

CS474 ANDROID DEVELOPMENT

Enjoy greater efficiency and accomplish more

Course Details

"The human brain physiology is the hardware of that cosmic computer, which can create anything through proper programming." "Life is here to enjoy" -- Maharishi Mahesh Yogi

Faculty Contact Information

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Course Overview

Developing Android programs is an exciting and potentially lucrative experience. Android development opens up the world of creativity to you the programmer and allows you to express yourself in ways you never dreamed of in a digital world where you can create a product and make it available to billions of users in just one click of a button. This course will concentrate on creating Android applications by using the Java programming language. Topics you will learn includes: Setting up your computer for Android programming; Manifest basics; Layouts, Activities, Views and UI components; working with Intents, Fragments and Shared Preferences; Web View and HTML; working with Multimedia; SQLite Database and JSON; understating Sensors; Localization; Publishing app into Google play store.

Objectives

The goal of this course is to teach you how to use Java to develop and control Android applications. Upon completion of this course, you will achieve

- Plan the setup of a computer for Android programming
- Understand how Android applications work, their lifecycle, manifest, intents and using external resources.
- Develop user input and output interfaces using widgets, structured layouts , Listeners, Views, Menus and Dialogs.
- Develop UIs using XML
- Adapt Android library classes for data storage and retrieval using shared preferences, files and data bases.
- Generate Multimedia applications with the help of Audio, Video and Camera.
- Develop methods to save state information between app runtimes.
- Create adaptable UIs using frgments.
- Understand how to work with Android built-in Sensors.
- Build your own Android Apps.
- Continued development of higher states of consciousness through regular practice of the Transcendental Meditation technique and a balanced daily routine.

Online Reading Resource

<https://developer.android.com>

The recommended textbook

1. Head First Android Development A Brain-Friendly Guide, Edition 2

Authors : Dawn Griffiths, David Griffiths

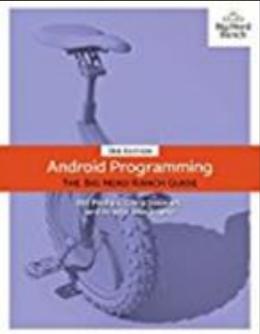
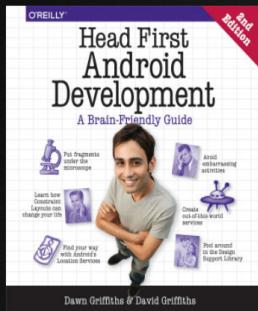
2. Android Programming: The Big Nerd Ranch Guide (3rd Edition)

Authors : Bill Phillips, Chris Stewart, and Kristin Marsicano

Publisher: O'Reilly Media

Publishers : Barnes & Noble

Release Date: August 2017



Course Overview Chart

WEEK		MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
WEEK ONE	AM	The Course Overview Chart & Syllabus Lesson 1 Introduction to Android	Lesson 3 Layouts, Activity and UI Components	Lesson 4 Intents	Lesson 5 Advanced UI Components	Lesson 5 Continued	Lesson 5 Continued
	PM	Lesson 2 Creating First App Short Lab : Hands on training with Android SDK	Lab Time	Lab Time	Lab Time	Lab Time	Rest
WEEK TWO	AM	Lesson 6 Shared Preferences & Fragments	Lesson 7 WebView & HTML	Lesson 8 Multimedia	Lesson 8 Continued	Review for Midterm	Midterm Examination
	PM	Lab Time	Lab Time	Lab Time	Lab Time	Study for Midterm	Rest
WEEK THREE	AM	Lesson 9 JSON & SQLite Database	Lesson 9 (Continued)	Lesson 10 Sensors Lesson 11 Localization	Lesson 12 Publish APK	Review for Final	Final Examination
	PM	Lab Time & Project work	Lab Time & Project work	Lab Time & Project work	Lab Time & Project work		
WEEK FOUR	AM	Lesson 13 Android Course APP Demo	Project Work	Project Work	Project Presentation		
	PM						

Project Work

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