



Course Brochure

IOS with Swift Programming

Overview

•This Course introduces Mobile Application Development for the ios platform, Participants with learn to create and deploy ios applications, with particular emphasis on software engineering topics including software architecture, software process, usability and deployment.

Pre-requisites

•Basic OOPS Knowledge is essential

Applications

COURSE CONTENTS

iOS Application development fundamentals, iOS Software development kit(SDK) iOS SDK Xcode

- ❖ Interface builder
- ❖ Storyboards
- ❖ Simulator
- ❖ Performance tools

iOS software architecture

- ❖ CocoaTouch
- ❖ Media layer
- ❖ Core Services
- ❖ Core OS

Viewcontrollers, Appdelegates

- ❖ ModelViewController(MVC) pattern
- ❖ AppDelegate Class
- ❖ Adding ViewController
- ❖ Application Life Cycle
- ❖ Connection Making with Controllers
- ❖ Basic View Structure

Objective-C Programming

- ❖ Objective-C Class Structure
- ❖ OOPS Programming Structure
- ❖ Difference between C and Objective-C
- ❖ Object Creation
- ❖ Interface Structure
- ❖ Implementation Structure
- ❖ @interface, @implementation
- ❖ @property, @synthesize
- ❖ Objective-c Keywords
- ❖ Method Declaration, Definition
- ❖ Class And Instance Methods
- ❖ Alloc init release autorelease Methods
- ❖ Properties(atomic, nonatomic, retain, strong)
- ❖ Message syntax
- ❖ Method Types
- ❖ Categories
- ❖ Protocols

Swift Programming

- ❖ Playgrounds
- ❖ Constants and Variables
- ❖ Printing Variables and Constants
- ❖ Code Comments
- ❖ Datatypes
- ❖ Tuples
- ❖ Arrays
- ❖ Dictionaries

- ❖ Loops
- ❖ if Statements
- ❖ Switch Statements
- ❖ Functions
- ❖ Nested Functions
- ❖ Classes
- ❖ Instances
- ❖ Properties
- ❖ Protocols
- ❖ Delegation

X-code, Interface Builder, Storyboards

- ❖ IBAction Implementation
- ❖ IBOutlet Implementation
- ❖ Debugging Process
- ❖ UI Desining Process

IBOutlet, IBAction.

- ❖ How to Connect IBAction
- ❖ How to Connect IBOutlet

Foundation Framework.

- ❖ NSString
- ❖ NSObject
- ❖ NSString, NSMutableString
- ❖ NSArray, NSMutableArray
- ❖ NSDictionary, NSMutableDictionary NSDate
- ❖ NSTime
- ❖ NSLog
- ❖ NSData
- ❖ NSSet, NSMutableSet
- ❖ NSFileManager
- ❖ NSUserDefaults
- ❖ NSTimer
- ❖ NSURL
- ❖ NSURLRequest

UIKit Framework

- ❖ UIButton
- ❖ UILabel
- ❖ UIAlertView
- ❖ UIActionSheet
- ❖ UIActivityViewController
- ❖ UISwitch
- ❖ UISlider
- ❖ UISegmentedViewController UITextView
- ❖ UIImageView
- ❖ UITextField
- ❖ UITableView
- ❖ UITableViewCell
- ❖ UIView

COURSE CONTENTS

- ❖ UIPickerView
- ❖ UIDatePicker
- ❖ UIProgressView
- ❖ UIWebView
- ❖ WKWebView
- ❖ UIStepper
- ❖ UIProgressView
- ❖ UINavigationController
- ❖ UIBarButtonItem
- ❖ UICollectionView
- ❖ UICollectionViewCell

UINavigationController

- ❖ UINavigationController Creation
- ❖ UINavigationControllerItem
- ❖ UINavigationControllerBar
- ❖ Making View Navigations
- ❖ Using Navigation in a tab
- ❖ PushViewController
- ❖ PopViewController
- ❖ StoryBoard using For UINavigationController

UITabbar Controller

- ❖ UITabBarController
- ❖ UITabBarItem
- ❖ Adding TabBarItem to a TabBarController
- ❖ Adding Tabbar to a View
- ❖ Make Interface Between Tabs
- ❖ StoryBoard Using For TabBarController

UIPageViewController

- ❖ UIPageViewController
- ❖ Add data model
- ❖ UIPickerView, UIDatepicker
- ❖ UIPickerView Class
- ❖ UIDatePickerClass
- ❖ DataSourceMethods
- ❖ DelegateMethods
- ❖ Import Images in Picker

UITableView Controller

- ❖ UITableView
- ❖ UITableViewDelegate
- ❖ UITableViewDataSource
- ❖ UITableView Cell
- ❖ Custom Table Generation
- ❖ UITableView With NavigationController
- ❖ UITableView With images.

UIViewTrasitions

- ❖ Animate View CoverVertical
- ❖ Animate View CrossDissolve
- ❖ Animate View FlipHorizontal
- ❖ Animate View PartialCurl
- ❖ Use StoryBoard For Transitions

PropertyList(LocalData Saving)

- ❖ PropertyList
- ❖ Create A PropertyList for Data Storage
- ❖ Load Values From PropertyList

SQLite DataBase

- ❖ DataBase Creation
- ❖ Add Tables
- ❖ Delete Elements
- ❖ Update Elements
- ❖ Select Elements
- ❖ Load Values From Database

Browsing Internet

- ❖ Using UIWebView
- ❖ Browse internet In Application
- ❖ Loading Pdfs
- ❖ Loading HTML Files
- ❖ Read Data From Internet

Parsing XML And JSON Webservices

- ❖ NSXMLParser Class
- ❖ NSXMLParser Delegate
- ❖ Data getting from JSON.
- ❖ NSJSONSerialization
- ❖ GET POST Methods

Sending Email, Sending SMS

- ❖ MailComposing.
- ❖ SMS Composing.
- ❖ Phone Call

Audio, Vedio playing

- ❖ Playing Audio
- ❖ Playing Video

Events, Multitouch, Gestures, Shake s

- ❖ Touch Events
- ❖ Gesture Events
- ❖ UITapGestureRecognizer
- ❖ UIPinchGestureRecognizer
- ❖ UIRotationGestureRecognizer

COURSE CONTENTS

- ❖ UISwipeGestureRecognizer
- ❖ UIPanGestureRecognizer
- ❖ UIScreenEdgePanGestureRecognizer
- ❖ UILongPressGestureRecognizer
- ❖ Shake Events

CoreGraphic Framework

- ❖ Introduction CoreGraphicFrameWork
- ❖ Draw Circles
- ❖ Draw Rectangles
- ❖ Draw Lines
- ❖ Draw Images

CoreData Framework

- ❖ Introduction CoreData
- ❖ Class Architecture
- ❖ Insert delete update data

Mapkit Framework

- ❖ MKMapView
- ❖ Loading Maps
- ❖ Load Different Map types
- ❖ Annotations on mapview

CoreLocation Framework

- ❖ CLLocation
- ❖ Load current location

Social Networking

- ❖ FaceBook Integration
- ❖ Twitter Integration

Load Internal Content

- ❖ AddressBook Picker
- ❖ Image Picker
- ❖ Camera Picker
- ❖ Media Picker

Icon Splash screens for app

- ❖ Create Icon image for Applicatin
- ❖ Load icon for App
- ❖ Create Splash Screen
- ❖ Test Applicaton on ipad.
- ❖ Test Application on iphone.
- ❖ Appstore Submission Process.

iOS Advanced :

- ❖ StoryBoard Programming (iOS 5.0)

- ❖ Scene
- ❖ Segue
- ❖ NavigationController
- ❖ TabbarController
- ❖ CollectionViewController
- ❖ Data Passing
- ❖ UITransitions
- ❖ Custom Segue

Universal Application

- ❖ Create Universal app
- ❖ load iPhone and iPad UI

Constrains For Autolayout

- ❖ Introduction Autolayout
- ❖ Working with Constrains
- ❖ Working with StackView

Working with Notifications

- ❖ localNotifications
- ❖ Apple Push Notifications

Working with Animations

- ❖ UIViewAnimations
- ❖ Custom Keyboards
- ❖ Using Cocoa Pods
- ❖ Integrating Ads With Google Ad mob
- ❖ In App Purchases
- ❖ Build An Ad Blocker
- ❖ TouchID
- ❖ Hybrid apps
- ❖ Difference between native app and Hybrid app

Hybrid mobile apps with Cordova

- ❖ Cordova installation
- ❖ Create app with Cordova
- ❖ Integrate HTML CSS Javascript
- ❖ Integrate JQueryMobile
- ❖ Integrate Ionic Framework
- ❖ Create ipa launch in iOS
- ❖ Create apk launch in android

Hybrid mobile apps with xamarin

- ❖ xamarin installation
- ❖ Create app with xamarin C# programming
- ❖ Launch in iOS
- ❖ Launch in android