

Mobile App Developer Jr (Advanced) using XCode

The students will learn how to conceptualize, design and program mobile application for mobile device suitable for iOS Platform

The objectives of the programmes are to promote logical, critical and creative thinking skills by providing a holistic learning environment for the students in the areas of application development and product development lifecycle.

Course Outline

Target: Secondary Students

Session	Course Outline	Remarks
1	<p>Introduction to Xcode Integrated Development Environment</p> <p>Understanding structure of objective-c programming semantic (sequence)</p>	<ol style="list-style-type: none"> 1. Creating Single View Project 2. Creating UI using Storyboard interface builder (IB) 3. Previewing the app using IOS Simulator 4. Learning to detect common mistakes of programming and apply simply debugging.
2	<p>Understanding the programming semantic (selection) conditional statements using IF/ Nested IF</p> <p>Introduce new UI objects (Imageview, Pages Control, Toolbar & Bar button)</p> <p>Learning to add external files (e.g. photo images) to the projects</p> <p>Loading images to image view using IB and programmatically</p>	<ol style="list-style-type: none"> 1. Enhance Hello World tutorial with buttons that toggle attributes 2. Creating a multi-view project starting from a single view template 3. Generating animation using sets of images 4. Adding Phonebook into MainCollections Tutorial
3	<p>Understanding the different data-type.</p> <p>Introduce new UI objects (Textfield & Slider)</p> <p>Getting input from users</p> <p>Displaying and formatting numerical data onto label objects</p>	<ol style="list-style-type: none"> 1. Adding Final Year marks calculator into MainCollections tutorial

Session	Course Outline	Remarks
4	Creating a web browser using web view Implementing media player to play video and audio files	Adding SimpleBrowser and MediaPlayer into MainCollections tutorial
5	Implementing collection list using Pickerview	
6	Understanding programming semantic (Iterative)	Adding StudentProfile into MainCollections tutorial Adding a child view controller to display section from the pickerview.
7	Understanding Data management using Core Data framework	
8	Understanding SQL Database and Deploying database & table	
9-11	Project Consultation & ad hoc iOS features	Project: Create an interactive app with iOS8 features that can store information
12	Project Wrap Up and Presentation	Students will learn how to deploy their projects to the iOS device for testing

Software Requirement:
Xcode V6.01 or later

Hardware Requirement:
Computers running Mac OS X
Maverick and above

For more information about our training, please contact us:

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For funding matters, please email ida_infocommclub@ida.gov.sg (if you are an Infocomm Club teacher in an MOE School)