

Lab Manual

Lab (2): Layouts



## Visual Programming for Smart Devices lab

## ❖ Objectives:

create an android application using different layouts

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Example 1: An Application using Linear Layout in .xml.

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:orientation="vertical" >
    <TextView
        android:layout_width="100dp"
        android:layout_height="wrap_content"
        android:text="@string/hello" />
    <Button
        android:layout_width="160dp"
        android:layout_height="wrap_content"
        android:text="Button"
        android:onClick="onClick" />
</LinearLayout>
```



Example 2: an application using Relative Layout in .xml.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
    android:id="@+id/RLayout"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    xmlns:android="http://schemas.android.com/apk/res/android" >

    <TextView
        android:id="@+id/lblComments"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Comments"
        android:layout_alignParentTop="true"
        android:layout_alignParentStart="true" />

    <EditText
        android:id="@+id/txtComments"
        android:layout_width="fill_parent"
        android:layout_height="170dp"
        android:textSize="18sp"
        android:layout_alignStart="@+id/lblComments"
        android:layout_below="@+id/lblComments"
        android:layout_centerHorizontal="true" />

    <Button
        android:id="@+id/btnSave"
        android:layout_width="125dp"
        android:layout_height="wrap_content"
        android:text="Save"
        android:layout_below="@+id/txtComments"
        android:layout_alignEnd="@+id/txtComments" />

    <Button
        android:id="@+id/btnCancel"
        android:layout_width="124dp"
        android:layout_height="wrap_content"
        android:text="Cancel"
        android:layout_below="@+id/txtComments"
        android:layout_alignStart="@+id/txtComments" />
</RelativeLayout>
```



Example 3: an application using Grid Layout in .xml.

```
<?xml version="1.0" encoding="utf-8"?>
<GridLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/GridLayout1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:columnCount="3"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/button3"
        android:layout_column="0"
        android:layout_gravity="left|top"
        android:layout_row="0"
        android:text="Button1" />

    <Button
        android:id="@+id/button1"
        android:layout_column="1"
        android:layout_gravity="left|top"
        android:layout_row="0"
        android:text="Button2" />

    <Button
        android:id="@+id/button2"
        android:layout_column="2"
        android:layout_gravity="fill_vertical"
        android:layout_row="0"
        android:layout_rowSpan="2"
        android:text="Button3" />

    <Button
        android:id="@+id/button4"
        android:layout_column="0"
        android:layout_columnSpan="2"
        android:layout_gravity="fill_horizontal"
        android:layout_row="1"
        android:text="Button4" />

</GridLayout>
```

