**MainActivity.java**

|  |
| --- |
| **package** com.example.mts.myapplication; **import** android.util.Log; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.View; **import** android.widget.Button; **import** android.widget.EditText; **public class** MainActivity **extends** AppCompatActivity {  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);  Button button=(Button) findViewById(R.id.***button***);  button.setOnClickListener(**new** View.OnClickListener() {  @Override  **public void** onClick(View v) {  EditText editText11=(EditText) findViewById(R.id.***editText***);  EditText editText22=(EditText) findViewById(R.id.***editText2***);  EditText editText33=(EditText) findViewById(R.id.***editText3***);  **int** a=Integer.*parseInt*(editText11.getText().toString());  **int** b=Integer.*parseInt*(editText22.getText().toString());  **int** c=a+b;  editText33.setText(c+**""**);  }  });  } } |

**Activity\_main.xml**

|  |
| --- |
| *<?***xml version="1.0" encoding="utf-8"***?>* <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:id="@+id/activity\_main"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:paddingBottom="@dimen/activity\_vertical\_margin"  android:paddingLeft="@dimen/activity\_horizontal\_margin"  android:paddingRight="@dimen/activity\_horizontal\_margin"  android:paddingTop="@dimen/activity\_vertical\_margin"  tools:context="com.example.mts.myapplication.MainActivity"**>   <**TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Addition"  android:layout\_marginLeft="128dp"  android:layout\_marginStart="128dp"  android:id="@+id/textView"  android:layout\_alignParentLeft="true"  android:layout\_alignParentStart="true"** />   <**EditText  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:inputType="textPersonName"  android:text="Name"  android:ems="10"  android:layout\_below="@+id/textView"  android:layout\_alignParentLeft="true"  android:layout\_alignParentStart="true"  android:layout\_marginTop="70dp"  android:id="@+id/editText"** />   <**EditText  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:inputType="textPersonName"  android:text="Name"  android:ems="10"  android:layout\_marginLeft="11dp"  android:layout\_marginStart="11dp"  android:layout\_marginTop="45dp"  android:id="@+id/editText2"  android:layout\_below="@+id/editText"  android:layout\_alignParentLeft="true"  android:layout\_alignParentStart="true"** />   <**Button  android:text="Add"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:id="@+id/button"  android:layout\_alignParentBottom="true"  android:layout\_alignParentLeft="true"  android:layout\_alignParentStart="true"  android:layout\_marginBottom="104dp"** />   <**EditText  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:inputType="textPersonName"  android:ems="10"  android:layout\_marginTop="32dp"  android:id="@+id/editText3"  android:layout\_below="@+id/editText2"  android:layout\_alignLeft="@+id/editText2"  android:layout\_alignStart="@+id/editText2"** />  </**RelativeLayout**> |

**How to hide the title ?**

**Note:**

|  |
| --- |
| requestWindowFeature(Window.FEATURE\_NO\_TITLE);//will hide the title not the title bar |

**How to set the Full screen?**

The **setFlags()** method of Window class is used to display content in full screen mode. You need to pass the **WindowManager.LayoutParams.FLAG\_FULLSCREEN** constant in the setFlags method.

|  |
| --- |
| this.getWindow().setFlags(WindowManager.LayoutParams.FLAG\_FULLSCREEN,   WindowManager.LayoutParams.FLAG\_FULLSCREEN);//int flag, int mask |

**TOAST**

Toast class is used to show notification for a particular interval of time. After sometime it disappears. It doesn't block the user interaction.

**Constants of Toast class**

There are only 2 constants of Toast class which are given below.

|  |  |
| --- | --- |
| **Constant** | **Description** |
| public static final int LENGTH\_LONG | displays view for the long duration of time. |
| public static final int LENGTH\_SHORT | displays view for the short duration of time. |

#### Methods of Toast class

**Example on Addition and Toast**

**MainActivity.java**

|  |
| --- |
| **package** com.example.mts.myapplication; **import** android.util.Log; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.View; **import** android.widget.Button; **import** android.widget.EditText; **import** android.widget.Toast;  **public class** MainActivity **extends** AppCompatActivity {   **private** EditText **edittext1**,**edittext2**;  **private** Button **buttonSum**;  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);  addListenerOnButton();   }   **public void** addListenerOnButton() {  **edittext1**=(EditText)findViewById(R.id.***editText1***);  **edittext2**=(EditText)findViewById(R.id.***editText2***);  **buttonSum**=(Button)findViewById(R.id.***button1***);   **buttonSum**.setOnClickListener(**new** View.OnClickListener() {  @Override  **public void** onClick(View v) {  String value1=**edittext1**.getText().toString();  String value2=**edittext2**.getText().toString();  **int** a=Integer.*parseInt*(value1);  **int** b=Integer.*parseInt*(value2);  **int** sum=a+b;  Toast.*makeText*(getApplicationContext(),String.*valueOf*(sum),Toast.***LENGTH\_LONG***).show();  }  });  } } |

**Activity\_main.xml**

|  |
| --- |
| *<?***xml version="1.0" encoding="utf-8"***?>* <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:id="@+id/activity\_main"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:paddingBottom="@dimen/activity\_vertical\_margin"  android:paddingLeft="@dimen/activity\_horizontal\_margin"  android:paddingRight="@dimen/activity\_horizontal\_margin"  android:paddingTop="@dimen/activity\_vertical\_margin"  tools:context="com.example.mts.myapplication.MainActivity"**>   <**EditText  android:id="@+id/editText1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentTop="true"  android:layout\_centerHorizontal="true"  android:layout\_marginTop="24dp"  android:ems="10"** />   <**EditText  android:id="@+id/editText2"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignLeft="@+id/editText1"  android:layout\_below="@+id/editText1"  android:layout\_marginTop="34dp"  android:ems="10"** >   <**requestFocus** />   </**EditText**>   <**Button  android:id="@+id/button1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_centerHorizontal="true"  android:layout\_centerVertical="true"  android:text="Add"** />  </**RelativeLayout**> |

# Android Custom Toast Example

You are able to create custom toast in android. So, you can display some images like congratulations or loss on the toast. It means you are able to customize the toast now.

**Activity\_main.xml**

|  |
| --- |
| *<?***xml version="1.0" encoding="utf-8"***?>* <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  tools:context=".MainActivity"** >   <**TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_centerHorizontal="true"  android:layout\_centerVertical="true"  android:text="@string/hello\_world"** /> </**RelativeLayout**> |

#### customtoast.xml(Create in layout folder)

|  |
| --- |
| *<?***xml version="1.0" encoding="utf-8"***?>* <**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:id="@+id/custom\_toast\_layout"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:orientation="vertical"  android:background="#F14E23"** >   <**ImageView  android:id="@+id/custom\_toast\_image"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:contentDescription="@string/hello\_world"  android:src="@drawable/ic\_launcher"**/>   <**TextView  android:id="@+id/custom\_toast\_message"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:contentDescription="@string/Toast"  android:text="@string/Toast"** /> </**LinearLayout**> |

MainActivity.java

|  |
| --- |
| **package** com.example.mts.myapplication; **import** android.util.Log; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Gravity; **import** android.view.LayoutInflater; **import** android.view.Menu; **import** android.view.View; **import** android.view.ViewGroup; **import** android.widget.Button; **import** android.widget.EditText; **import** android.widget.Toast; **public class** MainActivity **extends** AppCompatActivity  {  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);  *//Creating the LayoutInflater instance* LayoutInflater li = getLayoutInflater();  *//Getting the View object as defined in the customtoast.xml file* View layout = li.inflate(R.layout.***customtoast***,  (ViewGroup) findViewById(R.id.***custom\_toast\_layout***));   *//Creating the Toast object* Toast toast = **new** Toast(getApplicationContext());  toast.setDuration(Toast.***LENGTH\_SHORT***);  toast.setGravity(Gravity.***CENTER\_VERTICAL***, 0, 0);  toast.setView(layout);*//setting the view of custom toast layout* toast.show();  } } |

# Android Toggle Button Example

* **Android Toggle Button** can be used to display checked/unchecked (On/Off) state on the button.
* It is beneficial if user have to change the setting between two states. It can be used to On/Off Sound, Wifi, Bluetooth etc.
* Since Android 4.0, there is another type of toggle button called switch that provides slider control.
* Android ToggleButton and Switch both are the subclasses of CompoundButton class.

## Android Toggle Button class

Toggle Button class provides the facility of creating the toggle button.

### XML Attributes of ToggleButton class

The 3 XML attributes of ToggleButton class.

|  |  |
| --- | --- |
| **XML Attribute** | **Description** |
| android:disabledAlpha | The alpha to apply to the indicator when disabled. |
| android:textOff | The text for the button when it is not checked. |
| android:textOn | The text for the button when it is checked. |

### Methods of Toggle Button class

The widely used methods of Toggle Button class are given below.

|  |  |
| --- | --- |
| **Method** | **Description** |
| CharSequence getTextOff() | Returns the text when button is not in the checked state. |
| CharSequence getTextOn() | Returns the text for when button is in the checked state. |
| void setChecked(boolean checked) | Changes the checked state of this button. |

Example: (activity\_main.xml)

|  |
| --- |
| *<?***xml version="1.0" encoding="utf-8"***?>* <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  tools:context=".MainActivity"** >   <**ToggleButton  android:id="@+id/toggleButton1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentLeft="true"  android:layout\_alignParentTop="true"  android:layout\_marginLeft="60dp"  android:layout\_marginTop="18dp"  android:text="ToggleButton1"  android:textOff="Off"  android:textOn="On"** />   <**ToggleButton  android:id="@+id/toggleButton2"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignBaseline="@+id/toggleButton1"  android:layout\_alignBottom="@+id/toggleButton1"  android:layout\_marginLeft="44dp"  android:layout\_toRightOf="@+id/toggleButton1"  android:text="ToggleButton2"  android:textOff="Off"  android:textOn="On"** />   <**Button  android:id="@+id/button1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_below="@+id/toggleButton2"  android:layout\_marginTop="82dp"  android:layout\_toRightOf="@+id/toggleButton1"  android:text="submit"** /> </**RelativeLayout**> |

**MainActivity.java**

|  |
| --- |
| **package** com.example.mts.myapplication; **import** android.util.Log; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Gravity; **import** android.view.LayoutInflater; **import** android.view.Menu; **import** android.view.View; **import** android.view.ViewGroup; **import** android.widget.Button; **import** android.widget.EditText; **import** android.widget.Toast; **import** android.widget.ToggleButton;  **public class** MainActivity **extends** AppCompatActivity {   **private** ToggleButton **toggleButton1**, **toggleButton2**;  **private** Button **buttonSubmit**;  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);   addListenerOnButtonClick();  }  **public void** addListenerOnButtonClick(){  *//Getting the ToggleButton and Button instance from the layout xml file* **toggleButton1**=(ToggleButton)findViewById(R.id.***toggleButton1***);  **toggleButton2**=(ToggleButton)findViewById(R.id.***toggleButton2***);  **buttonSubmit**=(Button)findViewById(R.id.***button1***);   *//Performing action on button click* **buttonSubmit**.setOnClickListener(**new** View.OnClickListener(){   @Override  **public void** onClick(View view) {  StringBuilder result = **new** StringBuilder();  result.append(**"ToggleButton1 : "**).append(**toggleButton1**.getText());  result.append(**"\nToggleButton2 : "**).append(**toggleButton2**.getText());  *//Displaying the message in toast* Toast.*makeText*(getApplicationContext(), result.toString(),Toast.***LENGTH\_LONG***).show();  }  });  } } |

## Android CheckBox Example

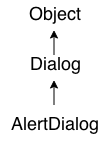
#### activity\_main.xml

|  |
| --- |
| <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  tools:context=".MainActivity" >    <CheckBox  android:id="@+id/checkBox1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentLeft="true"  android:layout\_alignParentTop="true"  android:text="Pizza" />    <CheckBox  android:id="@+id/checkBox2"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentTop="true"  android:layout\_toRightOf="@+id/checkBox1"  android:text="Coffe" />    <CheckBox  android:id="@+id/checkBox3"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentTop="true"  android:layout\_toRightOf="@+id/checkBox2"  android:text="Burger" />    <Button  android:id="@+id/button1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_below="@+id/checkBox2"  android:layout\_marginTop="32dp"  android:layout\_toLeftOf="@+id/checkBox3"  android:text="Order" />    </RelativeLayout> |

**MainActivity.java**

|  |
| --- |
| **package** com.example.mts.myapplication; **import** android.util.Log; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Gravity; **import** android.view.LayoutInflater; **import** android.view.Menu; **import** android.view.View; **import** android.view.ViewGroup; **import** android.widget.Button; **import** android.widget.CheckBox; **import** android.widget.EditText; **import** android.widget.Toast; **import** android.widget.ToggleButton; **public class** MainActivity **extends** AppCompatActivity {  CheckBox **pizza**,**coffe**,**burger**;  Button **buttonOrder**;  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);  addListenerOnButtonClick();  }  **public void** addListenerOnButtonClick(){  *//Getting instance of CheckBoxes and Button from the activty\_main.xml file* **pizza**=(CheckBox)findViewById(R.id.***checkBox1***);  **coffe**=(CheckBox)findViewById(R.id.***checkBox2***);  **burger**=(CheckBox)findViewById(R.id.***checkBox3***);  **buttonOrder**=(Button)findViewById(R.id.***button1***);   *//Applying the Listener on the Button click* **buttonOrder**.setOnClickListener(**new** View.OnClickListener(){   @Override  **public void** onClick(View view) {  **int** totalamount=0;  StringBuilder result=**new** StringBuilder();  result.append(**"Selected Items:"**);  **if**(**pizza**.isChecked()){  result.append(**"\nPizza 100Rs"**);  totalamount+=100;  }  **if**(**coffe**.isChecked()){  result.append(**"\nCoffe 50Rs"**);  totalamount+=50;  }  **if**(**burger**.isChecked()){  result.append(**"\nBurger 120Rs"**);  totalamount+=120;  }  result.append(**"\nTotal: "**+totalamount+**"Rs"**);  *//Displaying the message on the toast* Toast.*makeText*(getApplicationContext(), result.toString(), Toast.***LENGTH\_LONG***).show();  }  });  } } |

# Android AlertDialog Example



**Android AlertDialog** can be used to display the dialog message with OK and Cancel buttons. It can be used to interrupt and ask the user about his/her choice to continue or discontinue.

Android AlertDialog is composed of three regions: title, content area and action buttons.

Android AlertDialog is the subclass of Dialog class.

## Android AlertDialog Example

Let's see a simple example of android alert dialog.

#### activity\_main.xml

|  |
| --- |
| <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  tools:context=".MainActivity"** >  <**TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_centerHorizontal="true"  android:layout\_centerVertical="true"  android:text="@string/hello\_world"** /> </**RelativeLayout**> |

**MainActivity.java**

|  |
| --- |
| **package** com.example.mts.myapplication; **import** android.content.DialogInterface; **import** android.support.v7.app.AlertDialog; **import** android.util.Log; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Gravity; **import** android.view.LayoutInflater; **import** android.view.Menu; **import** android.view.View; **import** android.view.ViewGroup; **import** android.widget.Button; **import** android.widget.CheckBox; **import** android.widget.EditText; **import** android.widget.Toast; **import** android.widget.ToggleButton; **public class** MainActivity **extends** AppCompatActivity {  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);   AlertDialog.Builder builder = **new** AlertDialog.Builder(**this**);  *//Uncomment the below code to Set the message and title from the strings.xml file  //builder.setMessage(R.string.dialog\_message) .setTitle(R.string.dialog\_title);   //Setting message manually and performing action on button click* builder.setMessage(**"Do you want to close this application ?"**)  .setCancelable(**false**)  .setPositiveButton(**"Yes"**, **new** DialogInterface.OnClickListener() {  **public void** onClick(DialogInterface dialog, **int** id) {  finish();  }  })  .setNegativeButton(**"No"**, **new** DialogInterface.OnClickListener() {  **public void** onClick(DialogInterface dialog, **int** id) {  *// Action for 'NO' Button* dialog.cancel();  }  });   *//Creating dialog box* AlertDialog alert = builder.create();  *//Setting the title manually* alert.setTitle(**"AlertDialogExample"**);  alert.show();  setContentView(R.layout.***activity\_main***);  }  } |

Strings.xml

|  |
| --- |
| <**resources**>  <**string name="app\_name"**>My Application</**string**>  <**string name="hello\_world"**>Hello World</**string**>  <**string name="Toast"**>Custom Toast</**string**>  <**string name="menu\_settings"**>Settings</**string**>  <**string name="dialog\_message"**>Welcome to Alert Dialog</**string**>  <**string name="dialog\_title"**>MTS Alert Dialog</**string**> </**resources**> |

## Android Spinner Example

In this example, we are going to display the country list. You need to use **ArrayAdapter** class to store the country list.

Let's see the simple example of spinner in android.

#### activity\_main.xml

Drag the Spinner from the pallete, now the activity\_main.xml file will like this:

File: activity\_main.xml

|  |
| --- |
| <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android" xmlns:tools="http://schemas.android.com/tools" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".MainActivity"** >  <**Spinner  android:id="@+id/spinner1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentTop="true"  android:layout\_centerHorizontal="true"  android:layout\_marginTop="83dp"** />  </**RelativeLayout**> |

#### Activity class

Let's write the code to display item on the spinner and perform event handling.

|  |
| --- |
| **package** com.example.mts.myapplication; **import** android.app.Activity; **import** android.content.DialogInterface; **import** android.support.v7.app.AlertDialog; **import** android.util.Log; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Gravity; **import** android.view.LayoutInflater; **import** android.view.Menu; **import** android.view.View; **import** android.view.ViewGroup; **import** android.widget.AdapterView; **import** android.widget.ArrayAdapter; **import** android.widget.Button; **import** android.widget.CheckBox; **import** android.widget.EditText; **import** android.widget.Spinner; **import** android.widget.Toast; **import** android.widget.ToggleButton; **public class** MainActivity **extends** Activity **implements** AdapterView.OnItemSelectedListener {  String[] **country** = { **"India"**, **"USA"**, **"China"**, **"Japan"**, **"Other"**, };   @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);  *//Getting the instance of Spinner and applying OnItemSelectedListener on it* Spinner spin = (Spinner) findViewById(R.id.***spinner1***);  spin.setOnItemSelectedListener(**this**);   *//Creating the ArrayAdapter instance having the country list* ArrayAdapter aa = **new** ArrayAdapter<>(**this**,android.R.layout.***simple\_spinner\_item***,**country**);  aa.setDropDownViewResource(android.R.layout.***simple\_spinner\_dropdown\_item***);  *//Setting the ArrayAdapter data on the Spinner* spin.setAdapter(aa);  }    *//Performing action onItemSelected and onNothing selected* @Override  **public void** onItemSelected(AdapterView<?> arg0, View arg1, **int** position, **long** id) {  Toast.*makeText*(getApplicationContext(),**country**[position] ,Toast.***LENGTH\_LONG***).show();  }   @Override  **public void** onNothingSelected(AdapterView<?> arg0) {  *//* ***TODO Auto-generated method stub*** } } |

Login Example

Activity\_main.xml

|  |
| --- |
| <**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools" android:layout\_width="match\_parent"  android:layout\_height="match\_parent" android:gravity="center\_vertical|center\_horizontal"  android:orientation="vertical" android:paddingBottom="@dimen/activity\_vertical\_margin"  android:paddingLeft="@dimen/activity\_horizontal\_margin"  android:paddingRight="@dimen/activity\_horizontal\_margin"  android:paddingTop="@dimen/activity\_vertical\_margin" tools:context=".MainActivity"  android:background="#ffBE80FF"  android:descendantFocusability="beforeDescendants"  android:focusableInTouchMode="true"**>   <**LinearLayout  android:id="@+id/ll1"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:layout\_weight="1"  android:gravity="center\_vertical|center\_horizontal"**>   <**TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:textAppearance="?android:attr/textAppearanceLarge"  android:text="FOOBAR"  android:id="@+id/textView2"  android:textSize="30dp"  android:textColor="#ffffffff"** />    </**LinearLayout**>   <**LinearLayout  android:id="@+id/ll2"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:layout\_weight="1"  android:gravity="center\_vertical|center\_horizontal"**>  <**ProgressBar android:id="@+id/login\_progress" style="?android:attr/progressBarStyleLarge"  android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"  android:visibility="gone"** />  <**ScrollView android:id="@+id/login\_form" android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"**>  <**LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content"  android:orientation="vertical"**>   <**LinearLayout android:id="@+id/email\_login\_form" android:layout\_width="match\_parent"  android:layout\_height="wrap\_content" android:orientation="vertical"**>   <**AutoCompleteTextView android:id="@+id/email" android:layout\_width="match\_parent"  android:layout\_height="wrap\_content" android:hint="@string/prompt\_email"  android:inputType="textEmailAddress" android:maxLines="1"  android:singleLine="true"  android:layout\_marginBottom="10dp"  android:textColorHint="#ffffffff"  android:textColor="#ffffffff"** />   <**EditText android:id="@+id/password" android:layout\_width="match\_parent"  android:layout\_height="wrap\_content" android:hint="@string/prompt\_password"  android:imeActionLabel="@string/action\_sign\_in"  android:imeOptions="actionUnspecified" android:inputType="textPassword"  android:maxLines="1" android:singleLine="true"  android:layout\_marginBottom="10dp"  android:textColorHint="#ffffffff"  android:textColor="#ffffffff"** />   <**Button android:id="@+id/email\_sign\_in\_button" style="?android:textAppearanceSmall"  android:layout\_width="match\_parent" android:layout\_height="wrap\_content"  android:layout\_marginTop="16dp" android:text="@string/action\_sign\_in"  android:textStyle="bold"  android:textColor="#ffffffff"  android:background="#ff7e51c2"** />   </**LinearLayout**>  </**LinearLayout**>  </**ScrollView**>  </**LinearLayout**>   <**LinearLayout  android:id="@+id/ll3"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:layout\_weight="1"  android:gravity="bottom|center\_horizontal"**>   <**TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Sign up"  android:id="@+id/signUpTextView"  android:autoLink="web"  android:textColor="#ffffffff"** />  </**LinearLayout**> </**LinearLayout**> |

String\_activity\_login.xml

|  |
| --- |
| <**resources**>  *<!-- Strings related to login -->* <**string name="prompt\_email"**>Email</**string**>  <**string name="prompt\_password"**>Password</**string**>  <**string name="action\_sign\_in"**>Login</**string**>  <**string name="invalid\_email"**>This email address is invalid</**string**>  <**string name="invalid\_password"**>Password is too short</**string**>  <**string name="incorrect\_password"**>Password is incorrect</**string**>  <**string name="field\_required"**>This field is required</**string**> </**resources**> |

**MainActivity.java**

|  |
| --- |
| **package** com.example.mts.calcapp; **import** android.content.Intent; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.View; **import** android.widget.Button; **import** android.widget.EditText; **import** android.widget.Toast; **public class** MainActivity **extends** AppCompatActivity {  Button **button**;  EditText **etEmail**;  EditText **etPassword**;  @Override  **protected void** onCreate(Bundle savedInstanceState)  {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);  **etEmail**=(EditText) findViewById(R.id.***email***);  **etPassword**=(EditText) findViewById(R.id.***password***);  **button**=(Button)findViewById(R.id.***email\_sign\_in\_button***);  **button**.setOnClickListener(**new** View.OnClickListener() {  @Override  **public void** onClick(View v) {  String email=**etEmail**.getText().toString();  String password=**etPassword**.getText().toString();  **if**(email.equals(**"madhu@gmail.com"**) && password.equalsIgnoreCase(**"123"**))  {  Toast.*makeText*(getApplicationContext(),**"Welcome"**,Toast.***LENGTH\_LONG***).show();  Intent i = **new** Intent(getApplicationContext(), UserActivity.**class**);  startActivity(i);  }**else** Toast.*makeText*(getApplicationContext(),**"Invalid Userid/Password"**,Toast.***LENGTH\_LONG***).show();  }  });  } } |

**Autocomplete TextView**

|  |
| --- |
| <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  tools:context=".MainActivity"** >   <**TextView  android:id="@+id/textView1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentLeft="true"  android:layout\_alignParentTop="true"  android:layout\_marginTop="15dp"  android:text="What\_is\_your\_favourite\_programming\_language\_"** />   <**AutoCompleteTextView  android:id="@+id/autoCompleteTextView1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentLeft="true"  android:layout\_below="@+id/textView1"  android:layout\_marginLeft="36dp"  android:layout\_marginTop="17dp"  android:ems="10"  android:text=""**>   <**requestFocus** />  </**AutoCompleteTextView**>  </**RelativeLayout**> |

MainActivity.java

|  |
| --- |
| **package** com.example.mts.calcapp; **import** android.content.Intent; **import** android.graphics.Color; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Menu; **import** android.view.View; **import** android.widget.ArrayAdapter; **import** android.widget.AutoCompleteTextView; **import** android.widget.Button; **import** android.widget.EditText; **import** android.widget.Toast; **public class** MainActivity **extends** AppCompatActivity {  String[] **language** ={**"C"**,**"C++"**,**"Java"**,**".NET"**,**"iPhone"**,**"Android"**,**"ASP.NET"**,**"PHP"**};  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);   *//Creating the instance of ArrayAdapter containing list of language names* ArrayAdapter<String> adapter = **new** ArrayAdapter<String>  (**this**,android.R.layout.***select\_dialog\_item***,**language**);  *//Getting the instance of AutoCompleteTextView* AutoCompleteTextView actv= (AutoCompleteTextView) findViewById(R.id.***autoCompleteTextView1***);  actv.setThreshold(1);*//will start working from first character* actv.setAdapter(adapter);*//setting the adapter data into the AutoCompleteTextView* actv.setTextColor(Color.***RED***);   }   @Override  **public boolean** onCreateOptionsMenu(Menu menu) {  *// Inflate the menu; this adds items to the action bar if it is present.* getMenuInflater().inflate(R.menu.***menu\_user***, menu);  **return true**;  } } |

Rating Bar

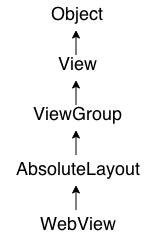
Activity\_main.xml

|  |
| --- |
| <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  tools:context=".MainActivity"** >   <**RatingBar  android:id="@+id/ratingBar1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentTop="true"  android:layout\_centerHorizontal="true"  android:layout\_marginTop="44dp"** />   <**Button  android:id="@+id/button1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignLeft="@+id/ratingBar1"  android:layout\_below="@+id/ratingBar1"  android:layout\_marginLeft="92dp"  android:layout\_marginTop="66dp"  android:text="submit"** />  </**RelativeLayout**> |

**ActivityMain.java**

|  |
| --- |
| **package** com.example.mts.calcapp; **import** android.content.Intent; **import** android.graphics.Color; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Menu; **import** android.view.View; **import** android.widget.ArrayAdapter; **import** android.widget.AutoCompleteTextView; **import** android.widget.Button; **import** android.widget.EditText; **import** android.widget.RatingBar; **import** android.widget.Toast; **public class** MainActivity **extends** AppCompatActivity {  RatingBar **ratingbar1**;  Button **button**;  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);  addListenerOnButtonClick();  }   **public void** addListenerOnButtonClick(){  **ratingbar1**=(RatingBar) findViewById(R.id.***ratingBar1***);  **button**=(Button)findViewById(R.id.***button1***);  *//Performing action on Button Click* **button**.setOnClickListener(**new** View.OnClickListener(){   @Override  **public void** onClick(View arg0) {  *//Getting the rating and displaying it on the toast* String rating=String.*valueOf*(**ratingbar1**.getRating());  Toast.*makeText*(getApplicationContext(), rating, Toast.***LENGTH\_LONG***).show();  }   });  }  @Override  **public boolean** onCreateOptionsMenu(Menu menu) {  *// Inflate the menu; this adds items to the action bar if it is present.* getMenuInflater().inflate(R.menu.***menu\_user***, menu);  **return true**;  }  } |

# Android WebView Example



**Android WebView** is used to display web page in android. The web page can be loaded from same application or URL. It is used to display online content in android activity.

Android WebView uses webkit engine to display web page.

The android.webkit.WebView is the subclass of AbsoluteLayout class.

The **loadUrl()** and **loadData()** methods of Android WebView class are used to load and display web page.

Let's see the simple code to **display javatpoint.com web page** using web view.

1. WebView mywebview = (WebView) findViewById(R.id.webView1);
2. mywebview.loadUrl("http://www.javatpoint.com/");

Let's see the simple code to **display HTML web page** using web view. In this case, html file must be located inside the asset directory.

1. WebView mywebview = (WebView) findViewById(R.id.webView1);
2. mywebview.loadUrl("file:///android\_asset/myresource.html");

Let's see another code to display **HTML code of a string**.

1. String data = "<html><body><h1>Hello, Javatpoint!</h1></body></html>";
2. mywebview.loadData(data, "text/html", "UTF-8");

Example

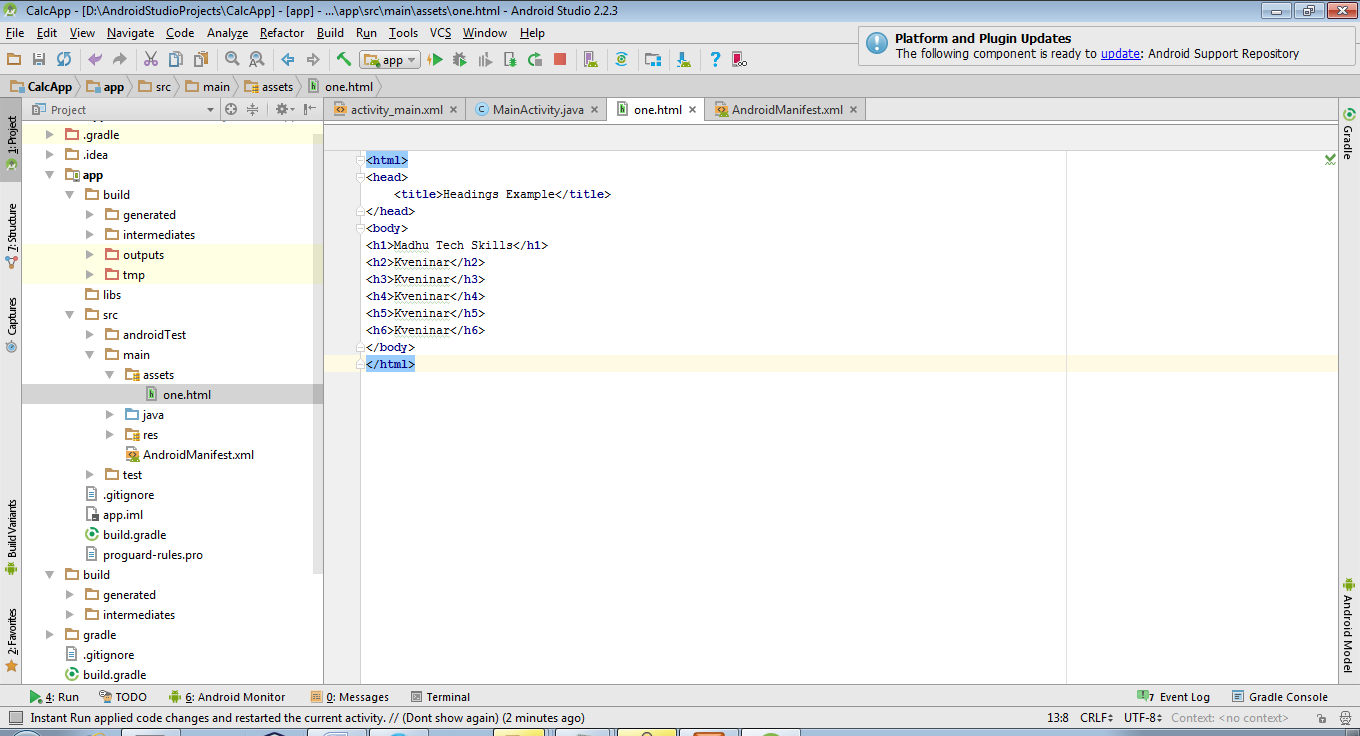
Activity\_main.xml

|  |
| --- |
| <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  tools:context=".MainActivity"** >   <**WebView  android:id="@+id/webView1"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:layout\_alignParentTop="true"  android:layout\_centerHorizontal="true"  android:layout\_marginTop="42dp"** /> </**RelativeLayout**> |

MainActivity.java

|  |
| --- |
| **package** com.example.mts.calcapp; **import** android.content.Intent; **import** android.graphics.Color; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Menu; **import** android.view.View; **import** android.webkit.WebView; **import** android.widget.ArrayAdapter; **import** android.widget.AutoCompleteTextView; **import** android.widget.Button; **import** android.widget.EditText; **import** android.widget.RatingBar; **import** android.widget.Toast; **public class** MainActivity **extends** AppCompatActivity {  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);   WebView mywebview = (WebView) findViewById(R.id.***webView1***);  *//mywebview.loadUrl("http://www.javatpoint.com/");   /\*String data = "<html><body><h1>Hello, Javatpoint!</h1></body></html>";  mywebview.loadData(data, "text/html", "UTF-8"); \*/* mywebview.loadUrl(**"file:///android\_asset/one.html"**);  }   @Override  **public boolean** onCreateOptionsMenu(Menu menu) {  *// Inflate the menu; this adds items to the action bar if it is present.* getMenuInflater().inflate(R.menu.***menu\_user***, menu);  **return true**;  }  } |

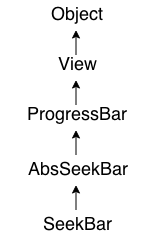
One.html file in main/assets folder we can use the html document like below “**file:///android\_asset/one.html**”



AndroidManifest.xml

<**uses-permission android:name="android.permission.INTERNET"**/>

# Android SeekBar Example



**Android SeekBar** is a kind of ProgressBar with draggable thumb. The end user can drag the thum left and right to move the progress of song, file download etc.

The SeekBar.OnSeekBarChangeListener interface provides methods to perform even handling for seek bar.

Android SeekBar and RatingBar classes are the sub classes of AbsSeekBar.

## Android SeekBar Example

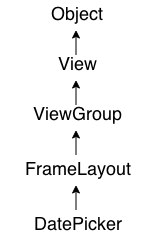
**activity\_main.xml**

|  |
| --- |
| <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:paddingBottom="@dimen/activity\_vertical\_margin"  android:paddingLeft="@dimen/activity\_horizontal\_margin"  android:paddingRight="@dimen/activity\_horizontal\_margin"  android:paddingTop="@dimen/activity\_vertical\_margin"  tools:context=".MainActivity"** >   <**SeekBar  android:id="@+id/seekBar1"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:layout\_alignParentTop="true"  android:layout\_centerHorizontal="true"  android:layout\_marginTop="39dp"** />  </**RelativeLayout**> |

**MainActivity.java**

|  |
| --- |
| **package** com.example.mts.calcapp; **import** android.content.Intent; **import** android.graphics.Color; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Menu; **import** android.view.View; **import** android.webkit.WebView; **import** android.widget.ArrayAdapter; **import** android.widget.AutoCompleteTextView; **import** android.widget.Button; **import** android.widget.EditText; **import** android.widget.RatingBar; **import** android.widget.SeekBar; **import** android.widget.Toast; **public class** MainActivity **extends** AppCompatActivity **implements** SeekBar.OnSeekBarChangeListener{  SeekBar **seekBar1**;  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);   **seekBar1**=(SeekBar)findViewById(R.id.***seekBar1***);  **seekBar1**.setOnSeekBarChangeListener(**this**);  }  @Override  **public void** onProgressChanged(SeekBar seekBar, **int** progress,  **boolean** fromUser) {  Toast.*makeText*(getApplicationContext(),**"seekbar progress: "**+progress, Toast.***LENGTH\_SHORT***).show();  }  @Override  **public void** onStartTrackingTouch(SeekBar seekBar) {  Toast.*makeText*(getApplicationContext(),**"seekbar touch started!"**, Toast.***LENGTH\_SHORT***).show();  }  @Override  **public void** onStopTrackingTouch(SeekBar seekBar) {  Toast.*makeText*(getApplicationContext(),**"seekbar touch stopped!"**, Toast.***LENGTH\_SHORT***).show();  }  @Override  **public boolean** onCreateOptionsMenu(Menu menu) {  *// Inflate the menu; this adds items to the action bar if it is present.* getMenuInflater().inflate(R.menu.***menu\_user***, menu);  **return true**;  }  } |

# Android DatePicker Example



Android DatePicker is a widget to select date. It allows you to select date by day, month and year. Like DatePicker, android also provides TimePicker to select time.

The android.widget.DatePicker is the subclass of FrameLayout class.

## Android DatePicker Example

Let's see the simple example of datepicker widget in android.

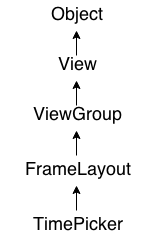
#### activity\_main.xml

|  |
| --- |
| <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  tools:context=".MainActivity"** >   <**TextView  android:id="@+id/textView1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentLeft="true"  android:layout\_alignParentTop="true"  android:layout\_marginLeft="50dp"  android:layout\_marginTop="36dp"  android:text="Current Date:"** />   <**Button  android:id="@+id/button1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentBottom="true"  android:layout\_centerHorizontal="true"  android:layout\_marginBottom="140dp"  android:text="Change Date"** />   <**DatePicker  android:id="@+id/datePicker1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_marginTop="45dp"  android:layout\_below="@+id/textView1"  android:layout\_centerHorizontal="true"** /> </**RelativeLayout**> |

**MainActivity.java**

|  |
| --- |
| **package** com.example.mts.calcapp; **import** android.content.Intent; **import** android.graphics.Color; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Menu; **import** android.view.View; **import** android.webkit.WebView; **import** android.widget.ArrayAdapter; **import** android.widget.AutoCompleteTextView; **import** android.widget.Button; **import** android.widget.DatePicker; **import** android.widget.EditText; **import** android.widget.RatingBar; **import** android.widget.SeekBar; **import** android.widget.TextView; **import** android.widget.Toast; **public class** MainActivity **extends** AppCompatActivity {  DatePicker **picker**;  Button **displayDate**;  TextView **textview1**;  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);   **textview1**=(TextView)findViewById(R.id.***textView1***);  **picker**=(DatePicker)findViewById(R.id.***datePicker1***);  **displayDate**=(Button)findViewById(R.id.***button1***);   **textview1**.setText(getCurrentDate());   **displayDate**.setOnClickListener(**new** View.OnClickListener(){  @Override  **public void** onClick(View view) {  **textview1**.setText(getCurrentDate());  }   });  }  **public** String getCurrentDate(){  StringBuilder builder=**new** StringBuilder();  builder.append(**"Current Date: "**);  builder.append((**picker**.getMonth() + 1)+**"/"**);*//month is 0 based* builder.append(**picker**.getDayOfMonth()+**"/"**);  builder.append(**picker**.getYear());  **return** builder.toString();  }  @Override  **public boolean** onCreateOptionsMenu(Menu menu) {  *// Inflate the menu; this adds items to the action bar if it is present.* getMenuInflater().inflate(R.menu.***menu\_user***, menu);  **return true**;  }  } |

# ndroid TimePicker Example



**Android TimePicker** widget is used to select date. It allows you to select time by hour and minute. You cannot select time by seconds.

The android.widget.TimePicker is the subclass of FrameLayout class.

### Android TimePicker Example

Let's see a simple example of android time picker.

#### activity\_main.xml

File: activity\_main.xml

|  |
| --- |
| <**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  tools:context=".MainActivity"** >   <**TimePicker  android:id="@+id/timePicker1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentTop="true"  android:layout\_centerHorizontal="true"  android:layout\_marginTop="86dp"** />   <**TextView  android:id="@+id/textView1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignLeft="@+id/timePicker1"  android:layout\_alignParentTop="true"  android:layout\_marginTop="17dp"  android:text="Current Time:"** />   <**Button  android:id="@+id/button1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignLeft="@+id/timePicker1"  android:layout\_below="@+id/timePicker1"  android:layout\_marginLeft="37dp"  android:layout\_marginTop="55dp"  android:text="Change Time"** />  </**RelativeLayout**> |

**MainActivity.java**

|  |
| --- |
| **package** com.example.mts.calcapp; **import** android.content.Intent; **import** android.graphics.Color; **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.Menu; **import** android.view.View; **import** android.webkit.WebView; **import** android.widget.ArrayAdapter; **import** android.widget.AutoCompleteTextView; **import** android.widget.Button; **import** android.widget.DatePicker; **import** android.widget.EditText; **import** android.widget.RatingBar; **import** android.widget.SeekBar; **import** android.widget.TextView; **import** android.widget.TimePicker; **import** android.widget.Toast; **public class** MainActivity **extends** AppCompatActivity {  TextView **textview1**;  TimePicker **timepicker1**;  Button **changetime**;   @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);   **textview1**=(TextView)findViewById(R.id.***textView1***);  **timepicker1**=(TimePicker) findViewById(R.id.***timePicker1***);  *//Uncomment the below line of code for 24 hour view* **timepicker1**.setIs24HourView(**true**);  **changetime**=(Button)findViewById(R.id.***button1***);   **textview1**.setText(getCurrentTime());   **changetime**.setOnClickListener(**new** View.OnClickListener(){  @Override  **public void** onClick(View view) {  **textview1**.setText(getCurrentTime());  }  });   }   **public** String getCurrentTime(){  String currentTime=**"Current Time: "**+**timepicker1**.getCurrentHour()+**":"**+**timepicker1**.getCurrentMinute();  **return** currentTime;  }  @Override  **public boolean** onCreateOptionsMenu(Menu menu) {  *// Inflate the menu; this adds items to the action bar if it is present.* getMenuInflater().inflate(R.menu.***menu\_user***, menu);  **return true**;  }  } |