Android+VR

Programming & development

Course Curriculum

ANDROID   APPLICATION   DEVELOPMENT

The course contents are as follows:

Course Details
Day-1:(Session-1, 3hrs before lunch break)

- **What Is Android?**
  - Brief Introduction of Android Device Programming for Android
  - Open Handset Alliance and Features

- **Installing the Android SDK**
  - Brief Introduction of Android Device Programming for Android
  - Installing the Android
  - Configuring the Android Plug-in for Eclipse

- **Android Stack(Architecture)**
  - Linux Kernel
  - Native Libraries
  - Dalvik Virtual Machine App Framework

- **Hello World Application**
  - Creating the first Android Application
  - Running the application on Android emulator
  - Hello World App on Android Emulator

Day-1:(Session-2, 5hrs after lunch break)

- **Main Building Blocks**
  - Default Packages
  - Activities
  - Activity Life Cycle

- o Intents
- o Content Providers
- o Broadcast Receiver

- **Intent Filters in Android**
  - o Role of filters
  - o Intent matching Rules
  - o Filters in your Manifest

- **Working on and Preparing Android User Interface**

  - o XML Layout Files
  - o Views and Layouts
  - o Setting Content View
  - o Basic UI Components(Buttons,EditText,ListView,AutoCompleteTextView,Spinner)
  - o Performing and Handling user events

Tea Break
- **Android Apps Building**
  - o Declaring Variables
  - o Using Text View for values to be printed
  - o Using Conditions

- **Designing an Application**
  - o Implementation of Widgets
  - o Using Radio Buttons
  - o Use of different types of Android Themes

Day-2:(Session-1, 4hrs before lunch break)

- **Android Layout Understanding&Menu**
  - o Linear Layout
  - o Relative Layout
    Building PopUp Menu

- **Android: Toast Creation**
  - o Creating Standard Toast
  - o Setting the position of a Toast on the Screen

Tea Break

- **Sensors in Android**
  - o How sensors work
  - o Types of Sensors
  - o Listening to sensor reading
  - o Working with Acceleration Sensor
  - o Reading X,Y,Z Coordinates

- **Work With Your Android Phone**
  - o Get your Apps on Phone.

- o Get Connected with Phones
- o App Transfer Among Hand Sets

Day-2:(Session-2, 4hrs after lunch break)

- **Broadcast Receiver**
  - o Life Cycle of Broadcast Receiver
  - o Some System Broadcast
  - o Pending Intent
  - o Creating messaging application

- **Android Graphics and Multimedia**
  - o Playing Audio
  - o Playing video

- **Media Player Application using Content Provider**
  - o Creating list view to display song list
  - o Transfer songs on AVD
  - o Play songs on AVD or on your Device

Android Advanced Topics (Only Overview)

1) Android Asyc Task
2) Android Webservices
3) Android Online Apps
4) Targetting mutiple Resolutions

Virtual Reality with Android Native – Android Studio

- Develop professional VR apps using Android Studio
- Run Android Studio applications in VR on a smart phone
- Create a 3D scene
- Select items in the scene
- Move around the 3D world
- Create easy to interact with menus to control application parameters
- Input alphanumeric information (text, numbers)
- Play back regular video
- Panoramic pictures and video