Mobile Application Development in Android

Objective: To train participants for emerging open-source mobile platform - Android.

Brief Course Content

Android Overview:

Android Features, Architecture, Android Applications, Android Application Framework, Android Libraries, Android Runtime

Application Fundamentals

Application Components, Activating Components, The Manifest File, Declaring Components, Declaring Components capabilities, Declaring Application requirements, Application Resources.

Setting up development environment:

Installation of Android SDK, Installation and configuration of IDE(Eclipse), Set up Android Virtual Devices or hardware devices, Create an Android Project, Build and run the application, Debug the application with the SDK debugging and logging tools, Testing the application within an emulator or device.

Additional Tools:

Essential command line tools, Open Source Tools, Third Party Tools

Development:

User Interface Development, Handling UI Events, Applying Styles and Themes, Building Custom Components for Applications, Common Layout Objects, Drawings, Handling Resources, Widget Design, Adding Color and Graphics , Alternative Resources, Optimizing User Interface.

Databases:

About SQLite, DbHelper, First Example, Update UpdaterService, Refactoring Status Data

Advanced:

Graphics in Depth, Audio and Video, Developing on a Device, Debugging Tasks, Signing Application, Licensing Application, Publishing Your Application

Project work

Eligibility

B.Sc/BA/BCom , Diploma/Degree in Electronics, Electricals, IT, CS or undergoing