

Introduction to iOS App Development (MD102)

48 Hours

Outline

This course will give you an understanding of Objective-C and will lead you naturally into app development where you can focus on the key frameworks, techniques and tool used to develop apps for those platforms. We explore iOS as a platform then build up from the chore architecture of an iOS app to fully working version with data, location, animation and even asynchronous cloud access. This course is hands on and you will build everything you see. By the end, you will be able to incorporate many IOS's most advanced features into your own apps.

Target Audience

Programmers that have experience with object oriented programming language and UI framework.

Prerequisites

Delegates for this course need to be experienced programmers in another programming language and have good understanding of object oriented programming principals and design patterns.

For those without a previous knowledge of C Language, the first day of the course (optional) will cover basic C topics.

In order to work outside the class, participants must have access to a Mac computer running Mac OS X 10.10 or better, and have Xcode 6.3 or better installed.

Contents

- Swift Programming Language
- Objective C overview
- Basic IOS development

Model 1: Swift Programming Language

- Xcode IDE
- Constants and Variables
- Data Types
- Tuples
- Optionals
- Enums
- Arrays and Dictionaries
- If, Switch and Loops
- Functions
- Nested functions and Closures
- Structures and Classes
- Properties and Observers
- Static Variables and Properties
- Subscripts
- Inheritance
- Overriding
- Initialization
- Type Casting
- Extensions
- Protocols and Delegations
- Generics
- ARC and Garbage Collector

Model 2: Android Fundamentals

- Writing code in objective C
- Building Classes in objective C

Model 3: Basic iOS Development

- Views: Image, Button, Label, Text, etc.
- Table View
- Basic table view
- Delete button
- Refresh button
- Reloading table view
- View Controllers
- View Controller lifecycle
- Presenting and dismissing view controller
- Concurrency and Multitasking
- Grand Central Dispatch
- Performing Tasks Asynchronously
- How the UI is rendered
- Completing long running tasks in the background
- Background fetch capabilities
- Monitoring user's location in the background
- Story board
- UI design
- Outlets
- Action