

# PROFESSIONAL TRAINING COURSE



## 4 Days Course on Android Application Development

### Android Development

Innovative mobile development



#### Two Sigma Technologies

Suite B, 19-2, Jalan PGN 1A/1, Pingiran Batu Caves,  
68100 Batu Caves, Selangor  
Tel : 03-61880601/Fax :03-61880602  
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## Android App Development

With Android phones being produced by all of the major phone manufacturers and with the addition of new tablet devices, it's no surprise that the Android platform is the fastest growing mobile development platform in the world. In this course, you will learn to develop Android applications using Java and the Eclipse development environment. You will learn basic application development including using the Android mobile camera, working with geolocation tools, and playing audio and video files.

## Skills Gained

- Use Eclipse and the Android ADT plugin to develop and debug Android applications
- Build resizable user interfaces
- Build sophisticated applications using multiple activities
- Communicate between and within Android applications using Intents
- Create Services to represent behind the scenes aspects of your application
- Set up text input from the hardware or software keyboard
- Display scrolling lists and grids with custom layouts
- Learn to properly handle rotation
- Parse and display XML from web services
- Use AsyncTask to background long running work
- Display context menus and search dialogs with the hardware search and menu buttons
- Listen and react to touch events

## Who Can Benefit

- New and experienced application developers who wish to expand their toolset and specialize in developing Android apps for business, education, or personal use
- Developers seeking a career as a mobile applications developer
- Those new to mobile apps development
- Anyone who started building an app and needs help putting all the pieces together

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## Prerequisites

- Experience in Java programming is required
- No experience in Android development is necessary
- Experience developing graphical user interfaces in JavaSE is helpful but not required

## Course Settings

Date	Refer to Training Calendar
Venue	Refer to Training Calendar
Fees	Contact Us at sales@2-sigma.com
Timings	0900-1700 (4 Days)
Inclusive	Certificates and notes
Audience	IT Officer, Application Developer and Programmer

## Android App Development -Schedule

Day 1	
09.00am – 10.00am	<b>Introduction to Android</b> <ul style="list-style-type: none"> <li>• History</li> <li>• Versions</li> <li>• Architecture</li> <li>• NDK vs SDK</li> <li>• Tools</li> <li>• Emulator</li> </ul> <b>Basic building blocks</b> <ul style="list-style-type: none"> <li>• Text Fields</li> <li>• Buttons</li> <li>• Spinner</li> <li>• Dialog</li> <li>• Switches</li> </ul>
10.00am – 10.30am	Breakfast
10.30am – 12.45pm	<b>Installation</b> <ul style="list-style-type: none"> <li>• Eclipse intro</li> <li>• Java</li> <li>• ADT Tools</li> </ul> <b>Emulator setup</b> <ul style="list-style-type: none"> <li>• Creating virtual device</li> <li>• AVD acceleration with Intel HaXm</li> <li>• Interacting with AVD</li> </ul>
12.45pm – 02.15pm	Lunch
02.15pm – 05.00pm	<b>Activity</b>

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	<ul style="list-style-type: none"> <li>• Lifecycle</li> <li>• Declaration</li> <li>• XML</li> <li>• Java</li> <li>• Layout</li> </ul> <p><b>Hello World</b></p> <ul style="list-style-type: none"> <li>• Wizard</li> <li>• Running in AVD</li> <li>• Installing APK in phone</li> <li>• Direct run</li> <li>• Intro to Debugging</li> </ul>
<b>Day 2</b>	
09.00am – 10.00am	<p><b>Layout</b></p> <ul style="list-style-type: none"> <li>• Absolute</li> <li>• Frame</li> <li>• Linear</li> <li>• Table</li> </ul>
10.00am – 10.30am	Breakfast
10.30am – 12.45pm	<p><b>Views</b></p> <ul style="list-style-type: none"> <li>• Text</li> <li>• Button</li> <li>• Image</li> </ul>
12.45pm – 02.15pm	Lunch
02.15pm – 05.00pm	<p><b>Dialog</b></p> <ul style="list-style-type: none"> <li>• Toast</li> <li>• AlertDialog</li> <li>• Custom Dialog</li> </ul> <p><b>Intro to Intent</b></p> <ul style="list-style-type: none"> <li>• Connecting two or more activity</li> <li>• Types of Intent</li> </ul>
<b>Day 3</b>	
09.00am – 10.00am	<p><b>Intent</b></p> <ul style="list-style-type: none"> <li>• Explicit Intent</li> <li>• Implicit Intent</li> </ul>
10.00am – 10.30am	Breakfast
10.30am – 12.45pm	<p><b>Intent (cont.)</b></p> <ul style="list-style-type: none"> <li>• Sending values to Intent</li> <li>• Retrieving values from Intent</li> </ul>
12.45pm – 02.15pm	Lunch

02.15pm – 05.00pm	<p><b>Menu</b></p> <ul style="list-style-type: none"> <li>• Design</li> <li>• Handling menu events</li> </ul> <p><b>Preference</b></p> <ul style="list-style-type: none"> <li>• Design</li> <li>• Saving preference</li> <li>• Preference loading</li> </ul>
<b>Day 4</b>	
09.00am – 10.00am	<p><b>SQLite</b></p> <ul style="list-style-type: none"> <li>• Creating helper class</li> <li>• Create database</li> <li>• DB query</li> </ul>
10.00am – 10.30am	Breakfast
10.30am – 12.45pm	<p><b>GPS</b></p> <ul style="list-style-type: none"> <li>• Intro to Providers</li> <li>• Intro to Permissions</li> <li>• GPS Provider</li> <li>• GPS events</li> <li>• Handling GPS events</li> <li>• Getting latitude &amp; longitude</li> </ul> <p><b>Maps</b></p> <ul style="list-style-type: none"> <li>• Static Maps</li> <li>• Maps API</li> <li>• Displaying location based on latitude &amp; longitude</li> </ul> <p><b>Camera</b></p> <ul style="list-style-type: none"> <li>• Camera Permission</li> <li>• Launching camera Intent</li> <li>• Retrieving captured Image</li> </ul>
12.45pm – 02.15pm	Lunch
02.15pm – 05.00pm	<p><b>File</b></p> <ul style="list-style-type: none"> <li>• File Permission</li> <li>• Create, Write, &amp; Save file</li> </ul> <p><b>Internet</b></p> <ul style="list-style-type: none"> <li>• Internet Permission</li> <li>• Using WebView</li> </ul> <p><b>Summary</b></p>



## More Information

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To register, please email to [sales@2-sigma.com](mailto:sales@2-sigma.com) or fax the registration form to 03-61880602, we will contact you for further action.

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