IOS Course Content

1. iOS Development Environment

- 1.1. Introduction to iOS SDK
- 1.2. What's new in iOS 9
- 1.3. SDK Tools
 - 1.3.1. What's new in Xcode 7
 - 1.3.2.Using XCode
 - 1.3.3. Using Interface Builder
 - 1.3.4. Using iPhone Simulator

2. Swift Fundamentals

- 2.1. Hello Swift
- 2.2. Swift Playground

3. Swift Language Basics

- 3.1. Core Data Types
- 3.2. String Type
- 3.3. Tuples & Optionals
- 3.4. Constants & Variables
- 3.5. Statements & Operators
- 3.6. Control Flow & Decisions
- 3.7. Functions

4. Basic Object Oriented Programming using Swift

- 4.1. Structs
- 4.2. Types versus instances
- 4.3. Member and static methods
- 4.4. Custom initialization & De-initialization
- 4.5. Classes
- 4.6. Initialization
- 4.7. Methods
- 4.8. Properties

5. Advanced Object Oriented Programming using Swift

- 5.1. Optionals
 - 5.1.1.Introducing optionals
 - 5.1.2.Unwrapping an optional
 - 5.1.3. Optional binding
- 5.2. Nested Types
- 5.3. Generic Types
- 5.4. Protocol

6. Memory Management

- 6.1. Reference Counting Basics
- 6.2. Automatic Reference Count
- 6.3. Retain Cycles

7. iPhone Application Basics

- 7.1. Anatomy of an iPhone application
- 7.2. Application Life cycle and States

8. User Interface Programming – Basics

- 8.1. UIKit Framework
- 8.2. XIB and Interface Builder
- 8.3. Window & View
- 8.4. Basic User Controls
 - 8.4.1. Labels, Text Fields, Buttons, Sliders, Picker etc.
 - 8.4.2. Building application screens
 - 8.4.3. Alerts and Action Sheets

9. Auto-layout and Constraints

10. View Controllers

- 10.1. Basics
- 10.2. Creating View Controllers
- 10.3. Content vs Container View Controllers
- 10.4. Orientation Management

11. User Interface – Special Views

- 11.1. Image View
- 11.2. Scroll View
- 11.3. Table Views
 - 11.3.1. Populating and configuring Table View
 - 11.3.2. Data Source and Delegate
 - 11.3.3. Table View Cells
 - 11.3.4. Custom Cells
 - 11.3.5. Editing Table View
- 11.4. Collection View

12. Multiple View Controllers

- 12.1. Applications with Multiple Views
- 12.2. Presenting View Controllers
- 12.3. Animating View Switching
- 12.4. Tab based applications (Tab Bar Controller)
 - 12.4.1. Configuring the Tab Bar
- 12.5. Navigation based applications (Navigation Controller)
 - 12.5.1. Working with the Navigation Bar embeddedact.com

13. Storyboards

- 13.1. Storyboard File
- 13.2. View Controller and Scene
- 13.3. Segue
- 13.4. Invoking a Segue
- 13.5. XIB and Storyboards
- 13.6. Table View Cell Prototype

14. Multi Touch and Gestures API

- 14.1. Events and Touches
- 14.2. Gesture Recognition

15. Data Persistence – 1

- 15.1. File System
- 15.2. SQLite

16. Data Persistence - 2

- 16.1. Core Data
- 16.2. NSUserDefaults

17. Concurrency and Background Execution

- 17.1. GCD and Closures
- 17.2. NSOperation and NSOperationQueue
- 17.3. Background execution

18. Networking, Connectivity etc.

- 18.1. Making web request
- 18.2. Restful services
- 18.3. JSON
- 18.4. Apple Push Notification Service

