



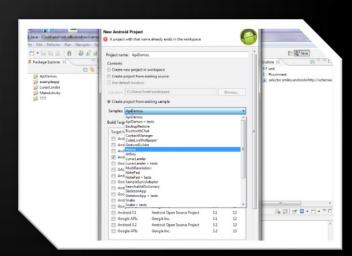
# Getting Started with Android

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Android Mobile Applications

Telerik Software Academy

<a href="http://academy.telerik.com">http://academy.telerik.com</a>



### Objectives

- Android architecture and application development model
- Install and configure an Android application development environment
- Develop and deploy a simple Android application

### **Android Architecture**

### **ARCHITECT**



What my friends think I do



What my mom thinks I do



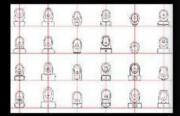
What society thinks I do



What contractors think I do

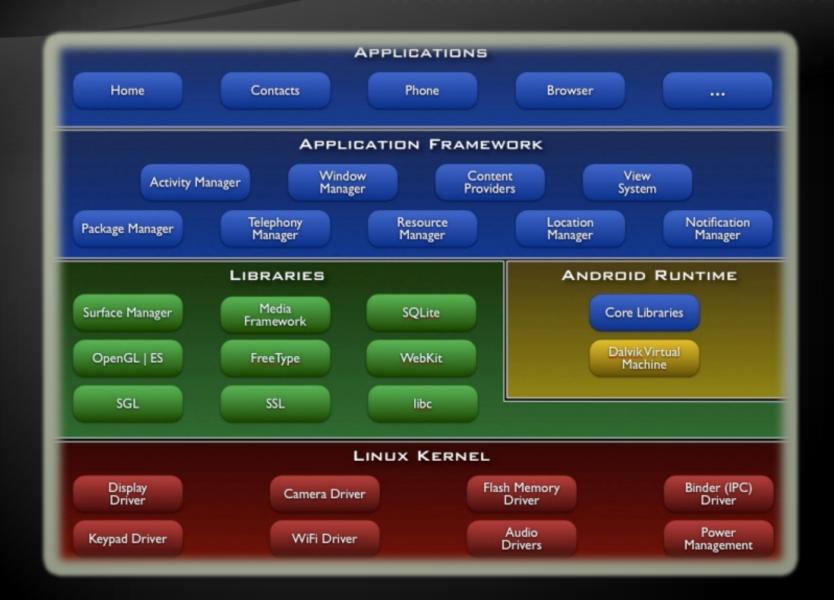


What I think I do



What I really do

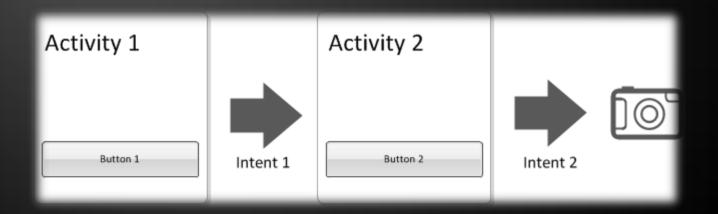
### **Android Architecture**



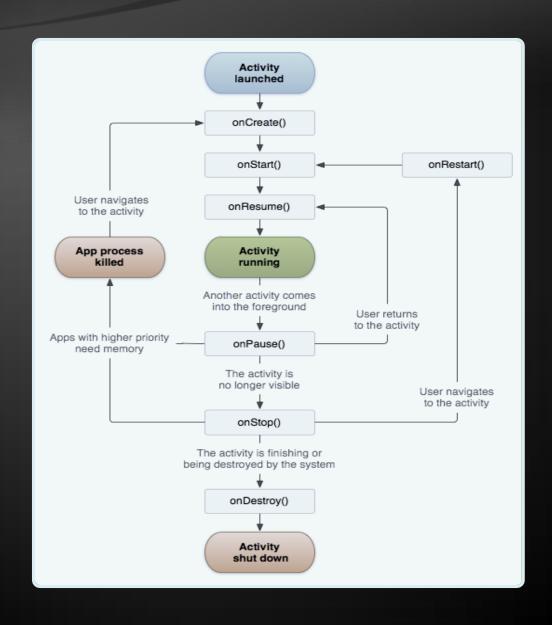
### **Application Building Blocks**

- Activity
  - UI component (one screen)
- ◆ IntentReceiver
  - Responds to notifications or status changes.
     Can wake up your process.
- Service
  - Faceless task that run in the background.
- ContentProviders
  - Enable applications to share data.

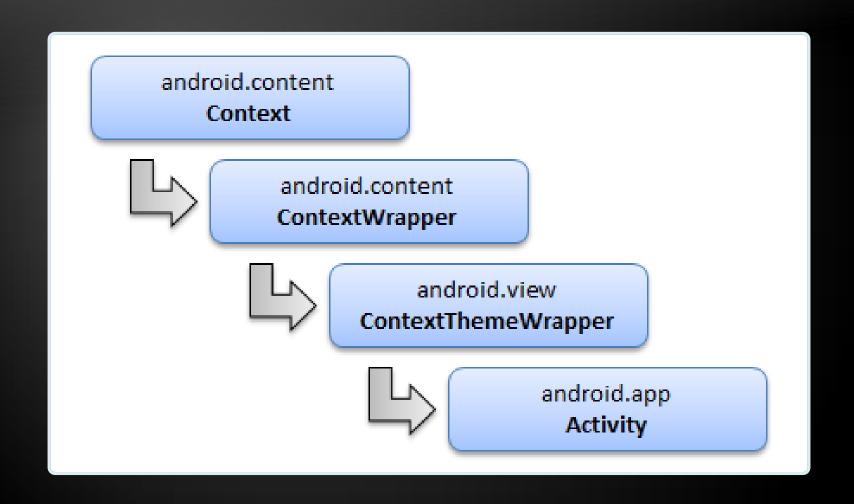
## Activity



### **Activity Lifecycle**



### **Activity Context**





## Intents Live Demo

#### Intents

- Activity to Activity communication
  - dataType
  - Object
  - Start with result
- Intent select image from gallery
- Intent share link with facebook

## Android Resources



## Primitive data type resources

```
Simple Resource Types
                                                                                                                                                                                                                                                                                              String
                                                                                                                                                                                                                                                                                               Color
<?xml version="1.0" encoding="utf-8"?>
                                                                                                                                                                                                                                                                                             Dimension
<resources>
         <string name="app_name">To Do List</string>

    Array

         <color name="app_background">#FF0000FF</color>
         <dimen name="default_border">5px</dimen>
         <array name="string_array">
                   <item>Item 1</item>
                   <item>Item 2</item>
                  <item>Item 3</item>
         </array>
         <array name="integer_array">
                  <item>3</item>
                                                                                                                                                                                                                                                                                                                                                           drawable-hdpi
                  <item>2</item>
                                                                                                                                                                                                                                                                                                                                                          ic_launcher.png
                   <item>1</item>

▲ Comparison de la prima del prima del prima de la prima del la prima de la prima del la prima de la prima de la prima del la prima 
         </array>
                                                                                                                                                                                                                                                                                                                                                          ic_launcher.png
</resources>
                                                                                                                                                                                                                                                                                                                                      ic_launcher.png
                                                                                                                                                                                                                                                                                                                                      x list_item.xml
                                                                                                                                                                                                                                                                                                                                                            x main.xml
                                                                                                                                                                                                                                                                                                                                                            x single_list_item.xm
                                                                                                                                                                                                                                                                                                                                                  values
                                                                                                                                                                                                                                                                                                                                                             strings.xm
```

### Style resources

```
1 <?xml version="1.0" encoding="utf-8"?>
    <resources>
        <string-array name="mitko">
            <item>One1</item>
            <item>One2</item>
            <item>One3</item>
  6
            <item>One4</item>
  8
            <item>One5</item>
  9
        </string-array>
 10
        <bool name="test">true
11
12
13
        <style name="mitko test">
            <item name="android:textSize">100sp</item>
14
15
                            hdroid:textColor">#ff1234</item>
              Element: item
16
              Content Model: ()*
        </sty
                Press 'F2' for focus
```

### **Image Resources**



### Localization



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### **Getting Started with Android**





- 1. Create an android application that has two activities:
  - One that has a edittext and a button. The button sends the info from the edittext through an intent
  - And one that shows the info that is passed from the first activity
- 2. Create an android application with gridView
  - Use the demo about the listView implementation from the video