



CURRICULUM

Introduction to IOS Application

- Understanding of IOS platform
- IOS Application Life Cycle
- Understanding of X-Code IDE

Installation and Configuration

- How to installed X-Code Environment
- How to open template for Development Environment

Introduction to Swift & IOS Development

Introduce Swift, IOS Development

The Swift Language Basic Syntax

Discuss the syntax of Swift and commonly used aspects of the language

The Swift Language Object-Oriented Programming

Discuss object-oriented programming concepts

Building Your First App

• Create an application in Xcode with an interactive UI

Creating & Configuring Scroll Views

Discuss scroll views

Implementing Navigation with the Tab Bar Controller

• Create an app with a tab bar navigation

Delegate Design pattern

- UI Text Field
- Protocols
- Implement delegate method

Target & Action Design Pattern

- Setting target& Action
- Implementing Methods

View Controllers

- Model View Controllers
- basic of View Controllers
- Life Cycle of View Controllers
- Creating of View Controllers
- Using Interface Builder
- Programmatically

UITable View and UITable View Controller

- Basic UITable
- Creating of Custom UITable View
- UITable view Cell
- Creation of UITable View Controller
- Using Interface Builder
- Programmatically
- UITable View Cell Advanced

Displaying Sets of Data: Table View

 Implement various operations, such as inserting, moving and deleting rows, and creating custom rows in a table view

UI Tab Bar Controller

- Basic UI Tab Bar application
- Creation UI Tab bar Controller
- Using Interface Builder
- Programmatically

Displaying Sets of Data: Collection View

• Implement various operations, such as inserting, moving and deleting cells, and creating custom cells in a collection view

Data Persistence

• Having looked at the different ways data can be saved on an IOS device, you will modify the currency converter app so that it saves data to the device and experiment with various data storage solutions to determine the right fit for your to-do list app.

Data Persistence with FileManager

• Discuss how data can be saved and retrieved to the file system using FileManager

Property Lists

- Discuss how data can be saved and retrieved to the file system using Property List files
- Discuss how data can be saved and retrieved to the file system using NSUserDefaults. This data will be presented and managed from the app
- UserDefaults: Presenting Preferences in Settings Discuss how Application Preferences can be saved and retrieved to and from the file system using UserDefaults and managed in the Settings app
- **SQLite:** Discuss how data can be saved and retrieved to the file system using SQLite
- Core Data: Discuss how data can be saved and retrieved to the file system using Core Data
- Final Project Check-In Point: Create an IOS application.

Gesture Programming

- Basics of Touch Events
- Responding to Touch Events
- Moving an Image View based on gestures

Implementing Gesture Recognition

Examine various types of gesture recognizers and how to use them to make an interactive app

Database Storage

- Userdefaults
- Property List
- SQLite Database
- Core Data

Create Project

Threading

- Basics of Thread Programming
- Create Custom thread to fetch data from Url

XML Programming

- Basics of XML Structure
- XML Parsing

JSON Programming

- Basics of JSON Structure
- JSON Parsing

Working with menus & Dialogs

How to create menus in Storyboard and View-based Application

Notification

- Local Notification
- Application Notification
- Types of notification

Camera

- UI Image View
- Getting Image FromLibrary
- Phone Library

Playing Audio And Video

- Play Video
- Play Audio
- How to Record audio and Video File in i-Phone and Play

Animation Programming

- UI View Animation
- Basics of layers
- Layer Animation

Core Location Framework

- CL Location & CL Location Manager
- Where am I application
- Where am I application

Address Book framework

Overview of Address Book API

Map Kit Framework

- Overview of map kit programming
- Where am I app

Web Services Interaction I-Pad Basics

- Overview of IPad App
- UI Pop Over Controller
- UI Split View Controller

Memory management Tools

- Reference Counting
- object ownership
- Auto release pools
- Retain count methods

Social Sharing

- Facebook
- Linked-in
- Twitter

Advanced Feature

- Facebook Integration
- Twitter Integration
- Linked-In Integration
- **Google Plus Integration**

Storyboard

How to work StoryboardHow to work Layout in Storyboard

Performance and Debugging

- Find and fix problems
- Elimination hot spots and slow code
- Instruments utility
- Show data in Log Panel

SQL Queries in IOS

- **Run Simple Queries**
- How to configure the database
- Joins

Creating Auto Layouts

After learning about the different ways you can make an app's UI adaptive to the device it is run on, you will modify the previous currency converter app and make it adaptive so that it can run well and look great on any IOS device (i.e. iPad, iPhone, or iPod)

Web Services

Create own custom web services & integrate these web service in IOS app

Implement Third Party Libraries

- **FMDB**
- Almo Fire

App Store Basics

- Overview of Deeloper/Provisional certificates
- Prepare App store build

Final Projects







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