

Layouts

Layouts

- Son contenedores de vistas (views).
- Los más usados son:
 - LinearLayout: lineal horizontal o vertical.
 - TableLayout: forma tabular.
 - RelativeLayout: relativos unos con otros o con el padre.
 - FrameLayout: permite cambiar dinámicamente los controles en el layout.
 - GridLayout: forma de parrilla.

Contenedores

- Se pueden usar para agregar barras de scroll a una interface de usuario con muchos controles.
- Solo pueden tener un hijo.
- Contenedores más usados:
 - ScrollView
 - HorizontalScrollView

ScrollView

```
<ScrollView  
android:id="@+id/scrollView"  
android:layout_width="fill_parent"  
android:layout_height="fill_parent">  
  
<!-- add child view's here -->  
  
</ScrollView>
```

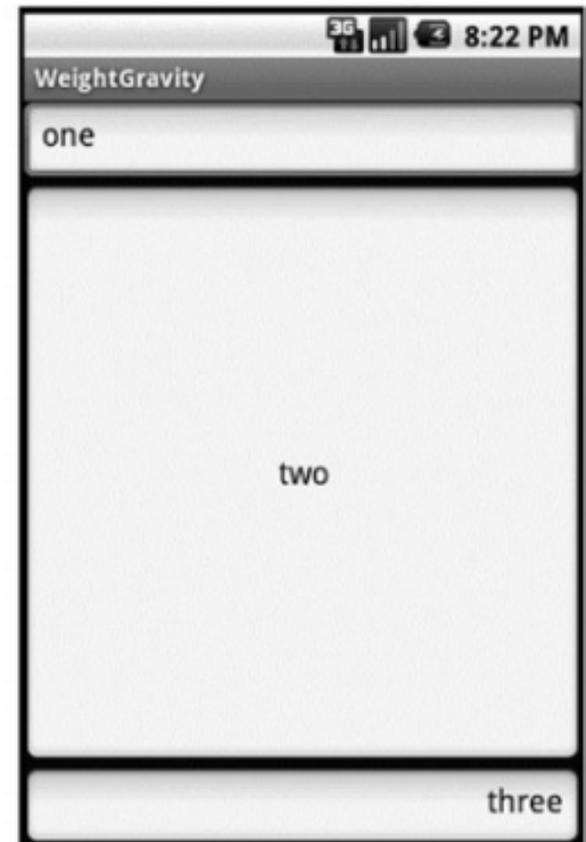
HorizontalScrollView

```
<HorizontalScrollView  
  android:id="@+id/horizontalscrollView"  
  android:layout_width="fill_parent"  
  android:layout_height="fill_parent">  
  
  <-- add child view's here -->  
  
</HorizontalScrollView >
```

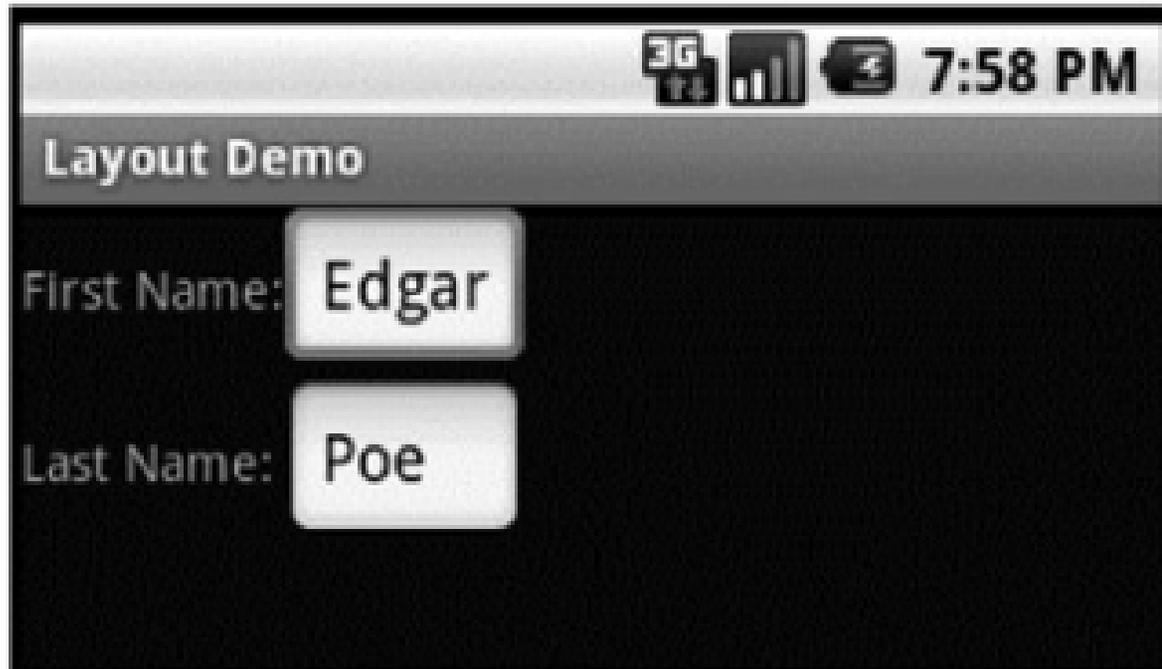
LinearLayout

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    android:orientation="horizontal"  
    android:layout_width="fill_parent"    android:layout_height="wrap_content">  
  
    <!-- add children here-->  
  
</LinearLayout>
```

Propiedades weight y gravity



TableLayout



TableLayout

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

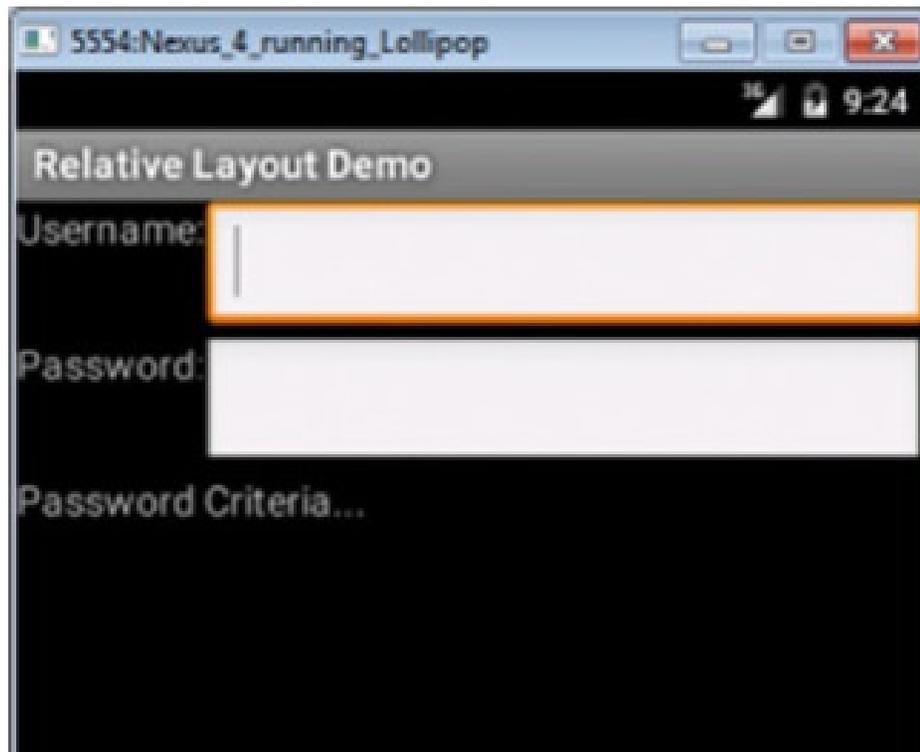
    <TableRow>
        <TextView android:text="First Name:"
            android:layout_width="wrap_content" android:layout_height="wrap_content" />

        <EditText android:text="Edgar"
            android:layout_width="wrap_content" android:layout_height="wrap_content" />
    </TableRow>

    <TableRow>
        <TextView android:text="Last Name:"
            android:layout_width="wrap_content" android:layout_height="wrap_content" />

        <EditText android:text="Poe"
            android:layout_width="wrap_content" android:layout_height="wrap_content" />
    </TableRow>
</TableLayout>
```

RelativeLayout



RelativeLayout

- El TextView se alinea arriba con respecto al padre.

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content">

<TextView android:id="@+id/usernameLbl"
    android:layout_width="fill_parent" android:layout_height="wrap_content"
    android:text="Username: "
    android:layout_alignParentTop="true" />
```

RelativeLayout

```
<EditText android:id="@+id/userNameText"
    android:layout_width="fill_parent" android:layout_height="wrap_content"
    android:layout_toRightOf="@id/userNameLbl" />

<TextView android:id="@+id/pwdLbl"
    android:layout_width="wrap_content" android:layout_height="wrap_content"
    android:layout_below="@id/userNameText"
    android:text="Password: " />

<EditText android:id="@+id/pwdText"
    android:layout_width="fill_parent" android:layout_height="wrap_content"
    android:layout_toRightOf="@id/pwdLbl"
    android:layout_below="@id/userNameText" />

<TextView android:id="@+id/pwdCriteria"
    android:layout_width="fill_parent" android:layout_height="wrap_content"
    android:layout_below="@id/pwdText"
    android:text="Password Criteria... " />

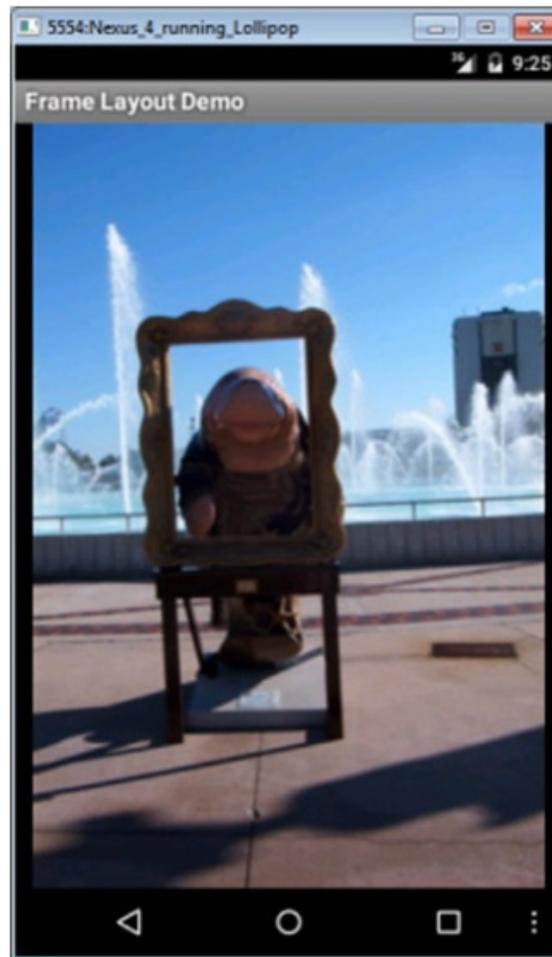
<TextView android:id="@+id/disclaimerLbl"
    android:layout_width="fill_parent" android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:text="Use at your own risk... " />

</RelativeLayout>
```

FrameLayout

- Su uso típico es para desplegar un control a la vez.
- Se definen varios controles.
- Todos menos uno tienen ***android:visibility="gone"***.
- Dentro de la actividad se puede hacer visible un control u otro.

FrameLayout



Layout

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

    <ImageView
        android:id="@+id/oneImgView" android:src="@drawable/one"
        android:scaleType="fitCenter"
        android:layout_width="fill_parent"    android:layout_height="fill_parent"/>
    <ImageView
        android:id="@+id/twoImgView" android:src="@drawable/two"
        android:scaleType="fitCenter"
        android:layout_width="fill_parent"    android:layout_height="fill_parent"
        android:visibility="gone" />

</FrameLayout>
```

Actividad

```
public class FrameLayoutActivity extends Activity{
    private ImageView one = null;
    private ImageView two = null;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.listing6_48);

        one = (ImageView)findViewById(R.id.oneImgView);
        two = (ImageView)findViewById(R.id.twoImgView);
    }
}
```

Actividad

```
one.setOnClickListener(new OnClickListener(){  
  
    public void onClick(View view) {  
        two.setVisibility(View.VISIBLE);  
  
        view.setVisibility(View.GONE);  
    });  
  
two.setOnClickListener(new OnClickListener(){  
  
    public void onClick(View view) {  
        one.setVisibility(View.VISIBLE);  
  
        view.setVisibility(View.GONE);  
    });  
}  
}
```

GridLayout

	<h2>Email Setup</h2>		
	You can configure email in just a few steps:		
Email address:	<input type="text"/>		
Password:	<input type="password"/>		
			<input type="button" value="Next"/>

- <http://android-developers.blogspot.mx/2011/11/new-layout-widgets-space-and-gridlayout.html>

Layout

```
<?xml version="1.0" encoding="utf-8"?>
<GridLayout
    xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout_width="match_parent"
    android:layout_height="match_parent"

    android:useDefaultMargins="true"
    android:alignmentMode="alignBounds"
    android:columnOrderPreserved="false"

    android:columnCount="4"
    >

    <TextView
        android:text="Email setup"
        android:textSize="32dip"

        android:layout_columnSpan="4"
        android:layout_gravity="center_horizontal"
        />

    <TextView
        android:text="You can configure email in just a few steps:"
        android:textSize="16dip"

        android:layout_columnSpan="4"
        android:layout_gravity="left"
        />
</GridLayout>
```

Layout

```
<TextView
    android:text="Email address:"

    android:layout_gravity="right"
/>

<EditText
    android:ems="10"
/>

<TextView
    android:text="Password:"

    android:layout_column="0"
    android:layout_gravity="right"
/>

<EditText
    android:ems="8"
/>
```

Layout

```
<Space
    android:layout_row="4"
    android:layout_column="0"
    android:layout_columnSpan="3"
    android:layout_gravity="fill"
/>

<Button
    android:text="Next"

    android:layout_row="5"
    android:layout_column="3"
/>
</GridLayout>
```