Course duration

4 days

Course Benefits

- Learn how to perform unit testing.
- Learn to work with flow control.
- Learn how to perform debugging.
- · Learn to work with windows and views.
- Learn to work with collections.
- Learn to manipulate design and work with picker view and date picker.
- · Learn to work with directories and files.
- · Learn to work with MapKit and Networking.
- Learn to run you app on a physical device and deploy.

Course Outline

- 1. Getting Started
 - 1. Introduction to Objective-C
 - 2. Lab: Hello World
 - 3. Data Types and Variables
 - 4. Lab: Properties
 - 5. Constants
 - 6. Alloc-Init & New
 - 7. Strings, Numbers, Bool
 - 8. Literals
 - 9. Typecasting
 - 10. nil
- 2. Unit Testing
 - 1. Introduction
 - 2. XCTest
 - 3. Performance Tests
 - 4. Lab: Unit Tests
 - 5. Xcode Server
 - 6. Create Bot
 - 7. Lab: Xcode Server
- 3. More Objective-C: Flow Control
 - 1. Loops
 - 2. Switch
 - 3. Lab: Loops
 - 4. Logical Operators

- 5. UI with Interface Builder
- 6. Introduction
- 7. View Controllers
- 8. View
- 9. Connections
- 10. Lab: Connections
- 4. More Objective-C: Functions
 - 1. Functions
 - 2. Parameters
 - 3. Lab: Functions
 - 4. Blocks
 - 5. Completion Handlers
 - 6. Lab: Blocks
 - 7. Debugging
 - 8. Introduction
 - 9. Breakpoints
 - 10. Debug Gauges
 - 11. Debug Area/Console
 - 12. Lab: Debugging
 - 13. Classes
 - 14. ARC
 - 15. Initializers
- 5. Windows and Views
 - 1. Windows
 - 2. Views
 - 3. Responder Chain
 - 4. View Resizing
 - 5. Screen Size Considerations
 - 6. Auto Layout
 - 7. Lab: Constraints
- 6. More Objective-C: Collections
 - 1. Arrays
 - 2. Sets
 - 3. Dictionaries
 - 4. Enumerations
 - 5. Lab: Collections
 - 6. Asset Management
 - 7. Asset Catalogs
 - 8. App Icon
- 7. More Objective-C: Beyond Basics
 - 1. Protocols
 - 2. Lab: Protocols
 - 3. Categories
 - 4. Application Patterns
 - 5. Model-View-Controller
 - 6. Model-View-Presenter
 - 7. Model-View-ViewModel

- 8. Target-Action
- 9. Subclassing
- 10. Delegation
- 8. Protocol Oriented Programming
 - 1. Storyboards
 - 2. Introduction
 - 3. Segues
 - 4. Passing Data
 - 5. Lab: Storyboards
- 9. UI Design
 - 1. Constraints
 - 2. Table Views
 - 3. Table View Styles
 - 4. Cell Styles
 - 5. Prototype Cells
 - 6. Table Views
 - 7. Navigation
 - 8. Static Table Views
 - 9. Lab: Table View
- 10. Universal Apps
 - 1. Picker View
 - 2. Date Picker
- 11. Directories and Files
 - 1. Introduction
 - 2. Paths
 - 3. Paths and Directories
 - 4. File I/O
 - 5. User Defaults
 - 6. Lab: Files
- 12. CoreData
 - 1. CoreData
 - 2. Entities
 - 3. CoreData
 - 4. Core Generation
 - 5. Lab: CoreData
- 13. Touches, Taps, and Gestures
 - 1. Touches
 - 2. Gestures
 - 3. Lab: Touches
 - 4. Animation
 - 5. Lab: Animations
- 14. App States
 - 1. App States
 - 2. App Delegate
 - 3. Considerations/Limitations
 - 4. Background Execution
- 15. Notifications

- 1. Overview
- 2. Permission
- 3. Local Notifications
- 4. Push Notification
- 5. Notification Center
- 6. CoreLocation
- 7. Lab: CoreLocation

16. MapKit

- 1. MapKit
- 2. Concurrency
- 3. Operations and Operation Queue
- 4. NSInvocationOperation
- 5. NSBlockOperation
- 6. Grand Central Dispatch
- 7. Lab: Concurrrency

17. Networking

- 1. Reachability
- 2. Asynchronous Downloads
- 3. Lab: Downloads
- 4. GET Request
- 5. POST Request
- 6. JSON Data
- 7. Lab: JSON
- 8. Localization
- 9. Resources
- 10. Translation Considerations
- 11. Language and Region

18. Running on a Physical Device

- 1. Developer Account
- 2. Device
- 3. Performance and Power Optimization
- 4. Performance
- 5. Measuring Performance
- 6. Memory Considerations
- 7. Network Considerations

19. Deployment

- 1. Icons and Launch Storyboard
- 2. Archiving
- 3. Distributing
- 4. iTunesConnect
- 5. User Feedback
- 6. Obj-C from Swift
- 7. Swift from Obj-C

Class Materials

Each student will receive a comprehensive set of materials, including course notes and all the class examples.

Class Prerequisites

Experience in the following is required for this Objective-C class:

• Basic computer experience.

Experience in the following would be useful for this Objective-C class:

- Some experience in a programming language.
- Broader exposure than HTML, CSS, etc. is strongly suggested.
- If unsure about your experience and prerequisites, contact Webucator customer service who can put you in touch with an Objective-C instructor.
- End-user experience with an iPod, iPhone, or iPad.