

iOS or iPhone/iPad Apps Development Advance Course

About

iOS or iPhone/iPad Apps Development Advance Course is hands-on that provides surface level knowledge about iOS Apps life cycle. The objective of these courses is to make participant aware about the entire development cycle of the iOS apps. This course focused on the development and architect team who will be doing the in-depth coding of the iOS apps development environment. Also it is focused to the audience who wants to make sophisticate apps, which includes using various web services and displaying the content in multi controller environment. Storing the content in the iOS under the persistent storage. Participant will be able to make apps, which support location services. Apps with various Apple Services like Push Notification, InApp Purchases and many more.

The course is a combination of lectures and hands-on exercises that provide real-world experience.

Who Should Attend

- Programmers who are looking to enter the Mobile Apps Development.
- Beginners, Junior Software Developers, Senior Software Developers, Team Leads and Managers.
- Hobbian who wants to bring their ideas into potential Apps.

Duration

- 8 days
- Each day 8 hours of session
- Total 64 hours

What You'll Learn

- *Understanding of the Objective C concepts*
- *Create apps with sophisticate UI designs.*

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- *Create apps with MVC iOS environment*
- *Creates apps which interacts with various UI components*
- *Create an App with Multi Controller environment*
- *Deploy the App on the iOS devices and over the App Store*
- *Understand how to make App compatible with multi iOS devices from iPhone to iPad to iPhone 5S*
- *Understanding the App Ecosystem and how it grown rapidly and how people make money*
- *Create the Apps with Multitouch and Motion Sensor hardware capabilities.*
- *Create apps including Web services*
- *Create apps including the persistent storage*
- *Create client-server mobile app*
- *Understand the architecture for Web services oriented apps and persistent storage oriented apps.*
- *Create Apps with Location Services*
- *Create Apps with Apple Maps and Scroll View*
- *Create Apps supporting Multi Languages. Localization*
- *Create Static Libraries*
- *Social Media Integration of Facebook and Twitter*
- *Understanding BLOCKS*
- *AutoLayouts*
- *Create Apps with Apple Services like Location Notification and Apple Push Notification*
- *In App purchase*
- *Passes*
- *Data Protection Services*
- *iCloud Services*
- *iAds and iPods integrations*

Prerequisites

- Basic knowledge of programming language like C
- At least one Object Oriented Programming Language like C++ or JAVA

Course Outline

1.Objective C Basics

- Comparing the Objective C with language like C++ or JAVA
- Understanding Apple Philosophy and “WOW” factor
- Understanding Class template
 - What is Interface file?
 - What is Implementation file?
- Understanding NSObject, id pointer and isa pointer
- Understanding importance of id & isa pointers
- Understanding Objective C syntax and comparing with C++ & JAVA
- Understanding the Constructor pattern in Objective C
- Properties
 - Discuss setters & getters
 - Discuss attributes
 - Talk about pointer behavior for assign, retain, copy
 - Talk about pointer behavior in ARC environment i.e. strong and weak
 - Talk about autorelease
 - List our all methods incrementing retain count & corresponding methods which decrement retain count
 - Give golden rules what to use when setting the attributes while declaring the properties
- Talk about Protocols & delegates:
 - Importance of Protocols
 - Comparing Protocols with Interface in JAVA
 - Discuss Required and Optional methods in Protocol
- Automatic Reference Counting (ARC)
 - Talk about Automatic Reference Counting
 - How its different from Garbage Collector
 - Talk about Strong & Weak attributes
 - Importance of using ARC in code
 - Discussing scenarios where ARC fails and use Manual Memory Management
- Given golden rules for memory management in Objective C
- Autorelease Objects
 - Difference between auto release object and normal objects
 - When to use Autorelease objects
 - How system manages memory for the Autorelease objects.

- Golden rules on when to use Autorelease Objects in the Objective C

2. Xcode IDE, Foundation and UIKit Framework, NSString, NSArray, UILabel, UIImageView etc.

- Briefing the Mac OS system
- Walk through the creation of simple project in Xcode
 - Talk about maintaining folders in sequence
 - Understand various windows in the Xcode IDE
 - Understanding the various files
- Discuss MVC & the application life cycle, ask participants to put NSLog statements in their code
- Walk through changing the view background of the app
- Talk about general UI Component rules: creation of frame, setting properties, adding to view
- Talk about UILabels & NSStrings
 - Adding text,
 - Modifying properties
 - Font type
 - Font size
 - Alignment
 - Number of lines
 - Background color
 - Text color
 - Adding to view
 - Calling the load function
- Ask students to explore some properties of UILabel
- Correlate the 3 rules mentioned earlier with what we have done
 - Adding imageview to view
- Project implementation
- Talk about UIImageView
 - Adding resources to project & the directory concept
 - Creation of UIImage model
 - Setting the center

3. Responder Chain Pattern

- Touch Events
 - Get to implement the touches began, moved, ended messages
 - Get the basic label hiding effect with touches began
 - Understand pattern of registering the view with the touch
 - Drafting of 4 golden rules to register view on touch
 - Demonstrate each rule

4. Multi Controller Environment using UITabBarController and UINavigationController

- Talk about the multi controller environment
 - Talk about base architecture of the multi controller environment
 - Talk about the relationship between the window and root controller for the multi controller environment.
- Talk about Tab Bar controller
 - Talk about view controllers & root view controllers

- Walk through creation of tab bars
- Discuss about icons creations and Apple's clauses on Tab bar icons
- Talk about how to create various classes in Xcode.
- Discuss about the default constructor
- Creating multi controller project in iOS MVC architecture
- Talk about Navigation
 - Ask to implement navigation
 - Talk about various Navigation controllers in iOS
- Talk about Table creation
 - Talk about the multiple row/single column concept
 - Talk about various protocols used by Table in iOS
 - Discuss about required & optional methods
 - How to confirm the protocols in App
 - Talk about the Table optimization
 - Create first table and play with various table features

5. UITableViews

- Talk about customizing tables
 - Customizing the header/footer with text
 - Customizing Header/Footer with Images
- Talk about the protocols required
 - Talk about the height or the row & cell
 - Customizing Header/Footer with Multiple view components
- Talk about creation of custom cells

6. Making App Compatible from iPhone 4 to iPhone 5 and iPad to iPad mini and iPad Air

- Making App compatible with all the iOS devices
 - Understanding the development cycle time for all devices
 - Understanding Apple strategy about announcing the new devices
 - Understanding how to make existing App immediately compatible with the New device release
 - How you can still make money from App which were made 3-4 years back
 - How Apple ecosystem is strongest of all.

7. Deployment and Distribution

- Start off on deployment
 - Talk about the \$99 program & the free program. Especially the differences between the 2
 - Talk about Certificate creation, renewal
 - Talk about KeychainAccess and process for creating certificate request
 - Talk about registering devices on the provisioning portal
 - Talk about fetching the UDID
 - Talk about the app id creation
 - Unique id for each app
 - Format for bundle ids
 - Talk about provision profile creation
 - Talk about binding developer, appid, devices

- Talk about importing the provisioning profile
- Talk about setting the project target settings
- Talk about project settings
- Deploy the app/game that has been developed.
- Start off on distribution
 - Learn how to make .ipa file of the app.
 - Learn ad Hoc app distribution
 - Learn about iTunes Connect
 - Talk about how to register app on the iTunes connect and other legal things for app distribution
 - Registering the app on iTunes Connect

8. StoryBoard (Overview)

- What is Story Board
- Why it was introduced
- When and where to use Storyboard.
- Walk through the story board
- Integrating story board in the app

9. Hardware Capabilities

- Multi Touch
 - Talk about the Multi Touch environment
 - Understand Fast Enumeration concept
 - Build and test the App
- Accelerometer
 - Talk about the Accelerometer
 - Talk about the Motion Sensor
 - Build and test the App

10. WebServices using SOAP and REST

- Understand client server architecture
- Understand the Web services
- Start with the SOAP webservice
- Talk about how to integrate MVC architecture in client-server environment
- Talk about XML
 - Talk about where XML is used.
 - The working of client-server architecture
 - XML: Solution for client server architecture
- Talk about 5 golden points for creating robust MVC for client-server architecture
- The importance of 5 golden points across the entire platform.
- Talk about how to utilize same architecture across other platform
- Start of on the implementation of XML parsers
- Talk about the parsing process
- Talk about pure model components
- Talk about the protocols required & creating the protocol
- Walk through the flow of the code implemented
- Finally giving full MVC flow of client server environment.

- Difference between DOM and SAX parser
- Integrating the REST web services in the client-server architecture
- Talk about the JSON

11. Persistence using SQLite

- Talk about creation of persistent storage
 - Talk about SQLite
 - Talk about writing SQLite queries in objective-c & the protocols required
 - Walk through the creation of a simple database
- Start of with the implementation of the code
 - Talk about the sql_stmt object
 - Talk about the functions required by the SQLite handler class
 - Talk about single ton class concept
 - Talk about why single ton class is required
 - Talk about security
- Create front end
 - Talk about all the integration of front end with the handler
 - Creation of text fields & buttons
 - Talk about fast enumeration
 - Talk about UIAlertView
 - Making the To-DO List type App

12. Persistence using Plist

- Talk about creation of persistent storage using plists
 - Talk about key value concept of dictionaries as compared to arrays
 - Talk about how plists store key value pairs

13. Persistence using CoreData Framework

- Core Data frame work
 - Talk about the core data frame work
 - Discuss about the pros & cons of core data
 - Talk about when to use core data frame work
 - Walk through on creating core data
 - Integrating core data into the app

14. Apple Maps or Mapkit and Location Services

- MapKit frame work
 - Talk about the Mapkit frame work
 - Understand the MVC pattern for Maps
 - Create MVC pattern similar to the UITableView
 - Understanding the Bride or Mediator Design Pattern
 - Implementing the entire MVC plug and play code
- Location Services

- Understanding CLLocation fram work
- How Apple implements location services
- How to make GPS active to run in background
- How to make GPS active even when your app is killed by the iOS

15. ScrollView

- Why Scrollview is most important UI element
- How scrollview is configured
- How responder chain design pattern works in scrollview
- Understand UIControl elements with scroll view

16. BLOCKS

- What are BLOCKS
- Importance of using BLOCKS in Objective C
- Syntax of BLOCKS
- BLOCKS and type def relation
- Applications of BLOCKS

17. Social Media Integration

- Integrating Facebook in the application
- Integrating Twitter in the application

18. Localization

- Implementing the localization
- Why localization is important in the application
- Understanding the UI elements behavior in Localization

19. Static Library

- When we create the library
- How to create the static library

20. AutoLayout

- Understanding AutoLayout
- Why autolayout is important
- Various ways of implementing AutoLayout
- Understanding importance of Autolayout

21. Apple Services

- Apple Push Notification
 - Understanding the APNs full architect
 - Understanding the device token generation
 - Understand creation of notification certificates
 - Handling the notifications inside the Applications
 - Components of the notification
 - Life cycle of Application when notification arrives
 - Understanding various scenarios of the notifications
- Local Notification
 - Understanding the local notification full architect
 - Handling the notifications inside the Applications
 - Components of the local notification
 - Life cycle of Application when notification arrives
 - Understanding various scenarios of the notifications
- In App Purchases
 - Understanding the In App Purchase full architect
 - Registering the products for In App Purchase on itunesconnect
 - Components of the products
 - Types of products
 - Apple policy on purchasing the in app purchase products
 - Life cycle of the In App Purchase
 - Fetching products from the Apple server
 - Understanding the transaction
- Data Protection Services
 - Understanding the Data Protection full architect
 - Type of protections
- iCloud Service
 - Understanding the iCloud full architect
 - When to use iCloud
 - Understanding the UIDocument and it's importance
 - Fetching documents from iCloud
- iAd
 - Understanding the iAd full architect
 - Understanding Ad revenue system of Apple
- iPod Integration
 - Understanding the iPod full architect
 - Reading the iPod data into the app
 - Complete MVC of iPod integration



Pricing

40000 INR + 12.36% Service Tax

Terms and Conditions

- Payment: 100% advance for blocking the seat
- All payment needs to be made in favor of “Nimap Infotech LLP”

- **Wire Transfer Details**

Bank Name : ICICI bank

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Account Name : Nimap Infotech LLP

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- Lunch, Snacks and Tea will be provided at the Training Center.
- Non-refundable Fees. Replacement of seat is allowed.

Thank You!!

Success of Nimap Infotech as a company is measured by the growth and happiness of its customers. Nimap Infotech has a vested interest in supporting you for years to come.

Please send us a PO and provided above and email to Priyank@nimapinfotech.com if you choose to accept this offer.

Reviews: <http://www.iphonedevdevelopmentguide.com/all-testimonials.aspx>

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