

## **iOS Application Development Using Swift**

### **Course Contents:**

#### **1. Swift**

- Introduction to Swift
- Introduction to Playground
- Variables and Constants
- Optional & Forced Unwrapping
- Class and Objects
- Playing with Methods

#### **2. Introduction to iOS Application Development**

- Introduction of iOS
- What's different about coding for iOS ?

#### **3. iOS Stack and Setting development Environment**

- A top down tour of the layers
- About UIKIT, Cocoa Touch
- Setting up your project in XCODE

#### **4. Getting Familiar with XCODE ( IDE )**

- The XCODE workspace window
- The Toolbar
- The Navigator View
- Project Navigator
- Symbol Navigator
- Search Navigator
- Debug Navigator
- Break- Point Navigator
- Log Navigator
- The Jump Bar
- The Utility Pane
- Closer look to Project

#### **5. MVC and User Interfaces**

- View Controller
- Outlets and Actions
- Button and Action Methods
- Image View and Text Fields
- Closing Keypad
- Slider and Label
- Tags,

- Checkbox and Radio
- Alert Controller
- Switches and Segment Controls
- Web View
- More UI Components

## **6. Auto rotation, Auto sizing**

- Mechanics of Autorotation
- Points, Pixels and Retina display
- Autorotation Approaches
- View Orientation
- Auto sizing with different apple devices

## **7. Multi view Application**

- Architecture of Multi View Application
- Root controller
- Navigation Controller
- Tab Bar Controller
- Segues

## **8. Working with Pickers**

- Date Picker
- Single Component picker
- Multi Component picker
- Custom picker with images
- Delegates and Data sources

## **9. Table view with Navigation Controllers**

- Working with Table View
- Working with Table View Controller
- Grouped and Indexed Section
- Header and Footer
- Custom Table View
- Connecting View controller with Table View Controller

## **10. Basic Data Persistence**

- Store data in file
- Core Data
- SQLite Databases
- Accessing remote database (Web Services)

## **11. Grand Central Dispatch**

- Overview of Grand Central Dispatch
- Slow worker
- GCD: Playing with queues
- Background processing

## **12. Gestures**

- Taps Gesture
- Pinch Gesture
- Rotation Gesture
- Swipe Gesture
- Pan Gesture
- Screen Edges Pan Gesture
- Long Press Gesture

## **13. Working with Maps**

- iOS Core Location Framework
- iOS Map Kit Framework
- The Location Manager
- Getting Location Updates
- Visualizing your movement on a map
- Annotation
- Latitude & Longitude

## **14. Camera, Photo Library, Collection**

- Image Picker Controllers
- Camera and Library
- UI Collection

## **15. Multimedia**

- Playing video using URL
- Playing video using resource
- Working with Audio

## **16. Localization**

- Localization Architecture
- Localize application

## **17. Deploy your application**

- Overview on deployment of application
- Generating Certificate Request
- Provision Profile
- App ID Creation
- Deploy Application

