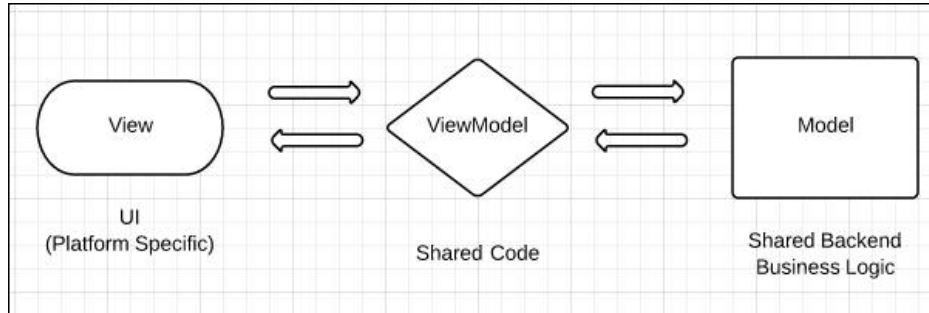




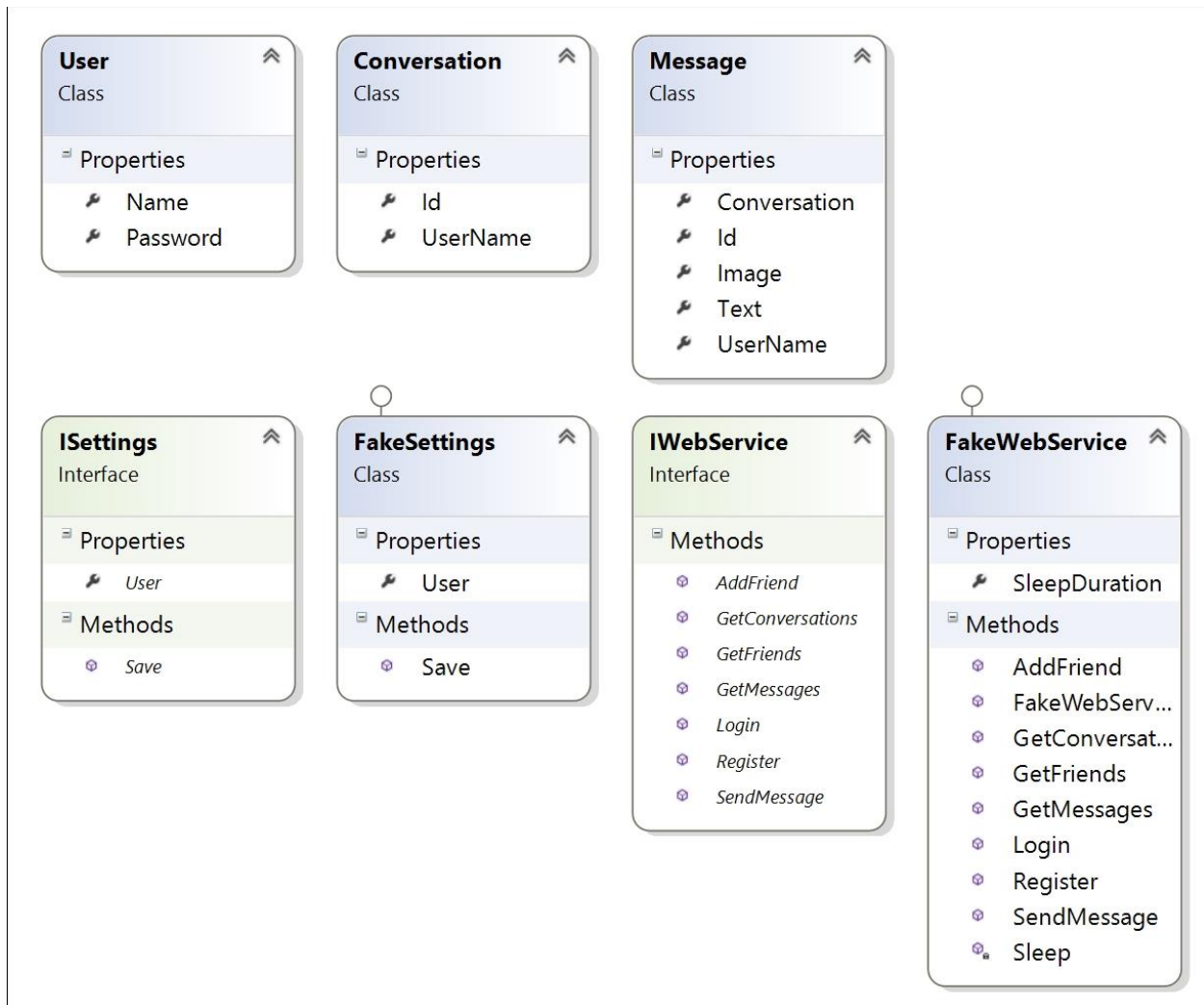
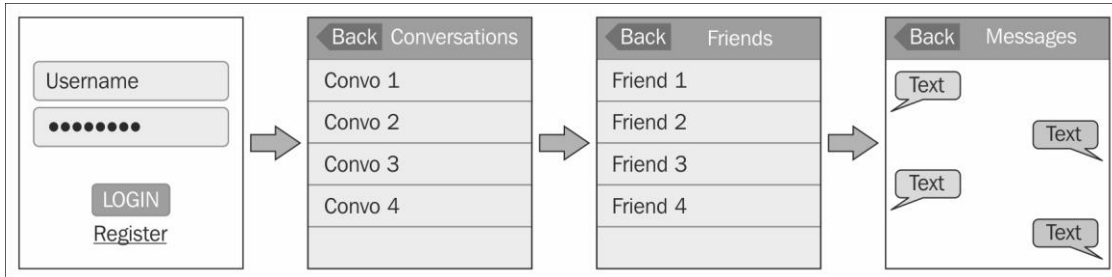


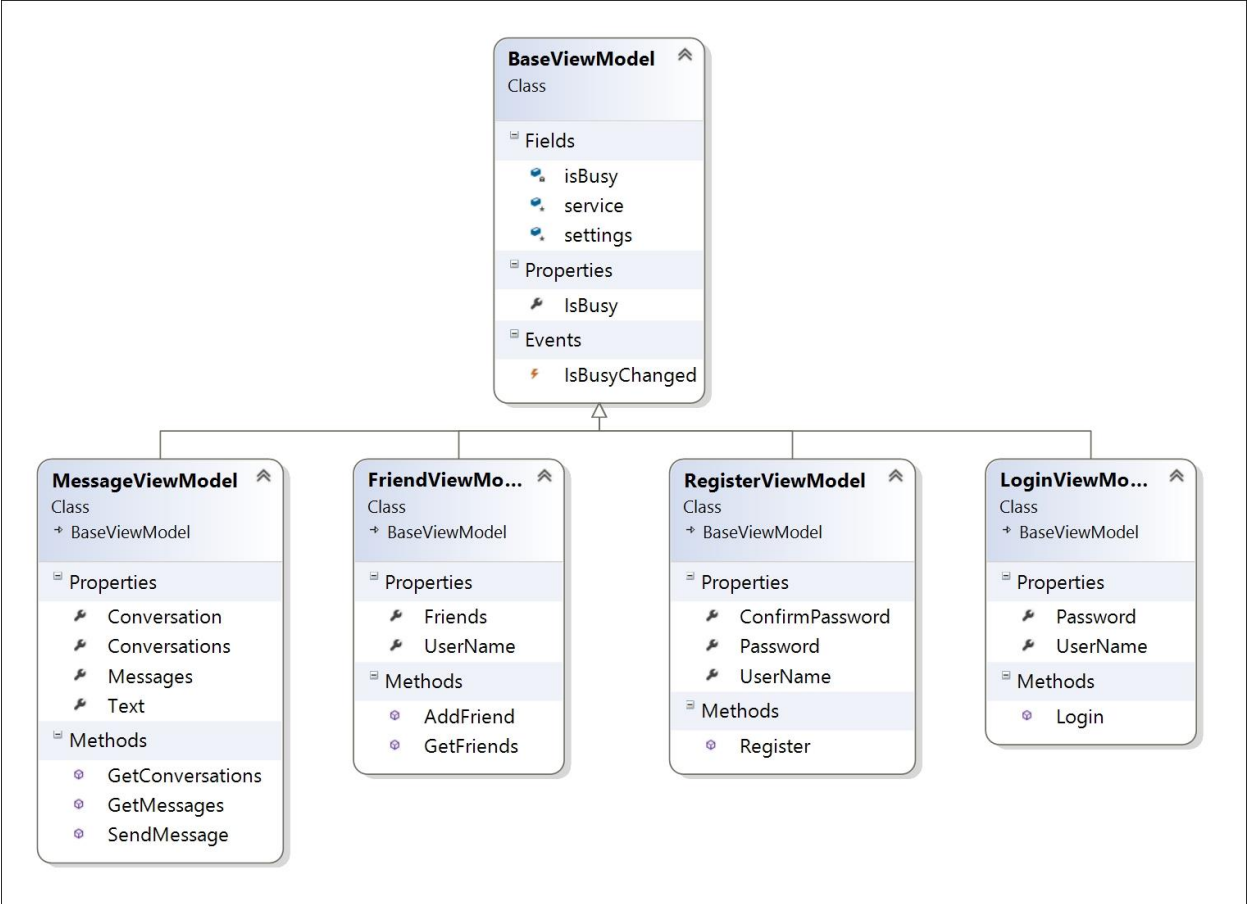


## Chapter 3: Code Sharing Between iOS and Android



## Chapter 4: XamSnap - A Cross-Platform App







⚡ Unit Tests

▶▶▶ Run All

- ✔ XamSnap
  - ✔ XamSnap.Tests
    - ✔ XamSnap
      - ✔ Tests
        - ✔ LoginViewModelTests
          - ✔ LoginSuccessfully

Toolbox Properties Document Outline Unit Tests

⚡ Test Results

✔ Successful Tests ? Inconclusive Tests ❌ Failed Tests ⚠ Ignored Tests 🗑 Output ▶▶▶ Rerun Tests

📄 Test results for XamSnap configuration Debug

- ✔ XamSnap.XamSnap.Tests.XamSnap.Tests.LoginViewModelTests.LoginSuccessfully

Passed: 1 Failed: 0 Errors: 0 Inconclusive: 0 Invalid: 0 Ignored: 0 Skipped: 0 Time: 00:00:00.0280000

⚡ Test Results

⚡ Test Results

✔ Successful Tests   ? Inconclusive Tests   ❌ Failed Tests   ⚠ Ignored Tests   🖨 Output   ▶ Rerun Tests   ❌

📘 Test results for **XamSnap** configuration **Debug**

▼ ❌ XamSnap.XamSnap.Tests.XamSnap.Tests.LoginViewModelTests.LoginSuccessfully

Expected: null  
But was: <XamSnap.User>

Passed: 0 Failed: 1 Errors: 0 Inconclusive: 0 Invalid: 0 Ignored: 0 Skipped: 0 Time: 00:00:00.0610000

⚡ Test Results

## Chapter 5: XamSnap for iOS

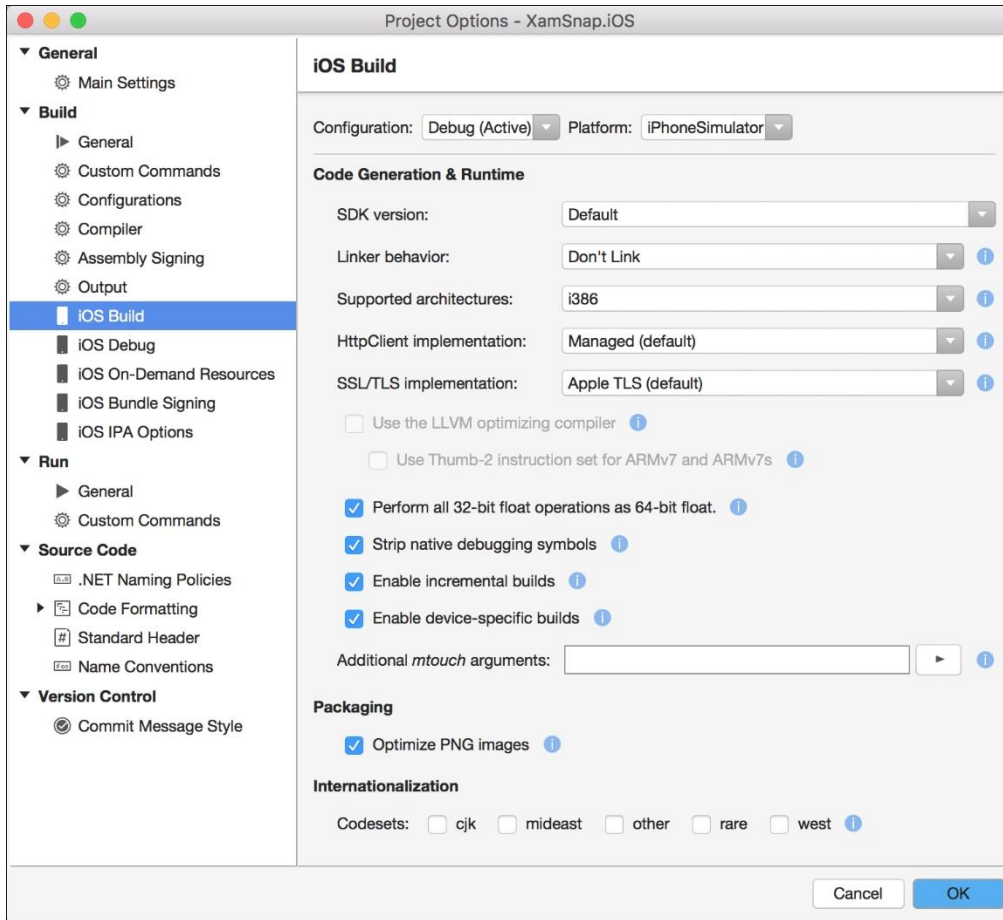
The screenshot shows the Xcode Info.plist editor for an application named "XamSnap". The editor is divided into two main sections: "Identity" and "Deployment Info".

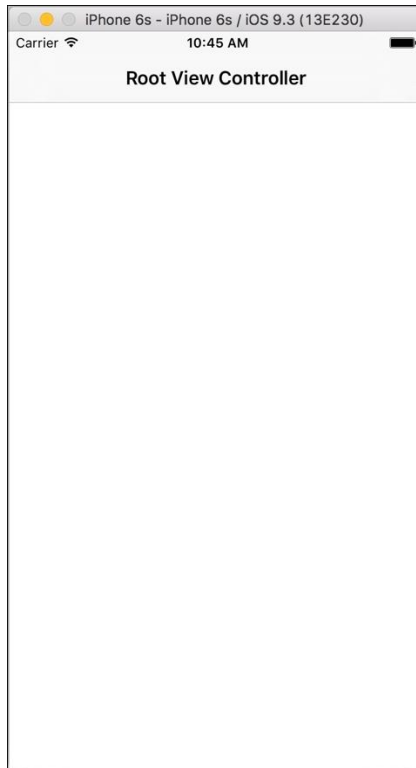
**Identity Section:**

- Application Name: XamSnap
- Bundle Identifier: com.jonathanpeppers.xamsnap
- Version: 1.0
- Build: 1.0

**Deployment Info Section:**

- Deployment Target: 8.0
- Devices: Universal
- Main Interface: Main
- Device Orientations:
  - Portrait
  - Upside Down
  - Landscape Left
  - Landscape Right
- Status Bar Style:
  - Hide status bar
  - Requires full screen





**Properties** [Close] **Document Outline**

**Widget** [Layout] [Events]

---

**Identity**

Class  [v]

Module

Storyboard ID

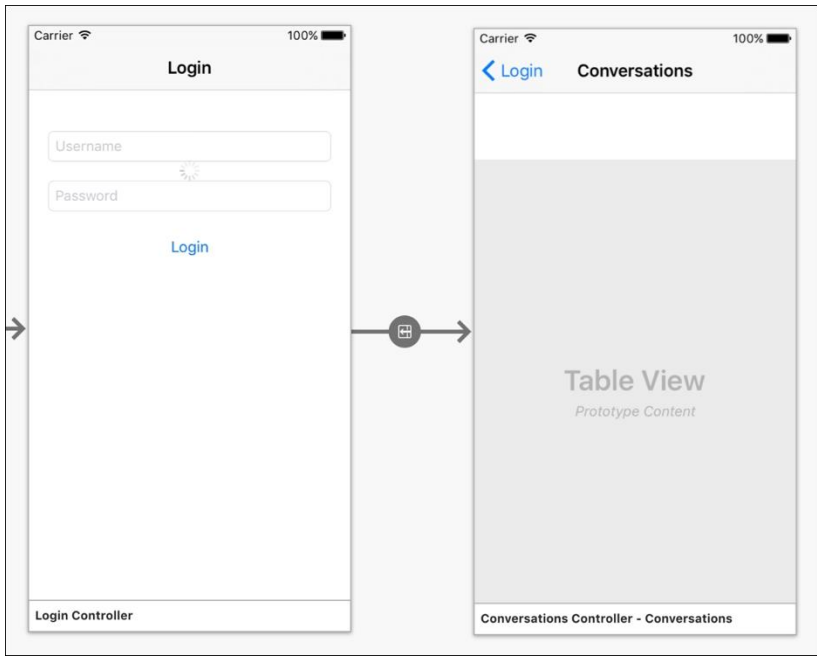
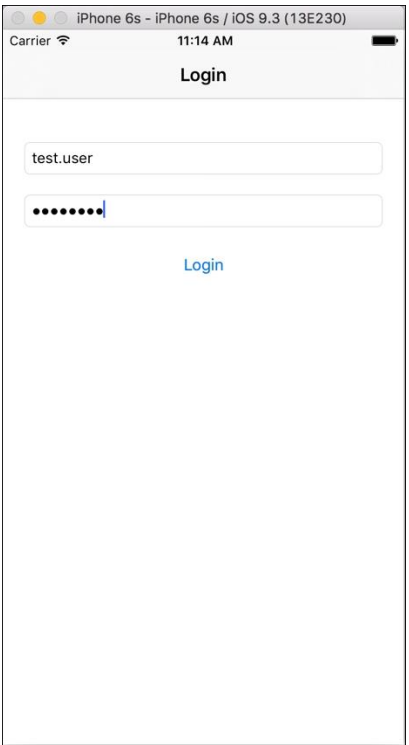
---

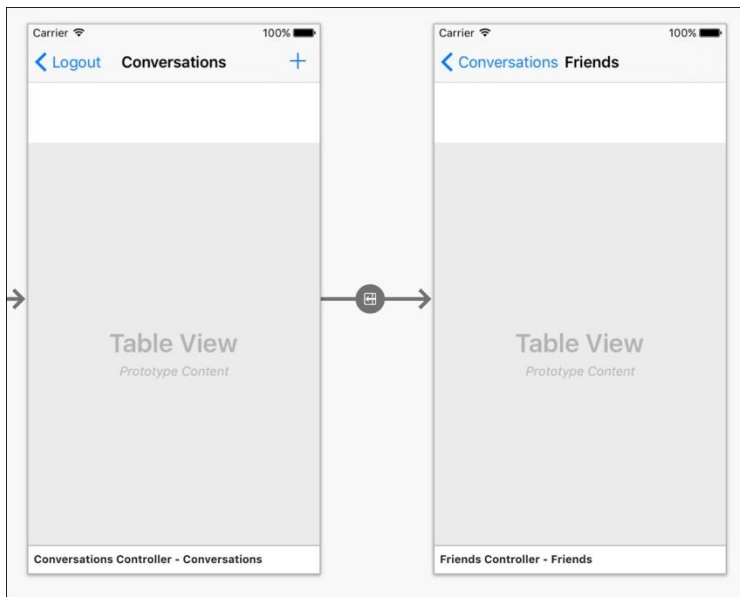
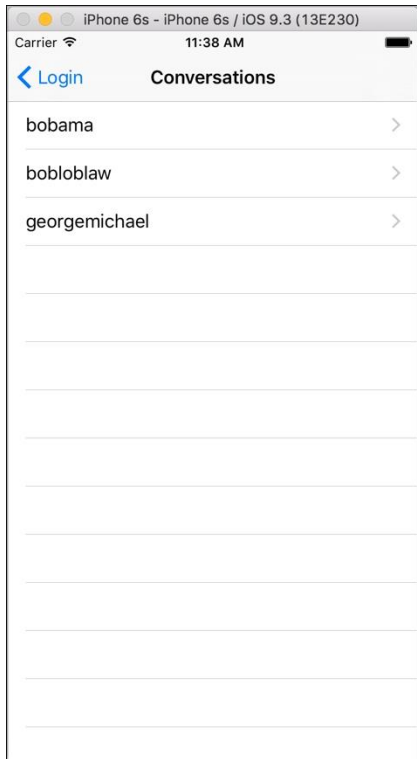
Restoration ID

Use Storyboard ID

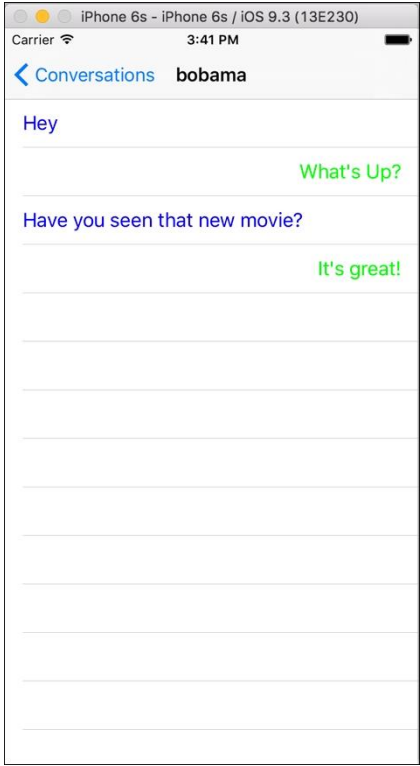
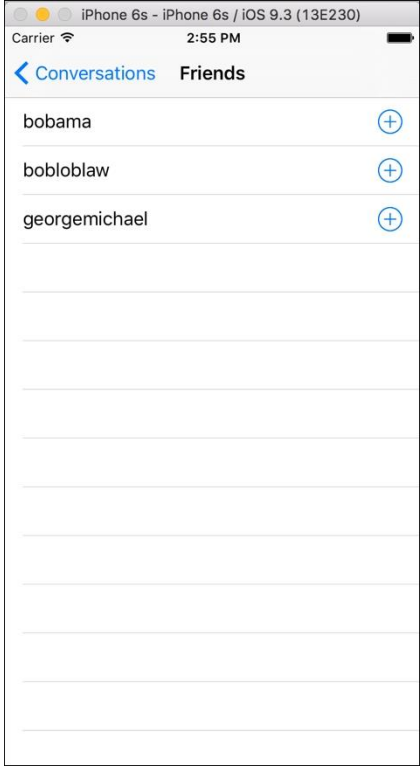
```
1 // WARNING\r\n
2 //\r\n
3 // This file has been generated automatically by Xamarin Studio
4 // actions declared in your storyboard file.\r\n
5 // Manual changes to this file will not be maintained.\r\n
6 //\r\n
7 using Foundation;\r\n
8 using System;\r\n
9 using System.CodeDom.Compiler;\r\n
10 using UIKit;\r\n
11 \r\n
12 namespace XamSnap.iOS\r\n
13 {\r\n
14     [Register("LoginController")] \r\n
15     partial class LoginController\r\n
16     {\r\n
17         [Outlet] \r\n
18         [GeneratedCode("iOS Designer", "1.0")] \r\n
19         UIKit.UIActivityIndicatorView indicator { get; set; } \r\n
20 \r\n
21         [Outlet] \r\n
22         [GeneratedCode("iOS Designer", "1.0")] \r\n
23         UIKit.UIButton login { get; set; } \r\n
24 \r\n
25         [Outlet] \r\n
26         [GeneratedCode("iOS Designer", "1.0")] \r\n
27         UIKit.UITextField password { get; set; } \r\n

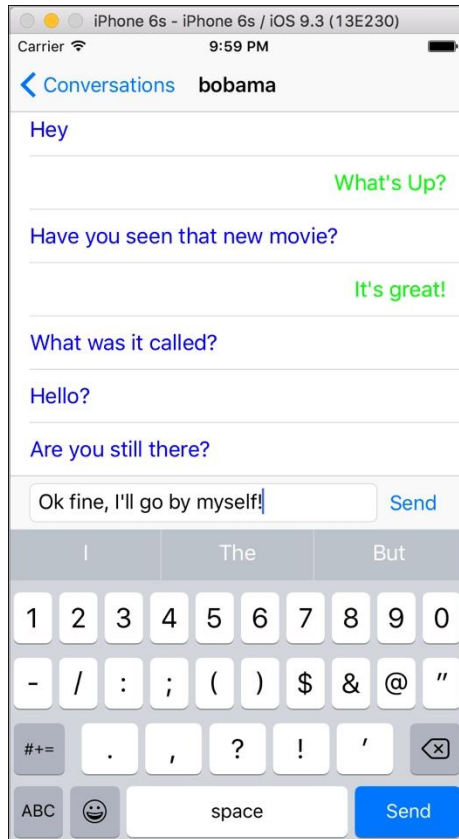
```



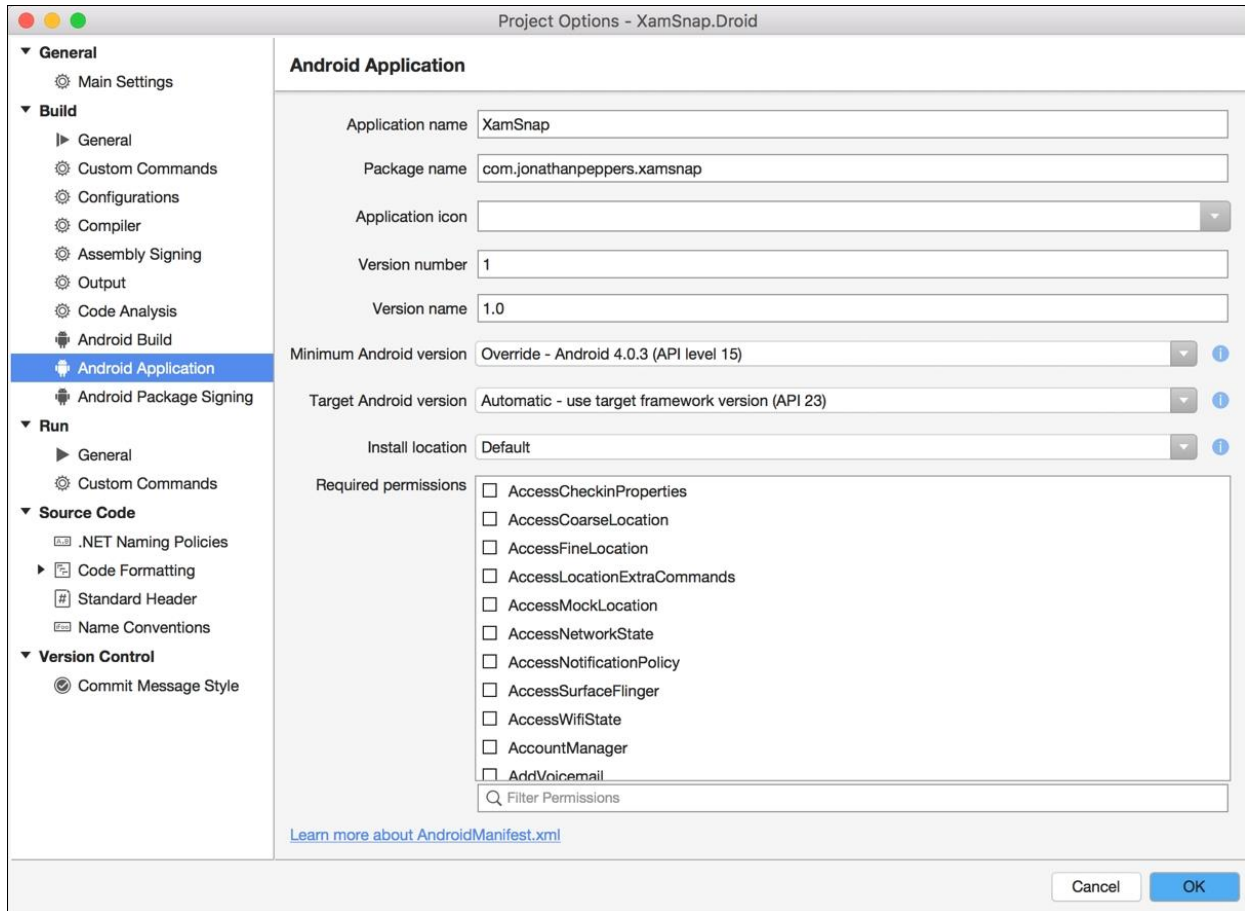


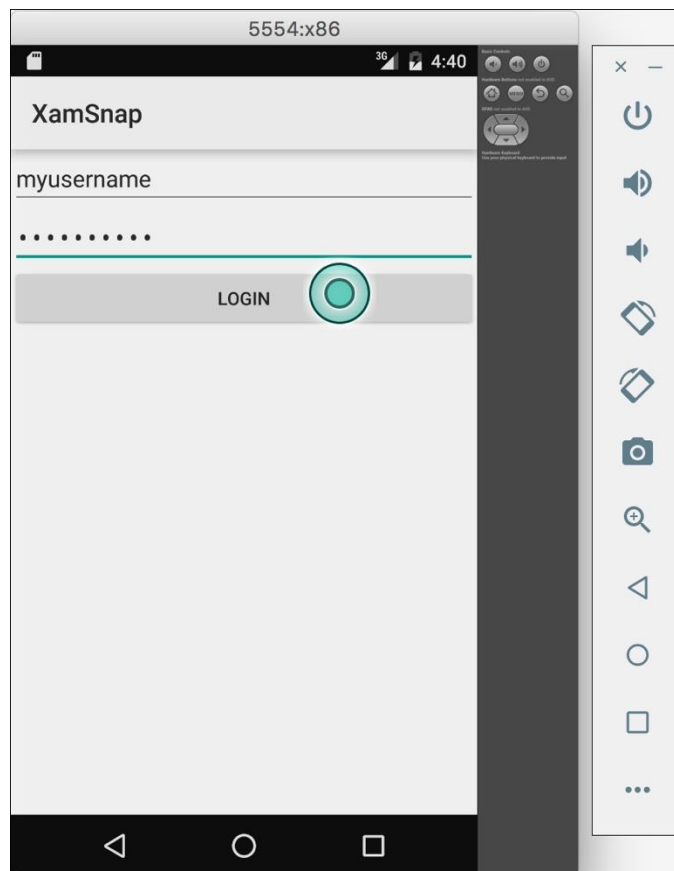
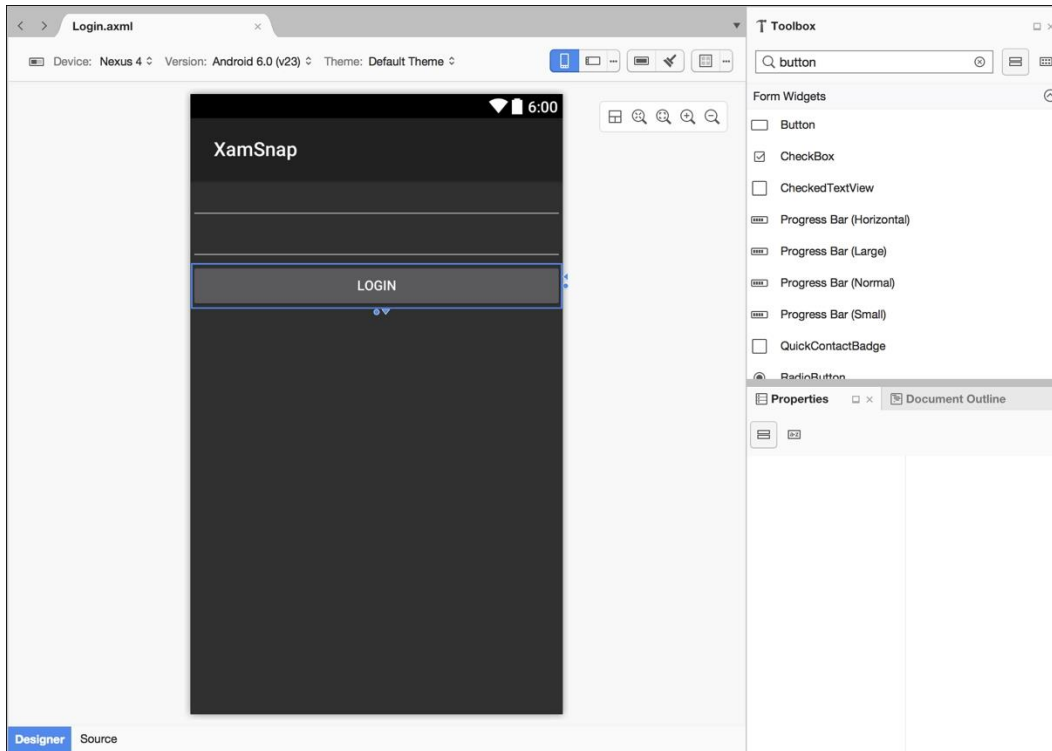


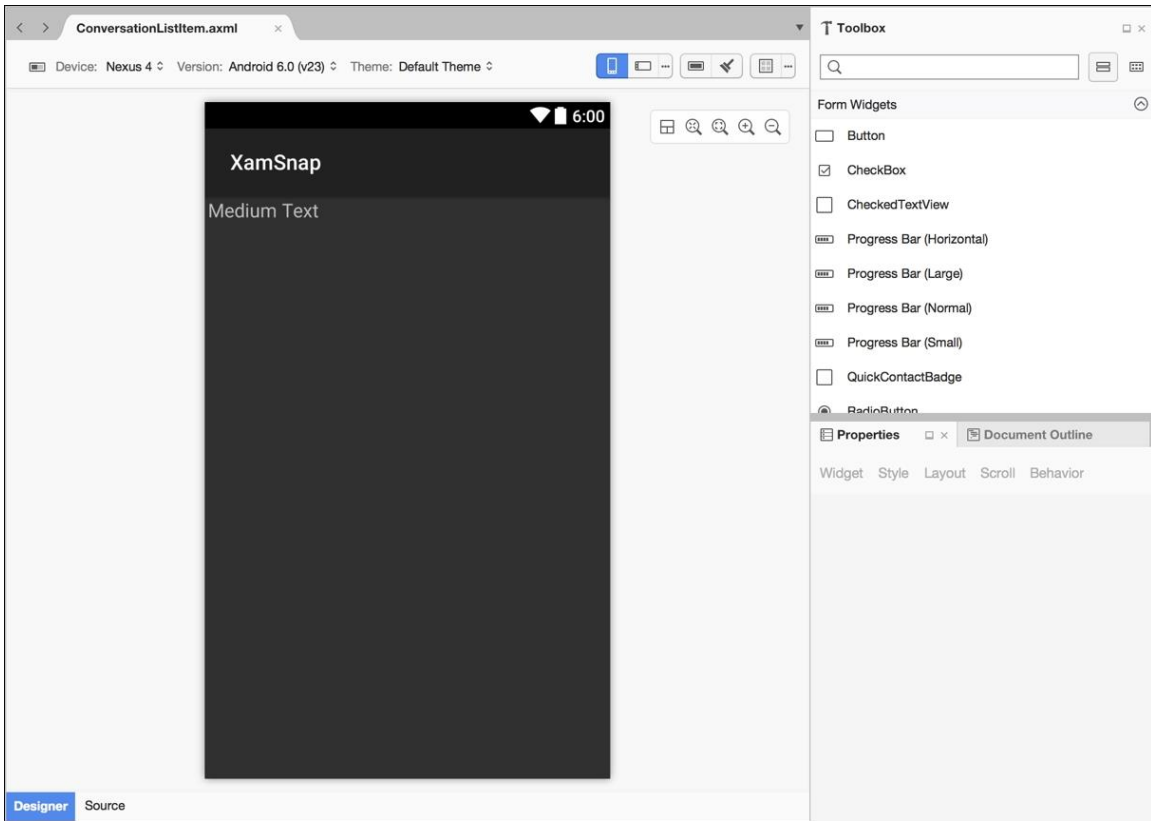




## Chapter 6: XamSnap for Android







5554:x86



3G



4:49

Basic Controls

Hardware Buttons not available in AVD

DPAD not available in AVD

Hardware Keyboard  
Use your physical keyboard to provide input

## Conversations

bobama

bobloblaw

georgemichael



5554:x86



3G



5:17

Basic Controls

Hardware Buttons not enabled in AVD

CPND not enabled in AVD

Hardware Keyboard  
Use your physical keyboard to provide input

## Friends

bobama



bobloblaw



georgemichael



5554:x86



3G



9:55

Basic Controls

Hardware Buttons not enabled in AVD

WIND not enabled in AVD

Hardware Keyboard  
Use your physical keyboard to provide input

bobama

Hey

What's Up?

Have you seen that new movie?

It's great!

Let's see another!

SEND

q w e r t y u i o p

a s d f g h j k l

↑ z x c v b n m ✕

?123 , . ↩






## Chapter 7: Deploying and Testing on Devices

**Device Information**

Name	Jon Peppers' iPhone
Model	iPhone 6 Plus
Capacity	55.41 GB (16.62 GB available)
Battery	69%
iOS	9.3.4 (13G35)
Identifier	

[View Device Logs](#) [Take Screenshot](#)



iOS Devices + ✎ 🔍

You can register 96 additional devices.

Name	UDID
Jon's 4S	[REDACTED]
Jon's iPad 3	[REDACTED]
Jon's iPhone 5S	[REDACTED]



**Jonathan Peppers**  
jonathan.peppers@gmail.com

Signing Identities	Action
iOS Development	
iOS Distribution	
Mac Development	<a href="#">Create</a>
Mac App Distribution	<a href="#">Create</a>
Mac Installer Distribution	<a href="#">Create</a>
Developer ID Application	<a href="#">Create</a>
Developer ID Installer	<a href="#">Create</a>

Provisioning Profiles	Expires	Action
JonathanPeppersDev	8/29/17	<a href="#">Download</a>
XamSnapAppStore	8/29/17	<a href="#">Download</a>

[Download All](#)

[Done](#)



## Your provisioning profile is ready.

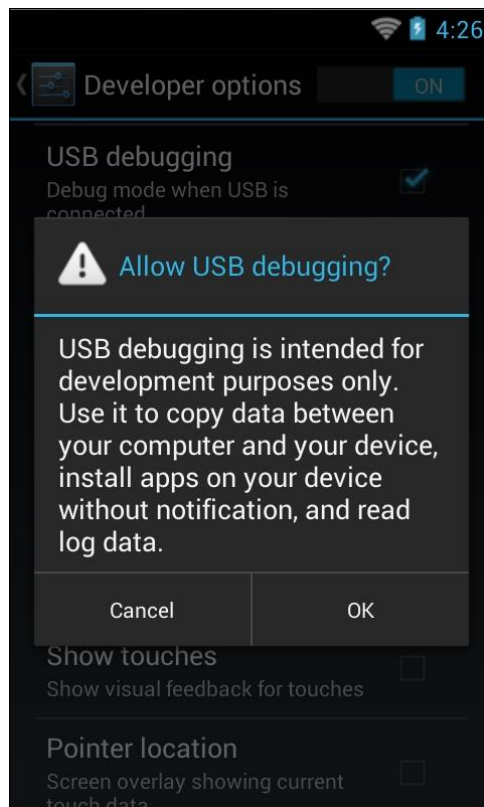
### Download and Install

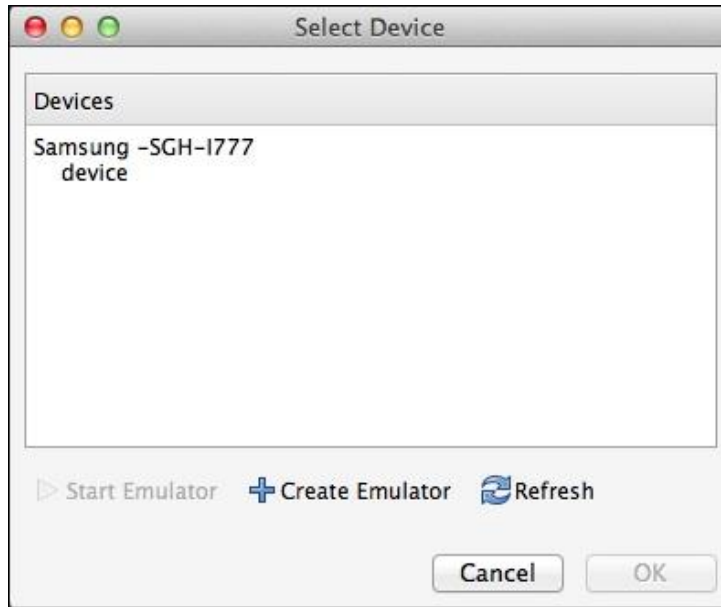
Download and double click the following file to install your Provisioning Profile.



Name: JonPeppersDev  
Type: iOS Development  
App ID: com.jonathanpeppers.\*  
Expires: Aug 29, 2017

Download








## Chapter 8: Contacts, Camera, and Location

The screenshot shows the Xamarin Component Store interface for the Xamarin.Mobile component. The page is titled "Xamarin Components" and "Xamarin Component Store - Xamarin.Mobile". It features a navigation menu on the left with options like "Publisher", "Category", "Price", "Versions", "Published On", and "Tags". The main content area displays the component name "Xamarin.Mobile 0.7.7" by "Xamarin Inc.", along with a 4-star rating (94 ratings) and compatibility icons for iOS, Android, and Windows. A description states: "Xamarin.Mobile is a library that exposes a single set of APIs for accessing common mobile device functionality across iOS, Android and Windows platforms." Below the description are links for "Getting Started", "License", and "Website", and an "Add to App" button. A central graphic shows a central 'X' icon connected to various mobile device icons (Apple, Android, Windows) and feature icons (Camera, Location, Contacts, etc.).

Xamarin Component Store - Xamarin.Mobile

Suggest a Component Submit a Component

 **Xamarin.Mobile** 0.7.7  
Xamarin Inc.

94 ratings ★★★★☆ Compatible with   


Xamarin.Mobile is a library that exposes a single set of APIs for accessing common mobile device functionality across iOS, Android and Windows platforms.

[Getting Started](#) [License](#) [Website](#) [Add to App](#)

**Publisher**  
Xamarin Inc.


**Category**  
Libraries

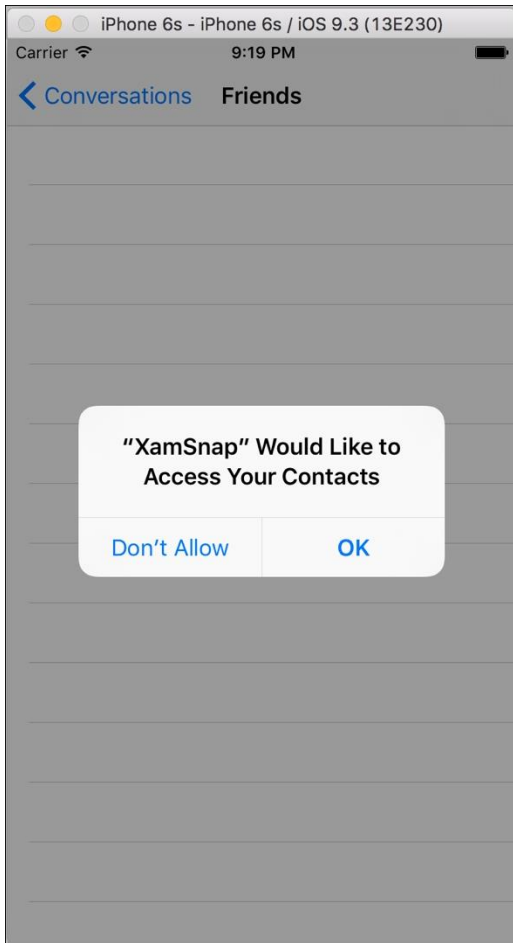
**Price**  
Free

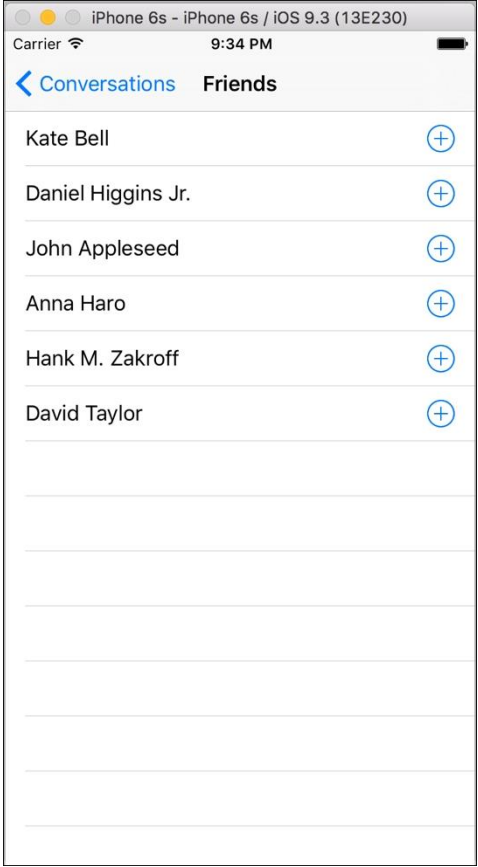
**Versions**  
0.7.7 

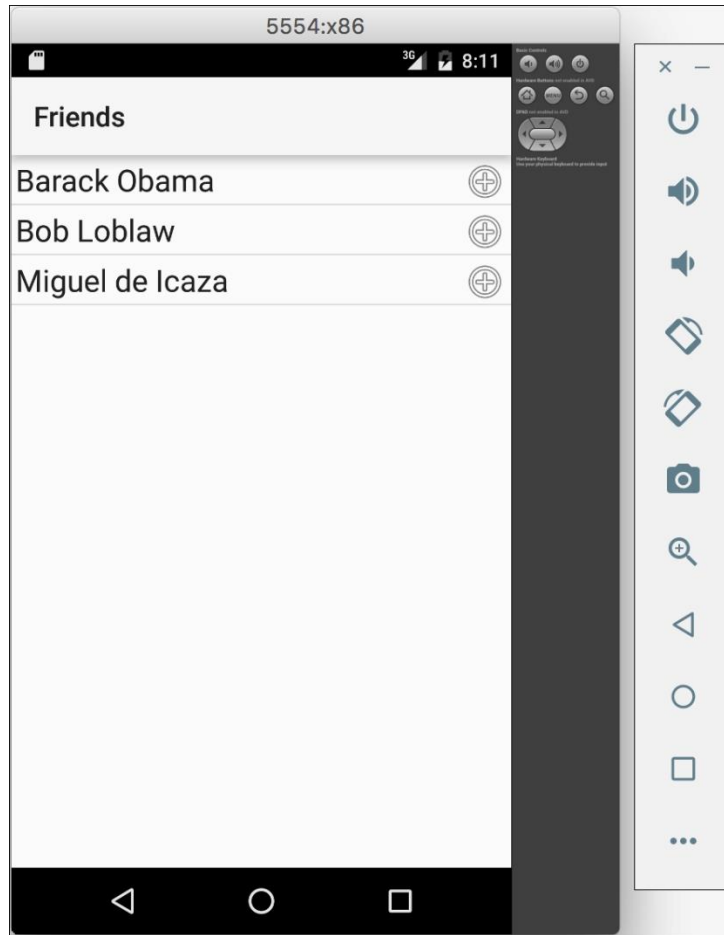
**Published On**  
October 01, 2015 (348 days ago)

**Tags**  
ios-32 Android WP8 WinRT ios-64

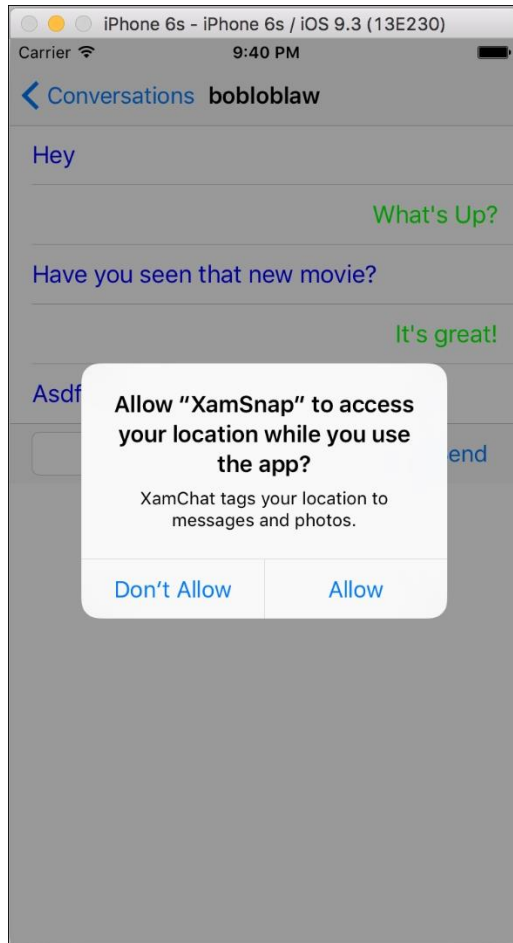












Extended controls

Location

Cellular

Battery

Phone

Directional pad

Fingerprint

Settings

Help

GPS data point

Decimal

Sexagesimal

Latitude: 37.422

Longitude: -122.084

Altitude (meters): 0.0

SEND

GPS data playback

Delay (sec)	Latitude	Longitude	Elevation	Name	Description
-------------	----------	-----------	-----------	------	-------------

▶ Speed 1X

LOAD GPX/KML

< Conversations georgemichael

Hey

What's Up?

Have you seen that new movie?

It's great!



Like this photo?



Send

5554:x86

3G 4:17

georgemichael

Basic Controls

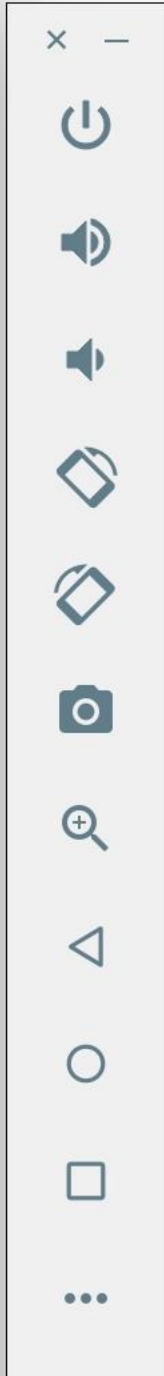
Hardware Buttons not emulated in AVD

WIND not available in AVD

Hardware Keyboard  
Use your physical keyboard to provide input



× —



Hey

What's Up?

Have you seen that new movie?

It's great!



Android rules!



SEND



## Chapter 9: Web Services with Push Notifications

The screenshot shows the Microsoft Azure portal interface for an App Service named 'xamsnap'. The breadcrumb navigation at the top indicates the path: Resource groups > xamsnap > xamsnap. The left sidebar contains navigation options: Overview (selected), Activity log, Access control (IAM), Tags, and Diagnose and solve problems. The main content area displays the 'Essentials' section with the following details:


Resource group	URL
xamsnap	<a href="http://xamsnap.azurewebsites.net">http://xamsnap.azurewebsites.net</a>
Status	App Service plan/pricing tier
Running	FreeEastUS (Free)
Location	FTP/deployment username
East US	No FTP/deployment user set
Subscription name	FTP hostname
Pay-As-You-Go	ftp://waws-prod-blu-057.ftp.azurewebsites...
Subscription ID	FTPS hostname
5a9942b9-c3a7-4204-9e4b-ae6d33f7ce6	ftps://waws-prod-blu-057.ftp.azurewebsites...

The screenshot shows the 'Logs' and 'Run' sections of the Azure portal. The 'Logs' section displays a list of log entries:

```
2016-10-05T22:03:13 Welcome, you are now connected to log-streaming service.
2016-10-05T22:04:09.270 Function started (Id=54d668aa-9dbc-4a24-98fb-f85e9ceffd2e)
2016-10-05T22:04:09.286 C# HTTP trigger function processed a request. RequestUri=https://xamsnap.azurewebsites.net/api/httptrigg
2016-10-05T22:04:09.303 Function completed (Success, Id=54d668aa-9dbc-4a24-98fb-f85e9ceffd2e)
2016-10-05T22:05:13 No new trace in the past 1 min(s).
2016-10-05T22:06:13 No new trace in the past 2 min(s).
2016-10-05T22:07:13 No new trace in the past 3 min(s).
```

The 'Run' section shows the request body and output:

Request body	Output	Status: 200 OK
<pre>1 { 2   "name": "Azure" 3 }</pre>	<pre>"Hello Azure"</pre>	

XamSnap		com.jonathanpeppers.xamsnap	
	Name:	XamSnap	
	Prefix:	JVDF6K5TG4	
	ID:	com.jonathanpeppers.xamsnap	
Application Services:			
Service	Development	Distribution	
App Groups	<input type="radio"/> Disabled	<input type="radio"/> Disabled	
Apple Pay	<input type="radio"/> Disabled	<input type="radio"/> Disabled	
Associated Domains	<input type="radio"/> Disabled	<input type="radio"/> Disabled	
Data Protection	<input type="radio"/> Disabled	<input type="radio"/> Disabled	
Game Center	<input checked="" type="radio"/> Enabled	<input checked="" type="radio"/> Enabled	
HealthKit	<input type="radio"/> Disabled	<input type="radio"/> Disabled	
HomeKit	<input type="radio"/> Disabled	<input type="radio"/> Disabled	
iCloud	<input type="radio"/> Disabled	<input type="radio"/> Disabled	
In-App Purchase	<input checked="" type="radio"/> Enabled	<input checked="" type="radio"/> Enabled	
Inter-App Audio	<input type="radio"/> Disabled	<input type="radio"/> Disabled	
Personal VPN	<input type="radio"/> Disabled	<input type="radio"/> Disabled	
Push Notifications	<input checked="" type="radio"/> Configurable	<input checked="" type="radio"/> Configurable	
SiriKit	<input type="radio"/> Disabled	<input type="radio"/> Disabled	



## Your provisioning profile is ready.

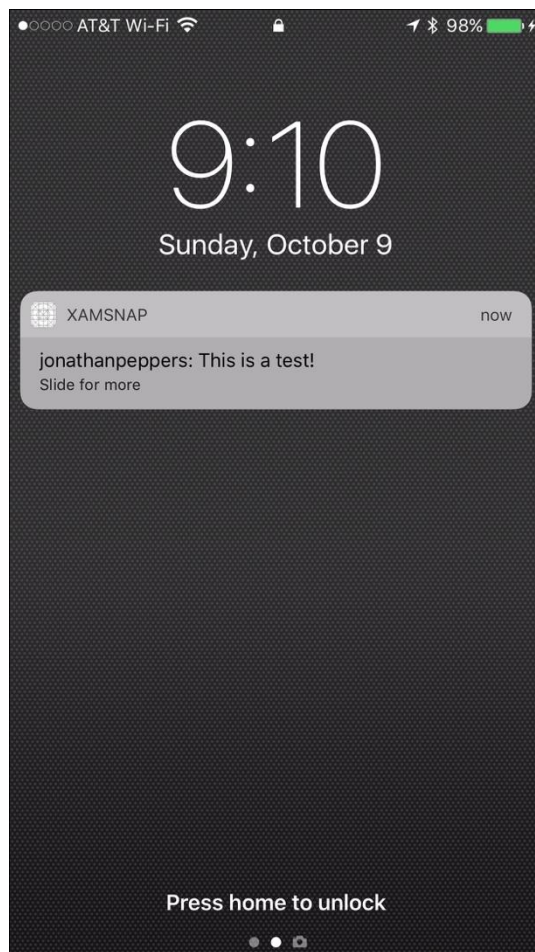
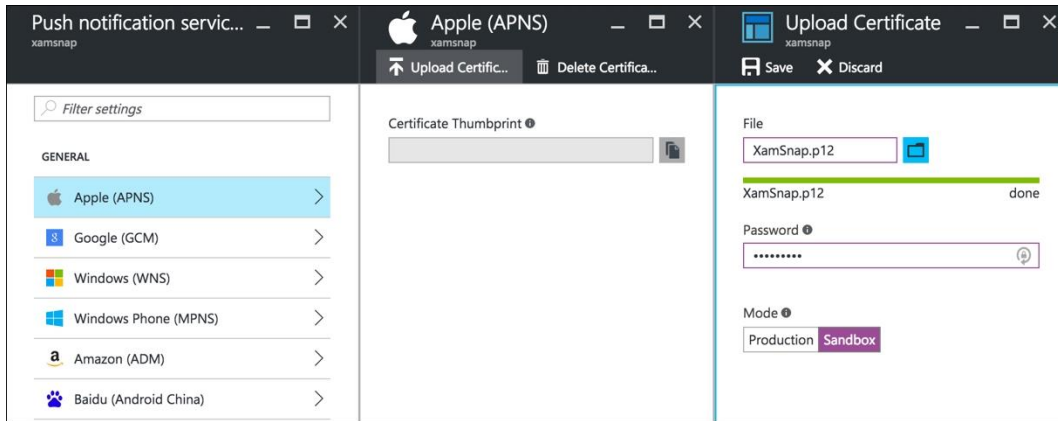
### Download and Install

Download and double click the following file to install your Provisioning Profile.



Name: XamSnapDev  
 Type: iOS Development  
 App ID: XXXXXXXXXX.com.jonathanpeppers.xamsnap  
 Expires: Oct 9, 2017

[Download](#)



## Project: XamSnap

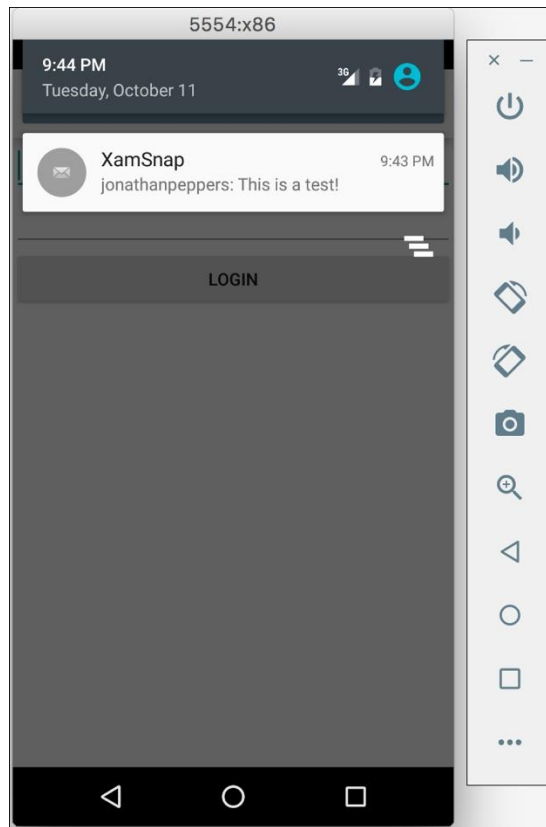
Details about your project 

**Project ID**

xamsnap

**Project number**

887040856377























## Chapter 10: Third-Party Libraries

Order by **FEATURED** ▾ DOWNLOADS NAME FRESH

Prev 1 2 3 4 5 6 Next

	<b>AWSSDK - Amazon Simple Storage Service</b> by Amazon Web Services ★★★★★ AWS S3 SDK for Xamarin	Free   
	<b>Azure Mobile Client SDK</b> by Microsoft ★★★★★ 6 ratings Store data in the cloud, authenticate users, and send push notifications.	Free   
	<b>IBM MobileFirst SDK</b> by IBM ★★★★★ 5 ratings Integrate your Xamarin apps with IBM MobileFirst Platform.	Free  
	<b>Microsoft Band SDK</b> by Xamarin Inc ★★★★★ 7 ratings Extend the experience of your application to your users' wrists via a new dimension of interaction.	Free   
	<b>Oracle Mobile Cloud Service SDK</b> by Xamarin Inc ★★★★★ 1 rating Connect to Oracle MCS for data storage, user authentication, push notifications, and more.	Free  

## Have you created something that makes app development easier?

Submit your component and share it with the world!

### 1 Create a component package containing libraries, templates, or UI elements.

Use the `xamarin-component` command line tool ([download](#)) to create your component package. For detailed instructions, see the [component packaging guidelines](#).

**Errors**

3 Errors 0 Warnings 0 Messages Build Output

!	Line	Description	File
✖	121	The type or namespace name `ILGenerator' could not be found. Are you missing an assembly reference? (CS0246)	DynamicMethodInjectorFactory.cs
✖	136	The type or namespace name `ILGenerator' could not be found. Are you missing an assembly reference? (CS0246)	DynamicMethodInjectorFactory.cs
✖	142	The type or namespace name `ILGenerator' could not be found. Are you missing an assembly reference? (CS0246)	DynamicMethodInjectorFactory.cs

Assembly Browser

Visibility: Only public members

Language Summary

- GoogleAnalytics.Droid
  - Resources
  - GoogleAnalytics.Tracking
    - CampaignTrackingReceiver
    - CampaignTrackingService
    - EasyTracker**
    - ExceptionReporter
    - Fields
    - GAServiceManager
    - GoogleAnalytics

```

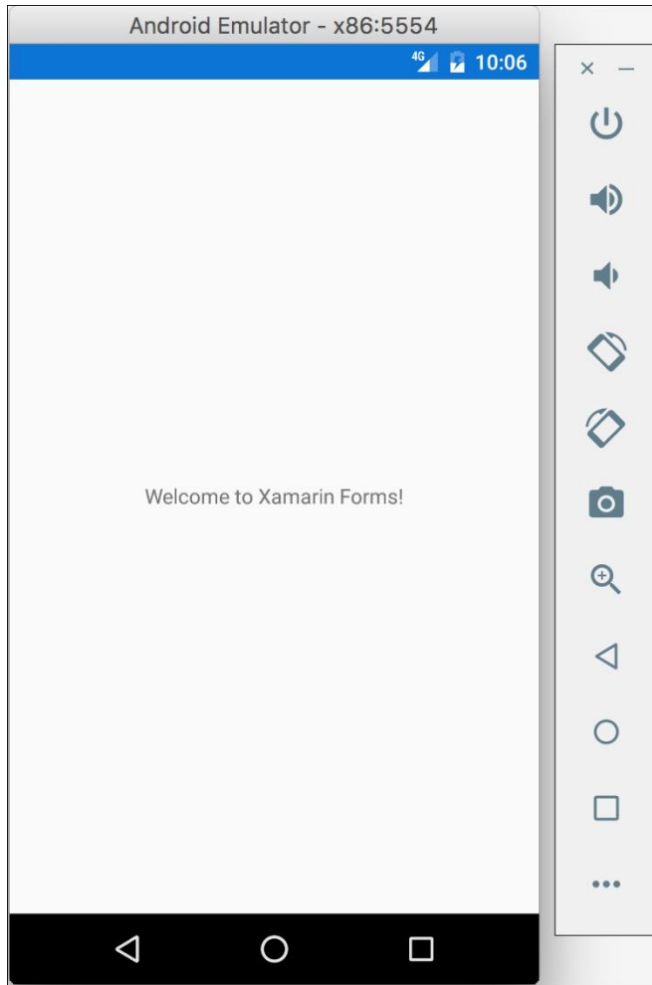
using Android.App;
using Android.Content;
using Android.Runtime;
using System;

namespace GoogleAnalytics.Tracking
{
    [Register ("com/google/analytics/tracking/android/EasyTracker", DoNotGenerateAcw = true)]
    public class EasyTracker : Tracker
    {
        //
        // Static Properties
        //
    }
}

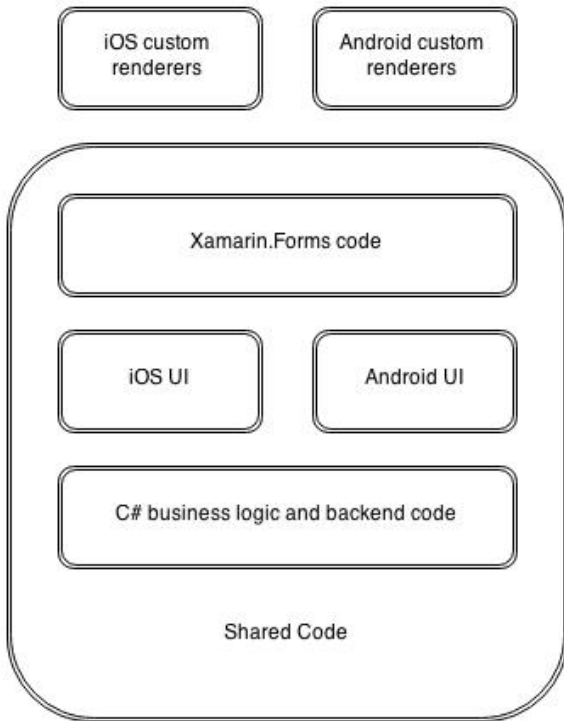
```

# Chapter 11: Xamarin.Forms

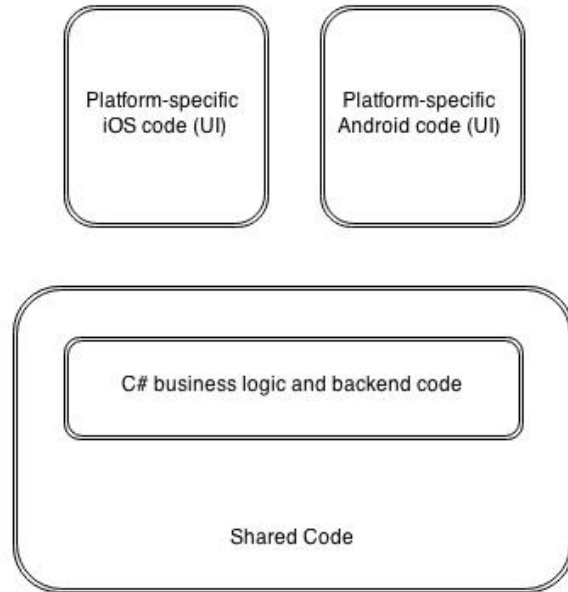




Xamarin.Forms application



A traditional Xamarin application





Android Emulator - x86:5554

4G   10:18

My Label

MY BUTTON

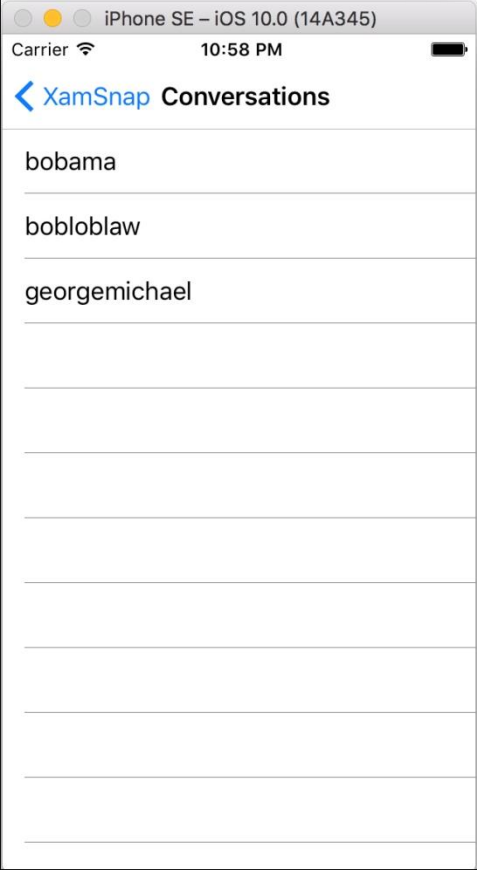
My Entry

---



- +







## Chapter 12: App Store Submission

# App Review

We review all apps submitted to the App Store and Mac App Store to ensure they are reliable, perform as expected, and are free of offensive material. As you plan and develop your app, make sure to use these guidelines and resources.


---

### Guidelines

#### App Review Guidelines

The App Review Guidelines provide rules and examples across a range of topics, including user interface design, functionality, content, and the use of specific technologies. Ensure your apps comply with these guidelines before submitting them for review.

- [App Store Review Guidelines](#)
- [Mac App Store Review Guidelines](#)




App Review Guidelines

#### Design and Trademark Guidelines

The Human Interface Guidelines provide guidance on fundamental UI design principles and how to apply them to your apps. Developers who wish to use Apple's trademarks, service marks, or images should read the Guidelines for Using Apple Trademarks and Copyrights.

- [iOS Human Interface Guidelines](#)
- [UI Design Dos and Don'ts](#)
- [OS X Human Interface Guidelines](#)
- [Guidelines for Using Apple Trademarks and Copyrights](#)




## Your provisioning profile is ready.

---

### Download and Install

Download and double click the following file to install your Provisioning Profile.



Name: XamSnapAppStore  
Type: iOS Distribution  
App ID: [REDACTED]com.jonathanpeppers.xamsnap  
Expires: 2017-08-30T00:27:47Z

[Download](#)

iTunes Connect My Apps XamSnap Jonathan Peppers Jonathan Peppers

App Store Features TestFlight Activity

APP STORE INFORMATION

- App Information
- Pricing and Availability

IOS APP

- 1.0 Prepare for Submissi...

+ VERSION OR PLATFORM

## App Information

This information is used for all platforms of this app. Any changes will be released with your next app version. Save

---

### Localizable Information English (U.S.)

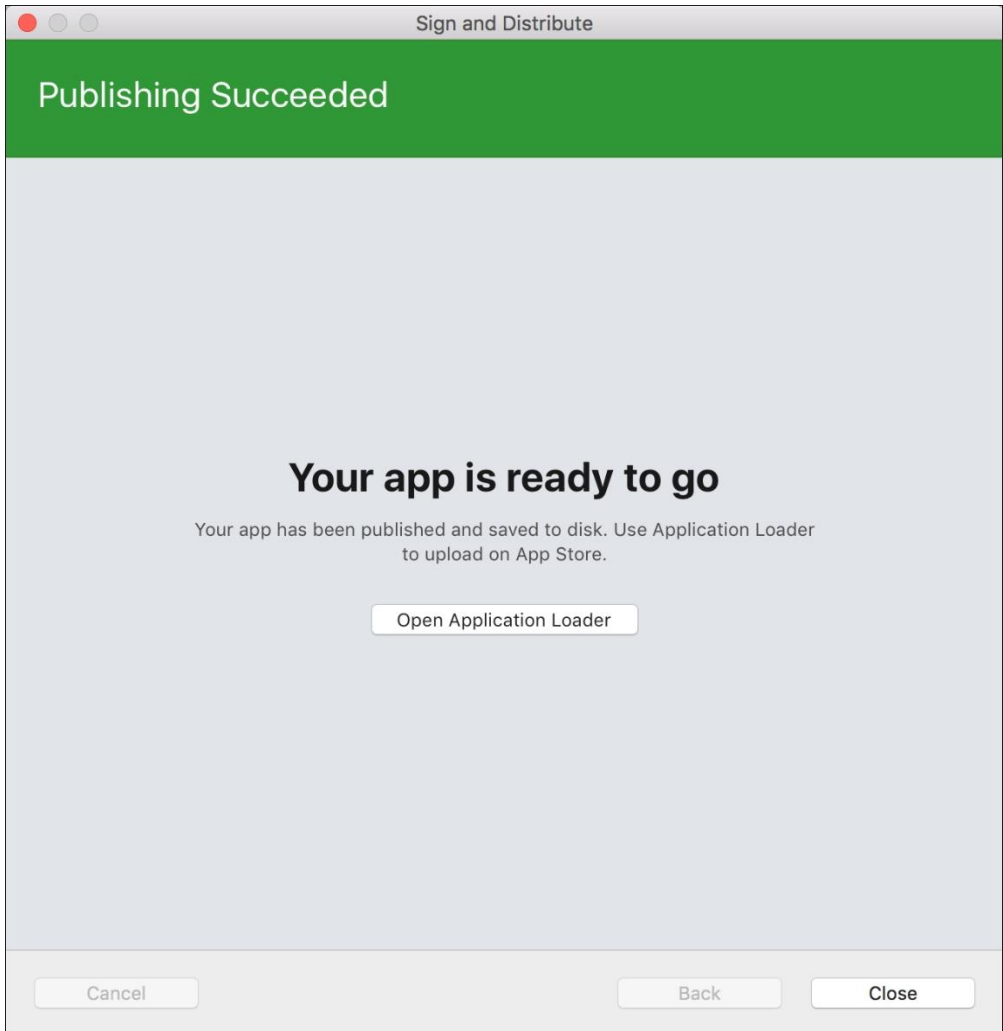
Name  Privacy Policy URL

Archives XamSnap

Platform	Name	Version	Code	Creation Date
iOS	XamSnap	1.0		October 18, 2016 9:39 PM

Creation Date: **October 18, 2016 9:39 PM**  
 Version: **1.0**  
 Version Code: **NJA**  
 Identifier: **com.jonathanpeppers.xamsnap**  
 Estimated App Store Size: **36.36 MB**  
 Build Comment:  
 Insights: **Insights not enabled**

Show all archives



Processing ?

	Build	Upload Date	Version	Status
	1.0	Nov 25, 2014	1.0	Uploaded

Create New Certificate

**Create a new signing certificate for Android applications**

Alias

Password  Confirm

Validity (years)

---

**Enter at least one of the following**

First and Last Name

Organisational Unit

Organisation

City or Locality

State or Province

Country  (2 character country code)



**XAMCHAT** - com.jonathanpeppers.xamchat

STORE LISTING

PRODUCT DETAILS Fields marked with \* need to be filled before publishing.

English (United States) - en-US

Title \*    
 English (United States) - en-US   
 7 of 30 characters



# Let's build the world's most trusted store for apps and games

Your innovation is what drives our shared success, but with it comes responsibility. These Developer Program Policies, along with the [Developer Distribution Agreement](#), ensure that together we continue to deliver the world's most innovative and trusted apps to over a billion people through Google Play. We invite you to explore our policies through the interactive tiles below or in a [print view](#).

