

# iOS Mobile App Development with Xamarin

#### **Duration:**

5 Days

#### What is the course about?

In this course you will learn how to develop native iOS applications using the C# programming language with Xamarin. Mobile applications developed with Xamarin are compiled to native code and they are indistinguishable from iOS apps developed using Objective-C or Swift. The course is designed for .NET developers that would like to develop native iOS mobile apps.

#### Duration

The course is full time 5 days. The course can also be taken as part of the Cross Platform Mobile App Development with Xamarin for Android and iOS using C#. The cross platform course also covers Android mobile app development.

#### Programming Experience

Extensive knowledge in .NET is required. A minimum of 2 years working experience is recommended. Proficient Java developers can also take this course but they will need to invest more time in getting to grips with the C# programming language.

#### **Technical Skill**

A good command of working in Visual Studio is required if using Windows or Mac experience is running on OS X.

#### **Private Training**

The course is primarily offered privately to a group, team or company. The training will be run on your premises or you can come to us. We have offices in Johannesburg and Cape Town and can also conduct the training in Durban at Regus Business Centre. We can train anywhere in South Africa and the rest of the African continent if we are coming to you. Private training is R9 500 per delegate if training is conducted on your premises and we require a minimum of 4 delegates to schedule the course. The same training is R12 599 when coming to us and a minimum of 4 delegates is required to schedule the course. There is no fixed date to run the course; we find dates would suit your team.

# **Public Training**

We also conduct the training publicly. This is suitable for individuals or delegates that cannot book the private training. The class will be comprised of delegates and individuals from different companies. The training content and duration is the same and training will run at our premises in Johannesburg or Cape Town, South Africa. The course price is R12 599 per delegate. A minimum of 4 delegates is required to run the course. A preliminary date is scheduled and will be confirmed once we have 4 delegates to run the course.

# **Course Topics**

#### Xamarin for iOS

Introduction to Xamarin.iOS Working with the Storyboard

#### Understanding MVC

# Introduction to Auto Layout

Introducing Auto Layout
Auto Layout Concepts
Working with Constraints in Interface Builder
Resolving Auto Layout Issues
Supporting Multiple Devices
Previewing the App on Multiple Devices

#### Using iOS Views

Text Entry with UITextField
Displaying Text with UILabel
Using UIButton
Using DatePicker
Using UIStepper
Using UISlider
Introducing UITableView

# Using Table Views

Introduction to table views
Creating a basic table view and a data source
Loading a property list into a table view
Reusing table view cells
Customizing table views
Customizing table view cells

#### iOS Navigation Patterns

Hierarchical navigation using UINavigationController
Using Segues for Navigation
Using PushViewController
Modal Segues with PresentationViewController and UIAlertViewController
Drill-down using UINavigationController
Navigation drawer using components
Tabs using UITabBarController

#### Maps and Location

Getting the User's Location
Region Monitoring and iBeacon
Geocoding Location Data
Displaying Maps
Annotating Maps
Plotting Directions
MapKit Overview
Enabling MapKit
Using CoreLocation
Getting the Current Location and Location Updates
Customizing Maps

# Photos and Contacts

Using the Camera Accesing Photos in the Gallery Accessing Contacts Adding and Editing Contacts

# iOS Networking

Accessing a REST API iOS App Transport Security Parsing JSOn with NewtonSoft JSON.Net Library Using the HttpClient

# Multiple-view Application

Introduction to multiple-view applications Using Segues Passing Data between Screens Using navigation controllers Deconstructing a master/detail app

# Basic Animation and Visula Effects

Basic Animations Using UIView Transform Animations Spring Animations Gestures UIKit Dynamics