

iPhone/iOS Syllabus

Intro to Objective-C

- Objective-C and Smalltalk
- Objective-C, C, C++ and Mac OS X
- Objective-C and iPhone/iPad/iOS

Introduction iOS and SDK

- iOS SDK: iPhone, iPod Touch
- Xcode
- Interface Builder
- iPhone Simulator
- Debugger

Xcode

- Xcode IDE
- Editing
- Building
- Running
- Console

Objective-C 2.0

- Programming in Objective-C
- The Preprocessor

Classes, Objects, Methods and Properties

- id
- null
- @interface
- @end
- @implementation
- Archiving
- @property

- @synthesize
- @dynamic
- Data Types
- control flow statement
- More about Classes
- More about Variables and Data Types
- Inheritance
- Polymorphism, Dynamic Typing, and Dynamic Binding

Categories and Protocols

- About Categories
- @category
- About Protocols
- @protocol

Foundation Framework

- Introduction to the Foundation Framework

Collections

- NSArray
- Enumeration
- NSMutableArray
- NSDictionary
- NSMutableDictionary
- Scalar Data Types
- NSObject and NSString
- NSData and NSDate

Files

- NSFileManager
- NSFileHandle
- NSUserDefaults
- NSHomeDirectory(), etc.
- Resource Files
- Read/Write Text Files

- Copying Objects
- Archiving

Memory Management

- Allocate
- Release
- Auto Releasing
- Reference Counting
- Static Analyzer
- Garbage Collection

Cocoa and Touch

- What is Cocoa?
- Cocoa Framework and Cocoa Classes
- Subclassing
- Xcode
- Simulator
- Interface Builder
- Nib files
- File's Owner
- Outlet Connections
- Action Connections
- Inspector

Controls Part-1

- Controls
- Labels
- IBOutlet
- Buttons
- IBAction
- Event Handling
- UIEvent
- Toolbars
- Toolbar items
- Status bar
- Navigation bar and items

Controls Part-2

- Activity Indicator
- Network Activity Indicator
- Page Indicator
- Progress View
- Refresh Control
- Scope Bar
- Search Bar
- Segmented Control
- Slider
- Stepper
- Switch
- Detail Disclosure Button
- Info Button

Text Controls

- Text Field and Delegate
- Text View and Delegate

View

- What is View?
- UIViews and UIViewControllers
- UIView Class
- UIView Subclasses
- Types of Views
- UIApplication

Window Based Application

- Application
- Application Delegate
- View Controller
- Window & Views
- Device Info
- Screen
- CGRect, CGPoint, CGSize

- CGRectMake(), CGRectZero
- Static Device Info
- Dynamic Device Info
- Orientation Info
- The iPhone Accelerometer
- Detecting shakes
- Determining orientation
- Responding to the accelerometer

Tab Bar Application

- Tab Bar Controllers
- Tab Bars
- First View Controller
- Second View Controller
- Third View Controller
- Creating New Classes
- Classes and Interface Builder

Navigation Based Application

- Root View Controller
- Navigation Controller, Bars and Items
- Button Bar Items
- Push/Pop Views

Picker View

- UIPickerView
- UIPickerViewDelegate
- UIPickerViewDataSource
- Date and Time Picker
- UIDatePicker
- NSTimer

Table View

- Table View and Controller
- Table View Cellz

- Data Source
- Table View Delegate

Popover (iPad Only)

Split View (iPad Only)

Browser View

Alerting Users

- Alert View
- Alert View Delegate
- Action Sheet
- Action Sheet Delegate

Media and Images

- UIImageView
- UI image
- animationImages
- Highlighted Animation Images
- UITouch
- UIGestureRecognizer
- UIPinchGestureRecognizer
- Panning
- Zooming
- Rotating Image
- Playing Audio
- Responding to audio events.
- Playing audio in background
- Recording Audio
- Playing Video
- Photo Library
- UIImagePickerController
- Taking Pictures And Movies

Processes and Threads

- NSProcessInfo
- NSThread
- PerformInBackground

- GCD (Grand Central Dispatch)
- Synchronization

Networking

- NSURL
- NSURLRequest
- NSURLConnection
- XMLParser
- SCNetwork
- CFHTTP
- CFFTP
- CFSocket
- Web Server

Working with SQLite

- What Is SQLite?
- The SQLite Library
- Building a Simple Database
- Designing the Database
- Creating the Database
- Populating the Database
- Creating Records with the INSERT Command

Working with Core Data

- Introducing Core Data
- SQLite and Core Data
- Modeling Data in Xcode
- Building a Core Data Application
- Core Data-Related Cocoa Features
- Core Data Migration and Performance
- Application Integration using Web Services

Location and Mapping

- About Core Location
- Handling location updates

- About Map Kit
- Map Overlays
- Adding annotations

Social Networks Integration

- Flickr integration
- Twitter integration
- Facebook integration
- YouTube integration

Real-Time Working Scenario

- What is mercurial and repository?
- What is IPA file?
- How to make an ipa file, upload a build to TestFlight? and upload app to app store?