

## COURSE CONTENTS

### Introduction

- Mobile Application Development
- Android Overview
- History of Android
- Android Versions & Levels
- Why Android is important?
- Android Features

### Android Architecture

- Software Stack
- Linux Kernel
- Native Libraries
- Android Runtime
- Dalvik Virtual Machine
- Application Framework
- Core Building Blocks

### Android Installation

- Java & JDK
- Eclipse IDE Helios & Indigo
- Android SDK
- Eclipse ADT Plugin
- Creating Android Virtual Device
- Different type of Skins
- Developing an Android Application
- R.java
- Android Manifest.xml
- Hide Title Bar

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- Activity Lifecycle
- Intents
- Linking Activities using Intents
- Passing Data using an Intent
- Returning data from Activity
- Calling Built-in Applications using Intent
- Implicit Intents

- Intent Filters
- Resources in an Android Application
- Grouping, accessing of Resources
- Permissions
- Debugging in Android Applications
- Dalvik Debug Monitor server – DDMS
- How DDMS interacts with a Debugger
- Using DDMS
- LogCat
- Hierarchy Viewer

### Basic Android User Interface

- View Hierarchy
- How Android draws Views?
- Common Layout Objects
- FrameLayout
- LinearLayout
- TableLayout
- RelativeLayout
- AbsoluteLayout
- GridLayout
- ScrollView
- Text Controls
- Button Controls
- Other Common UI Components
- Handling User interaction Events

### Advanced User Interface

- List Controls
- Custom List Controls
- Picker Controls
- Selection Components
- Spinner
- Adapters
- Complex UI Components
- Progress Bar
- Building UI for Performance
- Supporting Multiple Screens
- Styles & Themes
- Custom Themes

# Android

# ISS Galaxy Technologies & Services

## Animations & Graphics

- Frame by Frame Animations
- Tween Animations
- Programmatically creating Animations
- Drawing Graphics in Android

## Menus & Dialogs

- Creating Menus
- Options Menu
- Context Menu
- Popup Menus
- Sub Menus
- Loading menus through XML file
- Alert Dialog
- Progress Dialog
- Date Picker Dialog
- Time Picker Dialog

## Notifications & Toast

## Multimedia in Android

- Audio Playback
- Video Playback
- Recording Media

## Preferences & Data Storage

- Shared Preferences
- Internal Storage
- External Storage
- Database Storage

## SQLITE Databases

- Introducing SQLite
- SQLiteOpenHelper
- Creating a Database
- Opening and Closing a Database
- Creating Tables
- CRUD Operations
- Working with Cursors
- Working with SQLite Database Browser

## Fragments

## Networking

## SMS & Email

## Web Services

## Android Services

## Location based Service & GPS

## Broadcast Receivers

## Sensors

## WiFi

## Telephony

## Bluetooth

## Content Providers

## Publishing Android Applications

## Application Development in Google play store