UI Input Controls and Input Views

Activity_main.xml

```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="com.example.androidapptwo.MainActivity" >
<ImageButton
android:id="@+id/ibtn_image"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignTop="@+id/btn_txt_image"
android:layout_marginLeft="26dp"
android:layout_toRightOf="@+id/btn_txt_image"
android:contentDescription="@string/btn_image"
android:onClick="doImageButton"
android:src="@drawable/ic_action_name" />
<CheckBox
android:id="@+id/cbx_fruit"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@+id/btn_txt"
android:layout_toLeftOf="@+id/btn_txt_image"
android:onClick="doCheckBox"
android:text="@string/cbx_fruit" />
<CheckBox
android:id="@+id/cbx_meat"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignBaseline="@+id/cbx_fruit"
android:layout_alignBottom="@+id/cbx_fruit"
android:layout_alignLeft="@+id/btn_txt_image"
android:onClick="doCheckBox"
android:text="@string/cbx_meat" />
<RadioGroup
android:id="@+id/rgrp_level"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignLeft="@+id/btn_txt"
```

```xml
android:layout_below="@+id/cbx_fruit"
android:layout_marginTop="18dp" >
<RadioButton
android:id="@+id/rbtn_one"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:checked="true"
android:onClick="doRadioButton"
android:text="@string/rbtn_one" />
<RadioButton
android:id="@+id/rbtn_two"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:onClick="doRadioButton"
android:text="@string/rbtn_two" />
<RadioButton
android:id="@+id/rbtn_three"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:onClick="doRadioButton"
android:text="@string/rbtn_three" />
</RadioGroup>
<ToggleButton
android:id="@+id/tbtn_power"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignBottom="@+id/rgrp_level"
android:layout_marginBottom="20dp"
android:layout_toRightOf="@+id/btn_txt_image"
android:onClick="doToggleButton"
android:text="@string/tbtn_power" />
<EditText
android:id="@+id/etxt_msg"
style="@string/etxt_msg"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@+id/rbar_star"
android:layout_marginTop="33dp"
android:layout_toLeftOf="@+id/tbtn_power"
android:contentDescription="@string/etxt_msg"
android:ems="10"
android:inputType="none"
android:text="@string/etxt_msg" />
<Button
```

```xml
    android:id="@+id/btn_txt"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_alignParentTop="true"
    android:layout_marginLeft="17dp"
    android:layout_marginTop="19dp"
    android:text="@string/btn_txt" />
<Button
    android:id="@+id/btn_txt_image"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/cbx_meat"
    android:layout_centerHorizontal="true"
    android:drawableLeft="@android:drawable/ic_dialog_email"
    android:onClick="doButtonTextImage"
    android:text="@string/btn_txt_image" />
<Button
    android:id="@+id/btn_toast"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBottom="@+id/etxt_msg"
    android:layout_alignLeft="@+id/ibtn_image"
    android:onClick="doButton"
    android:text="@string/btn_toast" />
<RatingBar
    android:id="@+id/rbar_star"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/rgrp_level"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="18dp"
    android:onClick="use OnRatingBarChangeListener" />
</RelativeLayout>
```

Strings.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
<string name="app_name">AndroidAppTwo</string>
<string name="hello_world">Hello world!</string>
<string name="action_settings">Settings</string>
<string name="btn_txt">Text</string>
<string name="btn_txt_image">Mail</string>
<string name="btn_image">Take Shot</string>
<string name="btn_toast">Toast</string>
<string name="cbx_fruit">Fruit</string>
<string name="cbx_meat">Meat</string>
<string name="rbtn_one">One</string>
<string name="rbtn_two">Two</string>
<string name="rbtn_three">Three</string>
<string name="tbtn_power">Power Button</string>
<string name="etxt_msg">Enter Message</string>
</resources>
```

MainActivity.java


```java
package com.example.androidapptwo1;
import android.os.Bundle;
import android.app.Activity;
import android.content.Context;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RatingBar;
import android.widget.RatingBar.OnRatingBarChangeListener;
import android.widget.Toast;
import android.widget.ToggleButton;
public class MainActivity extends Activity {
Context context;
CharSequence text;
int duration;
Toast toast;
String check_box = "";
String radio_button ="One";
String toggle_button = "Off";
String rating_bar = "0.0";
String edit_text = "";
boolean fruit = false;
boolean meat = false;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
context = getApplicationContext();
duration = Toast.LENGTH_SHORT;
Button btn_text = (Button) findViewById(R.id.btn_txt);
btn_text.setOnClickListener(new OnClickListener() {
@Override
public void onClick(View v) {
// TODO Auto-generated method stub
text = "You Clicked Text Button";
toast = Toast.makeText(context, text, duration);
toast.show();} });
```

```java
RatingBar ratingBar = (RatingBar) findViewById(R.id.rbar_star);
ratingBar.setOnRatingBarChangeListener(new OnRatingBarChangeListener() {
@Override
public void onRatingChanged(RatingBar ratingBar, float rating, boolean fromUser) {
// TODO Auto-generated method stub
rating_bar = String.valueOf(rating);
}
});
}
@Override
public boolean onCreateOptionsMenu(Menu menu) {
// Inflate the menu; this adds items to the action bar if it is present.
getMenuInflater().inflate(R.menu.main, menu);
return true;
}
public void doButtonTextImage(View v){
text = "You Clicked Image Text Button";
toast = Toast.makeText(context, text, duration);
toast.show();
}
public void doImageButton(View v){
text = "You Clicked Image Button";
toast = Toast.makeText(context, text, duration);
toast.show();
}
public void doCheckBox(View v){
boolean checked = ((CheckBox)v).isChecked();
switch(v.getId()){
case R.id.cbx_fruit:
if(checked){
fruit = true;
} else {
fruit = false;
}
break;
case R.id.cbx_meat:
if(checked){
meat = true;
} else {
meat = false;
}
break;
}
if(fruit && meat){
```

```java
check_box = "Fruit and Meat";
} else if(fruit){
check_box = "Fruit";
} else if(meat){
check_box = "Meat";
} else {
check_box = "No Selection";
}
}
public void doRadioButton(View v){
boolean checked = ((RadioButton)v).isChecked();
switch(v.getId()){
case R.id.rbtn_one:
if(checked)
radio_button = "One";
break;
case R.id.rbtn_two:
radio_button = "Two";
break;
case R.id.rbtn_three:
radio_button = "Three";
break;
}
}
public void doToggleButton(View v){
boolean on = ((ToggleButton) v).isChecked();
if(on){
toggle_button = "On";
} else {
toggle_button = "Off";} }
public void doButton(View v){
EditText etxt_msg = (EditText) findViewById(R.id.etxt_msg);
edit_text = etxt_msg.getText().toString();
text = "Check Box: " + check_box + "\n";
text = text.toString() + "Radio Button: " + radio_button + "\n";
text = text.toString() + "Toggle Button: " + toggle_button + "\n";
text = text.toString() + "Rating Bar: " + rating_bar + "\n";
text = text.toString() + "Edit Text: ";
text = text.toString() + edit_text;
toast = Toast.makeText(context, text, duration);
toast.show();
}
};
```