Android App Development Course Highlights

Session 1: Startup

1. Introductions
2. Tools/environment setup & troubleshooting
3. Create 1st Android App – Bluetech
4. Introduction to Java
   4.1 Creating, compiling, & running a Java Program
   4.2 Variables, constants, data types, output and comments
   4.3 Operations: math, assignment, comparison, precedence, escape characters
   4.4 If, switch, for, while, do-while, break/continue
   4.5 Arrays
   4.6 Strings
   4.7 OO: properties + methods, inheritance, containment, class vs. object, interfaces
5. Revisit First Android App – Bluetech
   5.1 Manifest
   5.2 Resources
   5.3 Views
   5.4 Debugging
   5.5 DDMS
   5.6 Logcat

Session 2: Working with the User Interface

1. Development tools
2. Applications
   2.1 App manifest
   2.2 Resources
   2.3 Application types
3. Activities
   3.1 Activity Life Cycle
4. Introduction to UI
   4.1 Layouts
   4.2 Fragments
   4.3 Adapters
   4.4 Action bar
   4.5 Dialogs
   4.6 Notifications
5. UI best practices
Session 3: Data and App interaction

1. Intents and Broadcast Receivers
   1.1 Intents
   1.2 Pending intents
   1.3 Intent resolution
   1.4 Native broadcast intents
2. Preferences and saving state
3. Content Providers
4. Background processing
   4.1 Services
   4.2 IntentService
   4.3 AsyncTask
   4.4 Alarms

Session 4: Sensors, Deployment and more

1. Sensors
   1.1 Finding sensors
   1.2 Accelerometers
   1.3 Gyrosopes
   1.4 Other types
2. Orientation and Movement
   2.1 Pitch, roll and yaw
   2.2 Natural device orientation
   2.3 Reference frame remapping
3. SMS
   3.1 Sending
   3.2 Receiving
4. App Distribution
   4.1 Signing
   4.2 Google Play requirements
   4.3 Needed assets
   4.4 Monetization
   4.5 Tips on becoming a top app
   4.6 Google analytics