Widgets básicos para el diseño de la Interfaz de Usuario

Widgets

- •Widgets: control gráfico que sirve para interactuar con el usuario
- •Para recoger en tiempo de ejecución un widget usamos la función findViewByld(R.id.xxxx) donde xxxx es el identificador usado en el fichero UI *.xml. La función devuelve una View sobre la que haremos un casting de la clase real

```
public class Hola extends Activity {
```

```
@Override
  protected void onCreate(Bundle savedInstanceState)
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_hola); 23
21
22
```

```
final EditText miTexto= (EditText)findViewById(R.id.miTxt);
final Button miBoton= (Button)findViewById(R.id.miBtn);
final TextView elSaludo= (TextView)findViewById(R.id.miLbl);

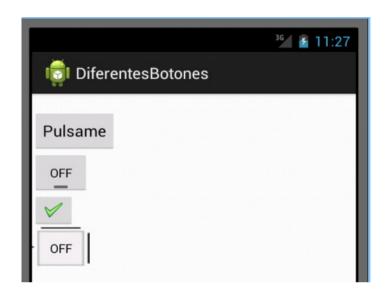
miBoton.setOnClickListener( new View.OnClickListener() {
    public void onClick(View v) {
        String mensajePaso= "Te saludo " + miTexto.getText();
        elSaludo.setText(mensajePaso);
    }
});
```

```
<TextView
           android:id="@+id/titulo"
 8
 9
           android: layout width="fill parent"
10
           android: layout height="wrap content"
           android: layout margin="5dp"
11
12
           android:text="@string/nombre"
           android:textColor="#5F9120"
14
           android:textSize="20dp"
15
           android:textStyle="bold" />
17
        <EditText
            android:id="@+id/TxtNombre"
18
19
            android: layout width="fill parent"
20
            android: layout height="wrap content"
            android: layout margin="5dp"
            android: hint="Escribe tu Nombre"
            android:inputType="text" />
```



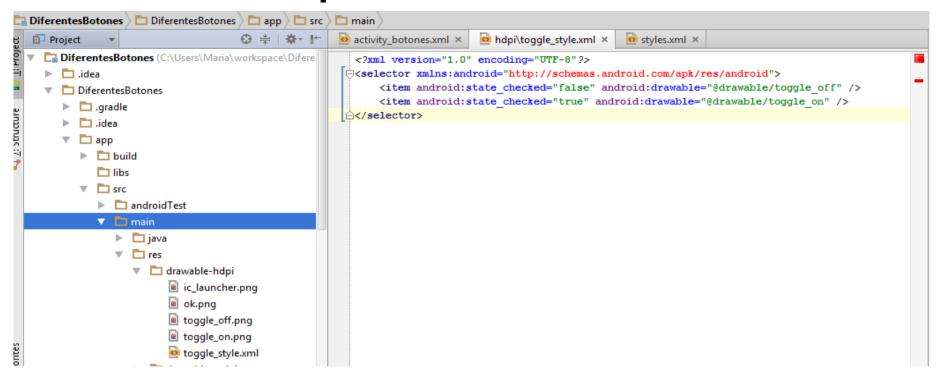
Tipos de botones

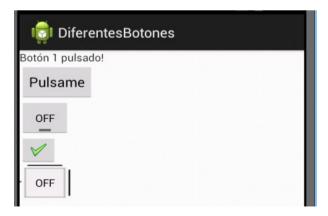
</LinearLayout>

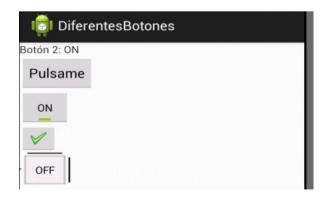


```
<LinearLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
  <TextView android:id="@+id/LblMensaje"
    android:layout width="fill parent"
    android:layout height="wrap content" />
  <Button android:id="@+id/BtnBoton1"
    android:text="Pulsame"
    android:layout width="wrap content"
    android:layout height="wrap content" />
  <ToggleButton android:id="@+id/BtnBoton2"
    android:textOn="ON"
    android:textOff="OFF"
    android:layout width="wrap content"
    android:layout height="wrap content" />
  <lmageButton android:id="@+id/BtnBoton3"</pre>
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:src="@drawable/ok" />
  <ToggleButton android:id="@+id/BtnBoton4"
    android:textOn="ON"
    android:textOff="OFF"
    android:padding="10dip"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:background="@drawable/toggle style"/>
```

Tipos de botones







```
public class ActivityBotones extends Activity {
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity botones);
     final TextView lblMensaje = (TextView)findViewByld(R.id.LblMensaje);
     final Button btnBoton1 = (Button)findViewByld(R.id.BtnBoton1);
                                                                           📆 DiferentesBotones
     btnBoton1.setOnClickListener(new View.OnClickListener() {
                                                                          otón 1 pulsado!
        public void onClick(View arg0)
                                                                          Pulsame
                                                                          OFF
          lblMensaje.setText("Botón 1 pulsado!");
     });
     final ToggleButton btnBoton2 = (ToggleButton)findViewById(R.id.BtnBoton2);
     btnBoton2.setOnClickListener(new View.OnClickListener() {
     public void onClick(View arg0)
                                                         DiferentesBotones
                                                      Botón 2: ON
          if(btnBoton2.isChecked())
                                                      Pulsame
             lblMensaje.setText("Botón 2: ON");
                                                                            DiferentesBotones
                                                                         Botón 2: OFF
          else
                                                                         Pulsame
             lblMensaje.setText("Botón 2: OFF");
                                                                          OFF
                                                       OFF
                                                .( continua la clase)
```

```
public class ActivityBotones ......(continuacion)
     final ImageButton btnBoton3 = (ImageButton)findViewById(R.id.BtnBoton3);
     btnBoton3.setOnClickListener(new View.OnClickListener() {
       public void onClick(View arg0)
          IblMensaje.setText("Botón 3 pulsado!");
     });
     final ToggleButton btnBoton4 = (ToggleButton)findViewByld(R.id.BtnBoton4);
     btnBoton4.setOnClickListener(new View.OnClickListener() {
       public void onClick(View arg0) {
          if (btnBoton4.isChecked())
             lblMensaje.setText("Botón 4: ON");
          else
             lblMensaje.setText("Botón 4: OFF");
                 DiferentesBotones
                                                                📆 DiferentesBotones
            Botón 4: ON
                                                              Botón 4: OFF
             Pulsame
                                                               Pulsame
```

Widgets básicos: CheckBox

```
<LinearLavout
                                                       📆 pruebaCheckBox
xmlns:android="http://schemas.android.com/apk/res/ar
    android:orientation="vertical"
    android:layout width="fill parent"
                                                          Cycling
    android:layout height="fill parent">
   <CheckBox
                                                          Teaching
        android:text="Cvcling"
        android:id="@+id/chkBoxCycling"
                                                          Blogging
        android: layout width="wrap content"
        android:layout height="wrap content">
    </CheckBox>
                                                       Get Hobby
    <CheckBox
                                                     ELIGE TU HOBBY !!!
        android:text="Teaching"
        android:id="@+id/chkBoxTeaching"
        android:layout width="wrap content"
        android:layout height="wrap content">
    </CheckBox>
                                                <But.t.on
                                                        android:text="Get Hobby"
                                                         android:id="@+id/btnHobby"
    <CheckBox
                                                         android:layout width="wrap content"
        android:text="Blogging"
                                                        android:layout height="wrap content"
        android:id="@+id/chkBoxBlogging"
        android:layout width="wrap content"
        android:layout height="wrap content">
                                                </Button>
    </CheckBox>
                                                <TextView
                                                        android:layout width="fill parent"
                                                        android:layout height="wrap content"
                                                        android:id="@+id/txtHobby"
                                                        android:text="@string/opHobby">
                                                      </TextView>
```

</LinearLayout>

```
📆 EjemCheckBox
public class MainActivity extends Activity {
                                                    Cycling
    CheckBox chkBoxCvcling;
    CheckBox chkBoxTeaching;
                                                      Teaching
    CheckBox chkBoxBlogging;
   Button btnHobby;
                                                      Blogging
    TextView txtHobby;
                                                    Get Hobby
   protected void onCreate (Bundle savedInstance)
                                                   Cycling Teaching
       // TODO Auto-generated method stub
       super.onCreate(savedInstanceState);
       setContentView(R.layout.activity main);
       initialUISetup();
   public void initialUISetup()
    chkBoxCycling = (CheckBox) findViewById(R.id.chkBoxCycling);
    chkBoxTeaching = (CheckBox) findViewById(R.id.chkBoxTeaching);
    chkBoxBlogging = (CheckBox) findViewById(R.id.chkBoxBlogging);
   btnHobby = (Button) findViewById(R.id.btnHobby);
    txtHobby = (TextView) findViewById(R.id.txtHobby);
   btnHobby.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
            getHobbyClick(v);
     });
```

```
public void getHobbyClick(View v)
String strMessage = "";
                                           ■ EjemCheckBox
if(chkBoxCycling.isChecked())
                                         Cycling
   strMessage+="Cycling";
                                         Teaching
if(chkBoxTeaching.isChecked())
                                         Blogging
   strMessage+="Teaching ";
                                         Get Hobby
                                        Cycling Teaching Blogging
if(chkBoxBlogging.isChecked())
   strMessage+="Blogging";
showTextNotification(strMessage);
public void showTextNotification(String msgToDisplay)
txtHobby.setText(msqToDisplay);
//Toast.makeText(this, msgToDisplay, Toast.LENGTH SHORT).show();
```

OTRA VERSION: Evento directo sobre CheckBox

```
public class OtroCheckBox extends Activity {
  CheckBox chkBoxCvcling:
  CheckBox chkBoxTeaching;
  CheckBox chkBoxBlogging;
  Button btnHoby:
  TextView txtHobby;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    // TODO Auto-generated method stub
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity otro check box);
    initialUISetup();
                                                  Crear la clase Interna a OtroCheckBox
  public void initialUISetup()
    chkBoxCycling = (CheckBox) findViewByld(R.id.chkBoxCycling);
    chkBoxTeaching = (CheckBox) findViewByld(R.id.chkBoxTeaching);
    chkBoxBlogging = (CheckBox) findViewByld(R.id.chkBoxBlogging);
    TextView txtHobby = (TextView)findViewByld(R.id.txtHobby);
    chkBoxCycling.setOnCheckedChangeListener(new myCheckBoxChangeClicker());
    chkBoxTeaching.setOnCheckedChangeListener(new myCheckBoxChangeClicker());
    chkBoxBlogging.setOnCheckedChangeListener(new myCheckBoxChangeClicker());
```

OTRA VERSION: Evento directo sobre CheckBox

```
class myCheckBoxChangeClicker implements CheckBox.OnCheckedChangeListener
     @Override
    public void onCheckedChanged(CompoundButton buttonView, boolean isChecked)
       if(isChecked)
         if(buttonView==chkBoxCvcling)
           showTextNotification("Cycling");
         if(buttonView==chkBoxTeaching)
           showTextNotification("Teaching");
         if(buttonView==chkBoxBlogging)
           showTextNotification("BlackBlogging");
  }// clase interna
public void showTextNotification(String msgToDisplay)
  { Toast.makeText(this, msgToDisplay, Toast.LENGTH SHORT).show();
```

Widgets básicos: RadioButton I

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    android:layout width="fill parent"
    android:layout height="fill parent"
    android:orientation="vertical" >
    <TextView
        android:id="@+id/LblSeleccion"
        android:layout width="fill parent"
        android:layout height="wrap content"
        android:text="ID opción seleccionada: (ninguna)" />
    < Radio Group
        android:id="@+id/gruporb"
        android:layout width="fill parent"
        android:layout height="150dp"
        android:orientation="vertical" >
        <RadioButton</pre>
            android:id="@+id/radio1"
            android:layout width="wrap content"
            android:layout height="wrap content"
            android:text="Opción 1" />
        <RadioButton</pre>
            android:id="@+id/radio2"
            android:layout width="wrap content"
            android:layout height="wrap content"
            android:text="Opción 2" />
    </RadioGroup>
</LinearLayout>
```



Widgets básicos: RadioButton I

```
public class MainActivity extends Activity {
    public void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity main);
      final TextView lblMensaje = (TextView)findViewById(R.id.LblSeleccion);
      final RadioGroup rg = (RadioGroup)findViewById(R.id.gruporb);
      rg.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
         public void onCheckedChanged(RadioGroup group, int checkedId) {
            lblMensaje.setText("ID opción seleccionada: " + checkedId);
        });
                             📆 📶 💶 5:07 PM
}
                                                 Ejemplo RadioButton
        Ejemplo RadioButton
                                                 ID opción seleccionada: 2131230723
        ID opción seleccionada: 2131230722
                                                     Opción 1
            Opción 1
                                                     Opción 2
            Opción 2
```

RadioButton: Un pequeño cambio

```
public class MainActivity extends Activity {
    public void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity main);
      final TextView lblMensaje = (TextView) findViewById(R.id.LblSeleccion);
      final RadioGroup rg = (RadioGroup) findViewById(R.id.gruporb);
      rg.clearCheck();
      rg.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                String textoOpcion="";
                if( group.getCheckedRadioButtonId()==R.id.radio1)
                  textoOpcion +="OPCION 1 con ID:" + checkedId;
                if( group.getCheckedRadioButtonId()==R.id.radio2)
                    textoOpcion +="OPCION 2 con ID:" + checkedId ;
                lblMensaje.setText(textoOpcion);
        });
                                                    EjemRadioButton1
```

PCION 2 con ID:2131230723

Opcion 1

Opcion 2