Mobile Application Development Course for Android Devices

Venue: Arusha Technical College
Date: 12-17, May, 2014
Fee: 80,000/=

Course Description

Study of fundamental concepts, design strategies, tools and APIs to create advanced applications for mobile phones and occasionally connected mobile devices. Topics include: design of mobile user interfaces, application life-cycle, inter-process communication, content providers and mobile application monetization strategies. The target computing environment may change. Currently the course explores the Android Operating System and its supporting SDK.

Student Outcomes

At the end of the course the student will be able to develop effective native android mobile applications. The student will be able to create a full, functional and complete android application at the end of the boot camp, also the student will be able to monetize their applications and publish them on the app stores.

1. **Targeting android application. The Big Picture**

Background and positioning of the Android platform, including comparisons to other popular mobile platforms. After an introduction to the platform, the balance of the first chapter introduces the high-level architecture of Android applications and the operating system environment.
- Introducing Android
- Stacking up Android
- Booting Android development
- An Android application
- Summary

2. **Android Development environment**

Step-by-step development exercise teaching you the essence of using the Android development environment, including the key tools and concepts for building an application.
- The Android SDK
- Fitting the pieces together
- Building an Android application in Eclipse
- The Android Emulator
- Debugging, clean and run
- Set and Reset Environment perspective
- Summary

3. **Android User interfaces:**

Covers the fundamental Android UI components, including View and Layouts. Introduces basic concepts such as handling external resources, dealing with events, and the lifecycle of an Android application.
- Creating the Activity
- An Overview of User Interfaces
- Using XML Layouts
- Selection Widgets
- Android options Menus
- Using Fonts
- Dialog Boxes: Alert Dialog and Toast
- Android Input Dialogs

4. Intents and services

Expands on the concepts learned in chapter 3 and delves into the Android Intent concept to demonstrate interaction between screens, activities, and entire applications.
Working with Intent classes

- Overview of Intent types
- Connecting xml UI with java classes
- Transfer data between activity using intents
- Performing Inter-Process Communication
- Summary

5. Android data related Features

- Android lists
- Android tabs
- Android search
- Android splash screen

6. Putting it all together–the Field Service Application.

Develop a complete application including server communications, persistent storage, multiple Activity navigation, menus, mapping, RSS services, etc.

- Field Service Application requirements
- Android application tour
- Android code
- Digging deeper into the code
- Summary

7. Mobile application monetization

- Paid application
- In app purchase
- Adverts
- Mobile application competitions and hackthon

8. Mobile application localization

Creating multi-lingual android applications
- Translating android applications
- Customizing android applications to global or local standard

9. Publishing android applications

- Exporting android applications
- Creating keys
- Opening accounts on the apps store
- Publishing requirements and procedures

Note: All the above android application concepts will be trained using 3 complete and full android applications. The class will get a chance to develop those 3 apps from scratch.

10. Learning Resources

- Visit Android's web site at developer.android.com
- Videos on Android at http://www.youtube.com/user/androiddevelopers
- Android Development Community http://www.anddev.org
- Official Android Market http://www.android.com/market
- Marakana mobile boot camp

For those who wish to attend the course please send us sms to reserve a seat on 0714689866 stating your full name, organization/school/college and email address; complete the payment procedure by depositing the fee to the following CRDB Bank Account:
Account Name: **ATC PRODUCTION & CONSULTANCY, A/C No. 01J1099202800**