

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

IOS

iOS SDK

- ➔ iOS Application development fundamentals
- ➔ Xcode
- ➔ Interface builder
- ➔ Storyboards
- ➔ Simulator
- ➔ iOS software architecture

Objective-C Programming

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

Swift Programming

- ➔ Playgrounds
- ➔ Constants and Variables
- ➔ Printing Variables and Constants
- ➔ Code Comments
- ➔ Data types
- ➔ Tuples
- ➔ Arrays
- ➔ Dictionaries
- ➔ Loops
- ➔ if Statements
- ➔ Switch Statements
- ➔ Functions
- ➔ Nested Functions
- ➔ Classes
- ➔ Instances
- ➔ Properties
- ➔ Protocols
- ➔ Delegation

Foundation Framework

- ➔ Foundation Framework
- ➔ NSLog
- ➔ NSObject
- ➔ NSString,NSMutableString

- ➔ StoryBoard Using For TabbarController

UISplitViewController

- ➔ UISplitViewController
- ➔ Split Items in tableview,DetailView
- ➔ Adding values to a SplitViewController

UIPopoverViewController

- ➔ UIPopOverViewController
- ➔ iPad App with popover

UIPageViewController

- ➔ UI Page View Controller
- ➔ Content in pages

UIPickerView

- ➔ UIPickerView
- ➔ Datasource Methods
- ➔ Delegate Methods
- ➔ UIDatePicker
- ➔ CustomPicker
- ➔ Images in Picker

UITableViewController

- ➔ UITableView
- ➔ UITableViewDelegate
- ➔ UITableViewDatasource
- ➔ UITableView Cell
- ➔ CustomCell TableView

- ➔ UITableView With NavigationController
- ➔ UITableView With images.

ViewTransitions

- ➔ Animate View CoverVertical
- ➔ Animate View CrossDissolve
- ➔ Animate View Flip Horizontal
- ➔ Animate View PartialCurl
- ➔ StoryBoard with ViewTransitions.

StoryBoards (UIDesign) 2010 iOS

- ➔ StoryBoard Programming
- ➔ Scene
- ➔ Segue
- ➔ UINavigationController
- ➔ UITabBarController
- ➔ UICollectionViewController
- ➔ UIPageViewController
- ➔ Data Passing
- ➔ UIModelTransitions
- ➔ Custom Segue
- ➔ App UI Building Process.
- ➔ MVC design For application.

Webservices

- ➔ Understanding XML
- ➔ Understanding JSON
- ➔ NSXMLParser Class.
- ➔ Parsing XML
- ➔ NSXMLParser Delegate.
- ➔ Data getting from JSON.

- ➔ NSJSONSerialization.
- ➔ SBJSON
- ➔ NSURLConnection and Delegate
- ➔ NSURLSession and Delegate

PropertyList

- ➔ PropertyList
- ➔ Create A PropertyList Bundle
- ➔ Create A PropertyList DocumentDirectory
- ➔ Add ,update and delete data
- ➔ Load Values From PropertyList in Table

SQLite Database

- ➔ SQLite DataBase Creation
- ➔ Add Tables
- ➔ Delete data
- ➔ Update data
- ➔ Select data
- ➔ Load Values From Database

CoreData

- ➔ Introduction CoreData
- ➔ CoreData Architecture
- ➔ Insert data
- ➔ Delete data
- ➔ Update data
- ➔ Read data

Composers

- ➔ Email Composing.
- ➔ SMS Composing.
- ➔ Phone Call
- ➔ FaceBook Integration
- ➔ Twitter Integration
- ➔ AddressBook Picker
- ➔ Image Picker
- ➔ Camera Picker
- ➔ Media Picker

Media

- ➔ Playing Audio
- ➔ Playing Video
- ➔ Touch Events
- ➔ Gesture Events
- ➔ Motion Events

Maps and Annotations

- ➔ MKMapView
- ➔ Loading Apple Maps
- ➔ Load Different Map types
- ➔ CLLocationManager
- ➔ CurrentLocation

Core Graphics

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

Universal Application

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

Constrains For Auto layout

- ➔ Introduction Autolayout
- ➔ Working with Constrains

PhoneGap with Xcode

- ➔ PhoneGap installation
- ➔ Create app with PhoneGap
- ➔ Integrate HTML CSS JavaScript
- ➔ Integrate JQueryMobile.

Appstore Process

- ➔ Create Icon image for Application
- ➔ Load icons for App
- ➔ Create Splash Screens
- ➔ Load Splash for App
- ➔ Test Application on ipad.
- ➔ Test Application on iphone.
- ➔ Appstore Submission Process.

Android

Introduction

- ➔ Mobile Application Development
- ➔ Android Introduction
- ➔ History & Versions of Android
- ➔ Android Features
- ➔ Dalvik Virtual Machine
- ➔ Android Architecture
- ➔ Application Building Blocks
- ➔ Build Process of an Android Application

Android Installation

- ➔ Java & JDK
- ➔ Eclipse IDE
- ➔ Android SDK
- ➔ Eclipse – ADT Plugin
- ➔ Creating Android Virtual Device

Android Studio Setup

- ➔ Developing an Android Application
- ➔ R.java
- ➔ Android Manifest file
- ➔ Toast Notifications
- ➔ Localization

Android Application

- ➔ Activities
- ➔ Activity Lifecycle
- ➔ Intents

- ➔ Linking Activities using Intents
- ➔ Passing Data using an Intent
- ➔ Returning data from Activity
- ➔ Calling Built-in Applications using Intent
- ➔ Explicit Intents
- ➔ Implicit Intents
- ➔ Intent Filters
- ➔ Resources in an Android Application
- ➔ Debugging in Android Applications
- ➔ Dalvik Debug Monitor Server – DDMS
- ➔ LogCat

Basic Android User Interface

- ➔ View Hierarchy
- ➔ How Android draws Views?
- ➔ Common Layout Objects
- ➔ FrameLayout
- ➔ LinearLayout
- ➔ TableLayout
- ➔ RelativeLayout
- ➔ AbsoluteLayout
- ➔ GridLayout
- ➔ Scroll View
- ➔ Text Controls
- ➔ Other Common UI Components
- ➔ Handling User interaction Events

Advanced User Interface

- ➔ List Controls
- ➔ Custom List Controls

- ➔ Daye & Time Pickers
- ➔ Selection Components
- ➔ Spinner
- ➔ Adapters
- ➔ Card View, Web View
- ➔ Grid View, Gallery View, Recycler View
- ➔ Drawer Layout
- ➔ TabHost
- ➔ Canvas & Paint
- ➔ Progress Bar
- ➔ Supporting Multiple Screens & Devices
- ➔ Styles & Themes
- ➔ Custom Themes

Animations & Graphics

- ➔ Frame by Frame Animations
- ➔ Tween Animations
- ➔ Programmatically creating Animations
- ➔ Drawing Graphics in Android

Menus & Dialogs

- ➔ Creating Menus
- ➔ Options Menu
- ➔ Context Menu
- ➔ Popup Menus
- ➔ Action Menus
- ➔ Alert Dialog
- ➔ Progress Dialog
- ➔ Date Picker Dialog
- ➔ Time Picker Dialog
- ➔ Status Bar Notifications

Custom Components

- ➔ Custom Dialogs
- ➔ Custom Views
- ➔ Custom Adapters
- ➔ Custom ListView

Multimedia

- ➔ MediaPlayer : Audio
- ➔ VideoView : Video
- ➔ Recording Media

Preferences & Data Storage

- ➔ Shared Preferences
- ➔ Internal Storage
- ➔ External Storage
- ➔ Database Storage

SQL ITE Databases

- ➔ Introducing SQLite
- ➔ SQLiteOpenHelper
- ➔ Creating a Database
- ➔ Opening and Closing a Database
- ➔ Creating Tables
- ➔ Create, Insert, Update & Delete data
- ➔ Working with Cursors
- ➔ Cursor Adapters
- ➔ Pre-creating a Database using SQLite Browser

Android Services

- ➔ Overview of Services in Android
- ➔ Implementing a Service
- ➔ Service Lifecycle
- ➔ How to start and Stop a Service
- ➔ Threads for Service
- ➔ AsyncTask

Web services

- ➔ XML
- ➔ XML Parsing
- ➔ JSON
- ➔ Exploring HttpURLConnection
- ➔ Thread & Runnable
- ➔ Using AsyncTask to Fetch & Parse JSON
- ➔ Using Retrofit to Fetch & Parse JSON
- ➔ Implementing SOAP Services
- ➔ Consuming a Web Service
- ➔ Android App working with PHP Web App

Location based Services & GPS

- ➔ Working with Location Manager
- ➔ Fetch Users Current Location
- ➔ Reverse Geocoding using Geocode
- ➔ Map Fragment
- ➔ Showing Current Location on Map
- ➔ Showing Markers on Map
- ➔ Exploring different Map Types
- ➔ Animated Zooming using Camera