



iOS Application Development Training

Duration: 65 Hours

Training Syllabus

Module 1: Theory Topics

- iPhone's History
- Hardware
- Software
- iPhone SDK
- Appstore
- Mac OS
- Mac OS History
- Types Of Mac OS
- Versions Of Mac OS
- Versions Of iOS
- Mac OS explanation comparing with windows OS
- Architecture of Mac OS X and iOS

Module 2: Objective-C Programming Language

- Directives
- Classes
- Class Instantiation

- Fields
- Access Privileges
- Methods
- Properties
- Initializers
- Memory Management
- Protocols
- Delegate
- Selectors
- Categories
- Strings
- Arrays
- Dictionaries

Module 3: Xcode

- Introduction to Xcode
- Steps for Xcode Installation
- iOS Application templates
- iOS Application Life Cycle
- MVC (Model View Controller) Design Pattern
- Customizing Application Icon And Launch Image

Module 4: Front End Programming (UI Designing) and Back End Programming (Coding)

- **Sample Program explanation by using Xcode Interface Builder (Xib) and pure coding (without Xib).**
- **All Sample programs explanation with objects which present in Xcode Tool Library.**

Label, RoundedRectangle, Segmented control, Slider, Switch, ActivityIndicatorView, ProgressView, Stepper, ScrollView, ImageView, WebView, iAds, Gestures, TableView, PageControl, UIAlertView, ActionSheet, Picker, DatePicker, View, UINavigationController, SearchBar, ToolBar, BarButtonItem, TabBar, TabBarItem

➤ **Story Boards in iOS**

➤ **Table View Programming in iOS**

a. Creating A Simple table View

- I. Adding a Header and footer
- II. Adding an Image
- III. Displaying the item selected
- IV. Indenting
- V. Modifying the height of each Row

b. Using the Table View in Master-Detail Application

c. Displaying Sections

- I. Adding indexing
- II. Adding Search Capability
- III. Disclosures and checkmarks
- IV. Navigating to Another View

➤ **Audio and Video Programming in iOS**

➤ **Simple 2D Animations**

a. Using the NSTimer Class

- I. Animating The Visual Change.

b. Transforming Views

- I. Translation
- II. Rotation
- III. Scaling

c. Animating a Series Of Images

- **Gestures Programming.**
 - a. Tap Gesture
 - b. Pinch Gesture
 - c. Pan Gesture
 - d. Swipe Gesture
 - e. Rotation Gesture
 - f. Long press Gesture
- **Accessing Built-In Applications**
 - a. Sending E-mail
 - b. Invoking Safari
 - c. Invoking the Phone
 - d. Invoking the SMS
 - e. Accessing the Photo Album and Camera

Module 5: Advanced iOS Concepts

- **Database Programming Using SQLite Manager**
- **Map kit Programming**
 - a. Displaying Maps and Monitoring Changes using the Map kit
 - b. Getting Location Data
 - I. Specifying the Hardware Requirement for Location Tracking
 - II. Displaying Location Using a Map
 - III. Getting Directional Information
 - IV. Rotating the Map
 - V. Displaying Annotations
 - VI. Reverse Geo-Coding
 - VII. Displaying a Disclosure Button

- **Web Services**
 - a. Basics Of consuming XML Web Services
 - b. Consuming a Web Service in your iOS Application Using SOAP,HTTP GET,HTTP POST and REST API's
 - c. XML Parsing in iOS
 - d. JSON Parsing in iOS
- **Sharing the details from the application to Social Networking Sites(Face Book and Twitter)**
- **Basic ideas on Core Animation Programming.**

Module 6: Testing

- **Steps to be followed how to deploy the application in Real iOS Devices.**
- **Creating IPA Files.**

Module 7: Swift Programming Language

Module 8: Project (2 Applications)

Note: All the softcopies and sample Codes will be provided