

Developing iOS Apps with Microsoft Visual Studio 2017 using Xamarin Framework

5 Days

Prerequisites:

- Mac OSX Sierra or later
- XCode 10 or later
- Visual Studio Community/Enterprise 2017
- Hands-On experience on Advance C# 4.5

Getting Started with Xamarin iOS

- Introduction to Xamarin Framework
- Native iOS Apps vs Xamarin iOS Apps
- Setting up Mac OSX Machine
- Setting up Windows Machine
- **Under the iOS**
 1. Overview of iOS Architecture
 2. AOT
 3. Selectors
 4. Registrars
 5. Available Assemblies : Xamarin.IOS & Xamarin.MAC
- Creating first Xamarin iOS Project
- Project Structure Walkthrough
 1. AppDelegate Class
 2. Info.plist
 3. Entitlement.plist
 4. Storyboard
 5. ViewController

User Interface

- iOS Designer Basic
- Form UI Controls
- Storyboards
- Layouts
- Navigation Controllers
- View Controllers
- Multiple Story Boards
- Controls
 1. Alerts

2. Custom Alert
3. Buttons
4. Collection Views
5. Images
6. Sliders, Steppers
7. Text Input
8. Tab Bar
9. Web Views

Application Fundamentals

- Events and Delegates
- **Background**
 1. Introduction
 2. Application LifeCycle Demo
 3. Backgrounding in iOS using Tasks
 4. Registering Apps to Run in background
 5. Updating and Application in Background
 6. Background Location
 7. Background Transfer Service
- Working with Property List
- Working with Images
- Working with File Systems
- **Touch**
 1. Enabling Touch
 2. Touch Events
 3. Multi Touch
 4. Touch Location
 5. Gestures : Tap , Pinch, Swipe, Press and Hold
 6. Register Multiple Gestures

Data Access

- **SQLite**
 1. Introduction SQLite ORM
 2. Creating Database
 3. Performing Basic CRUD Operation
- **Working with iCloud**
 1. Registering as a iOS Developers
 2. Creating a new App in Apple Store
 3. Configuring Entitlements.plist
 4. Configuring project to work with Cloud App
 5. Storing and Retrieving Values

- **Advance Data Access :iCloud Document Storage (Regular Track Only)**
 1. Introduction to Document Storage
 2. iOS Data Storage Guidelines
 3. Creating Document
 4. Finding and Opening Document
 5. Displaying Documents
 6. Saving iCloud Documents
 7. Managing Documents
 8. iCloud Backup

Deployment

- Debugging
- Code Signing and Provisioning
 1. Working with Capabilities
 2. Working with Entitlements
 3. Fastlane Tool Overview : Theory Only
- App Distribution
 1. App Store
 2. Ad-Hoc Distribution
 3. IPA Support
- Using Apple Instrumentation Tool
- Deployment to Apple Device