

Android Intents Examples

Notes are based on:

Android Developers

<http://developer.android.com/index.html>

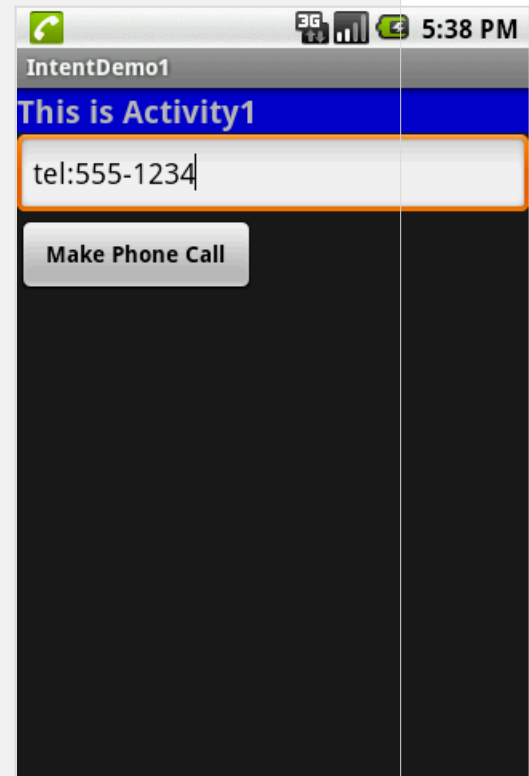


Intents

1. A Complete Example: Activity1 displays an interface to accept a phone number and requests (built-in) Activity2 to make the call.

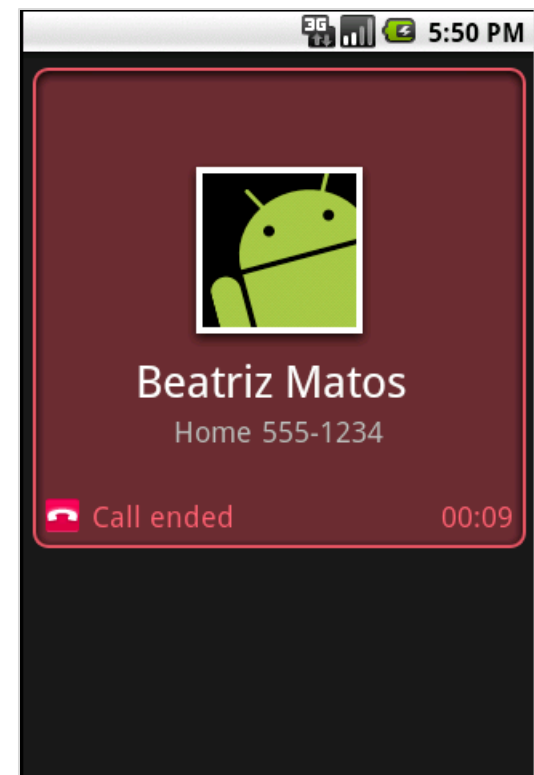
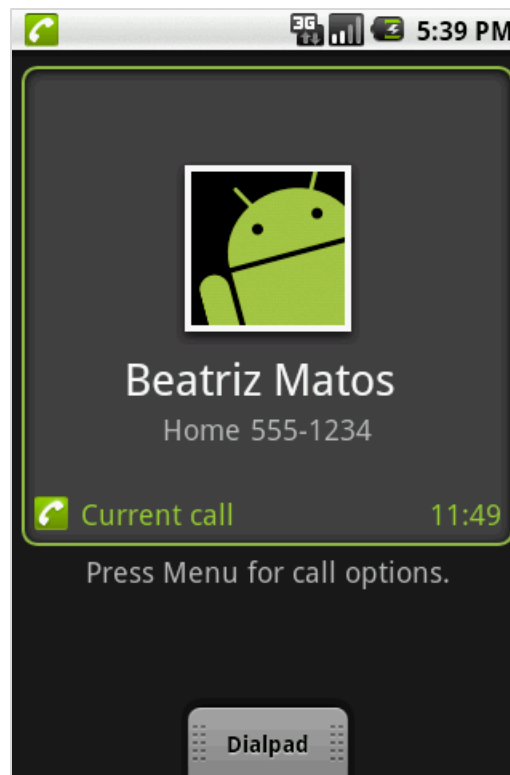
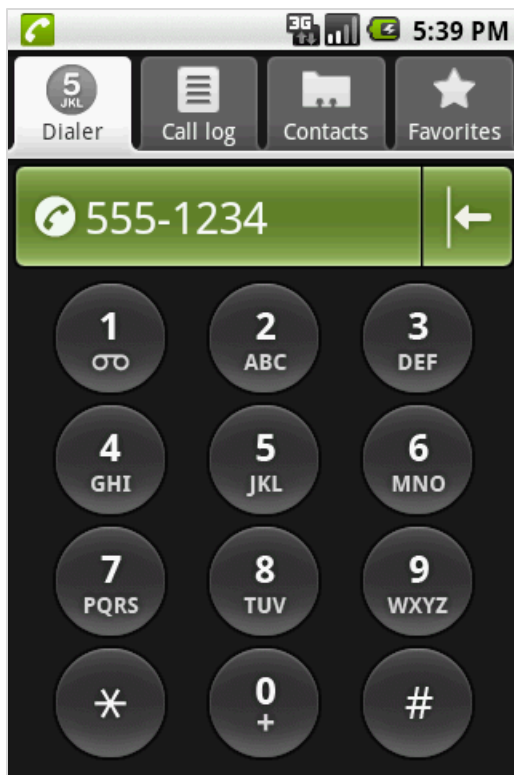
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"

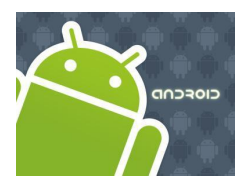
    android:layout_width="fill_parent"
    android:layout_height="fill_parent" >
<TextView
    android:id="@+id/label1"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:background="#ff0000cc"
    android:text="This is Activity1"
    android:textStyle="bold"
    android:textSize="20sp" />
<EditText
    android:id="@+id/text1"
    android:layout_width="fill_parent"
    android:layout_height="54px"
    android:text="tel:555-1234"
    android:textSize="18sp" />
<Button
    android:id="@+id/btnCallActivity2"
    android:layout_width="149px"
    android:layout_height="wrap_content"
    android:text="Make Phone Call"
    android:textStyle="bold" />
</LinearLayout>
```



Intents

1. A Complete Example: Activity1 displays an interface to accept a phone number and requests (built-in) Activity2 to make the call.



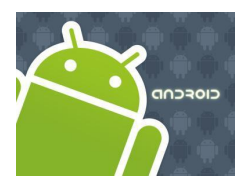


Intents

1. A Complete Example: Activity1 displays an interface to accept a phone number and requests (built-in) Activity2 to make the call.

```
//IntentDemol_Intent: making a phone call
package edu.scu.intents;
import android.app.Activity;
import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.*;

public class IntentDemol extends Activity {
    TextView label1;
    EditText text1;
    Button btnCallActivity2;
```



Intents

1. A Complete Example: Activity1 displays an interface to accept a phone number and requests (built-in) Activity2 to make the call.

```
@Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        try {

            setContentView(R.layout.main);
            label1 = (TextView)findViewById(R.id.label1);
            text1 = (EditText)findViewById(R.id.text1);

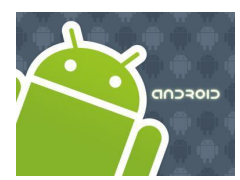
            btnCallActivity2 = (Button)findViewById(R.id.btnCallActivity2);
            btnCallActivity2.setOnClickListener(new ClickHandler());
        }
        catch (Exception e) {
            Toast.makeText(getApplicationContext(), e.getMessage(),
                Toast.LENGTH_LONG).show();
        }
    }
} //onCreate
```

Intents

1. A Complete Example: Activity1 displays an interface to accept a phone number and requests (built-in) Activity2 to make the call.

```
private class ClickHandler implements OnClickListener {
    @Override
    public void onClick(View v) {
        try {
            // myActivity2 places a phone call
            // for ACTION_CALL or ACTION_DIAL
            // use 'tel:' formatted data: "tel:555-1234"
            // for ACTION_VIEW use data: "http://www.youtube.com"
            // (you also need INTERNET permission - see Manifest)

            String myData = text1.getText().toString();
            Intent myActivity2 = new Intent(Intent.ACTION_DIAL,
                                           Uri.parse(myData));
            startActivity(myActivity2);
        }
        catch (Exception e) {
            Toast.makeText(getApplicationContext(), e.getMessage(),
                           Toast.LENGTH_LONG).show();
        }
    } //onClick
} //ClickHandler
} //IntentDemo1
```



Intents

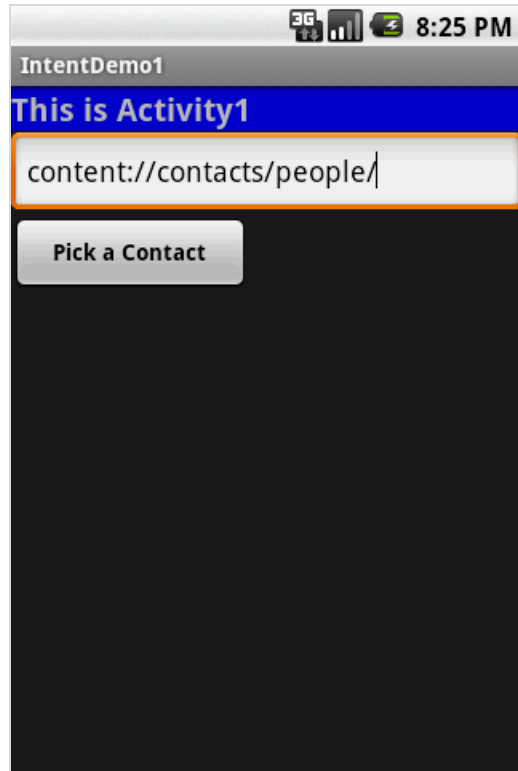
1. A Complete Example: Activity1 displays an interface to accept a phone number and requests (built-in) Activity2 to make the call.

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="edu.scu.intents"
    android:versionCode="1"
    android:versionName="1.0">
    <application android:icon="@drawable/icon"
        android:label="@string/app_name">
        <activity android:name=".IntentDemo1"
            android:label="@string/app_name">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
    <uses-sdk android:minSdkVersion="3" />
</manifest>
```

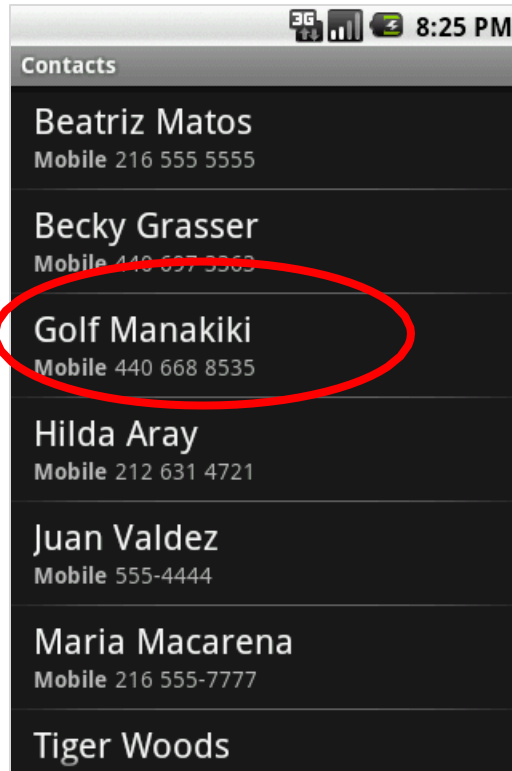


Intents

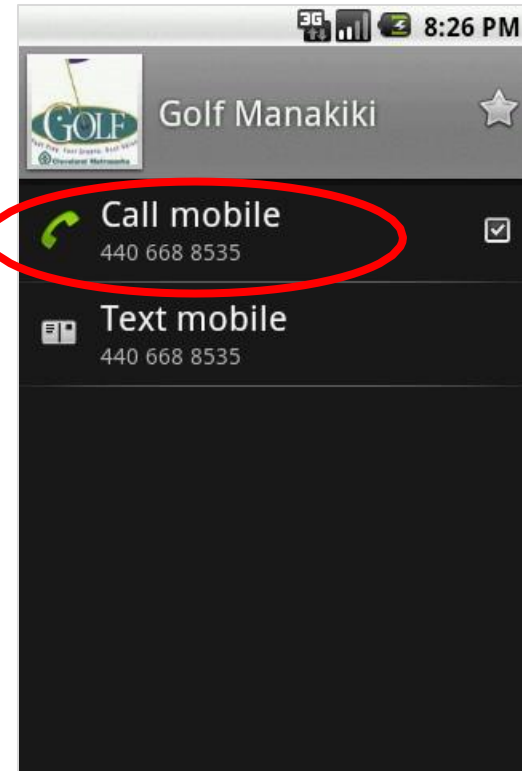
Example2. Let's play golf - *Call for a tee-time.*



Main Activity



Intent.ACTION_PICK

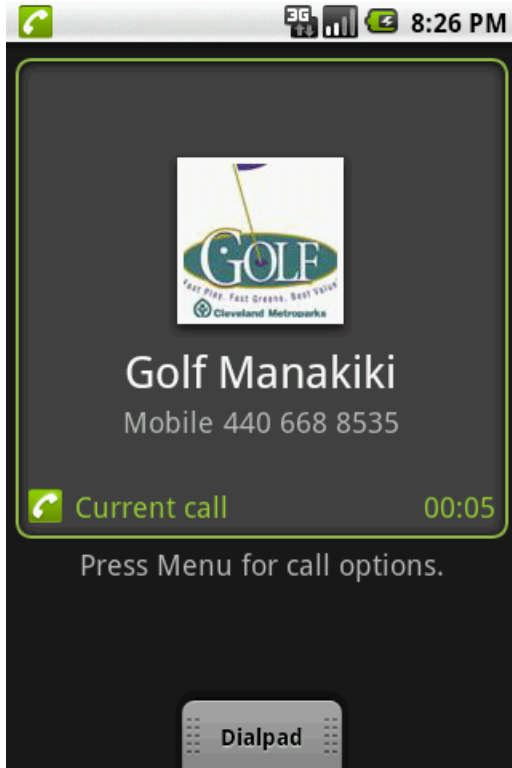


Intent.ACTION_VIEW

Cont.

Intents

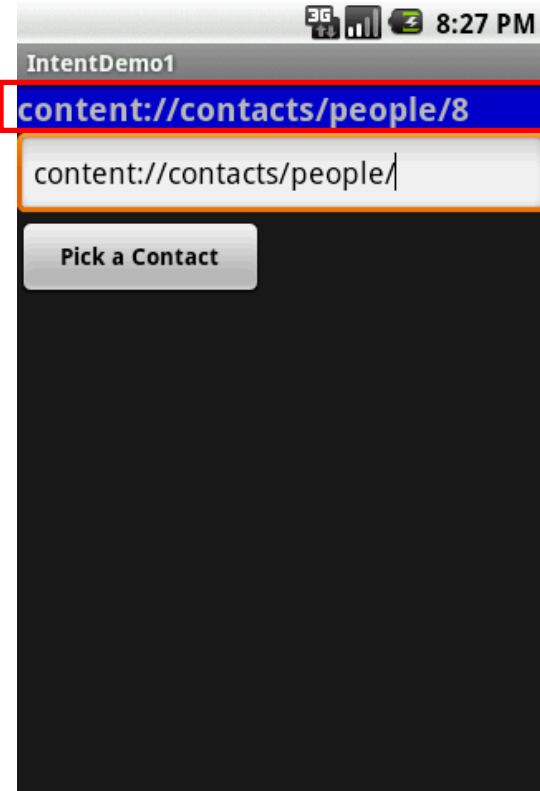
Example2 (cont.) Let's play golf - *Call for a tee-time*



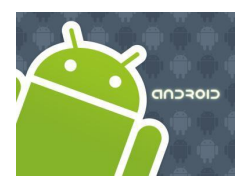
Place the call



Terminate the call



Selected contact's URI

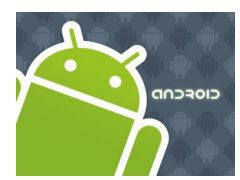


Intents

Example2. *Calling a sub-activity, receiving results.*

```
//IntentDemo2_Intent: making a phone call
//receiving results from a sub-activity
package edu.scu.intents;
import android.app.Activity;
import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.*;

public class IntentDemo2 extends Activity {
    TextView label1;
    EditText text1;
    Button btnCallActivity2;
```



Intents

Example2. *Calling a sub-activity, receiving results.*

```
@Override
public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    try {
        setContentView(R.layout.main);
        label1 = (TextView)findViewById(R.id.label1);
        text1 = (EditText)findViewById(R.id.text1);

        btnCallActivity2 = (Button)findViewById(R.id.btnPickContact);
        btnCallActivity2.setOnClickListener(new ClickHandler());
    }
    catch (Exception e) {
        Toast.makeText(getApplicationContext(),
            e.getMessage(), Toast.LENGTH_LONG).show();
    }
} //onCreate
```

Intents

Example2. *Calling a sub-activity, receiving results.*

```
private class ClickHandler implements OnClickListener {
    @Override
    public void onClick(View v) {
        try {
            // myData refer to: content://contacts/people/
            String myData = text1.getText().toString();

            //you may also try ACTION_VIEW instead
            Intent myActivity2 = new Intent(Intent.ACTION_PICK,
                                           Uri.parse(myData));

            // start myActivity2.
            // Tell it that our requestCodeID (or nickname) is 222
            startActivityForResult(myActivity2, 222);

            // Toast.makeText(getApplicationContext(),
            //                      "I can't wait for you", 1).show();
        }
        catch (Exception e) {
            label1.setText(e.getMessage());
        }
    } //onClick
} //ClickHandler
```

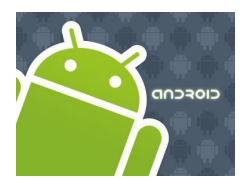


Example2. *Calling a sub-activity, receiving results.*

```
@Override
protected void onActivityResult(int requestCode,
                                int resultCode,
                                Intent data) {
    super.onActivityResult(requestCode, resultCode, data);
    try {
        // use requestCode to find out who is talking back to us
        switch (requestCode) {
            case (222): {
                // 222 is our friendly contact-picker activity
                if (resultCode == Activity.RESULT_OK) {
                    String selectedContact = data.getDataString();
                    // it will return an URI that looks like:
                    // content://contacts/people/n
                    // where n is the selected contacts' ID
                    label1.setText(selectedContact.toString());

                    //show a 'nice' screen with the selected contact
                    Intent myAct3 = new Intent (Intent.ACTION_VIEW,
                                                Uri.parse(selectedContact));
                    startActivity(myAct3);
                }
            }
        }
    }
}
```

Listener



Intents

Example2. *Calling a sub-activity, receiving results.*

```

        else {
            //user pressed the BACK button
            label1.setText("Selection CANCELLED "
                           + requestCode + " " + resultCode);
        }
        break;
    }
} //switch
}
catch (Exception e) {
    Toast.makeText(getBaseContext(), e.getMessage(),
                  Toast.LENGTH_LONG).show();
}
} // onActivityResult

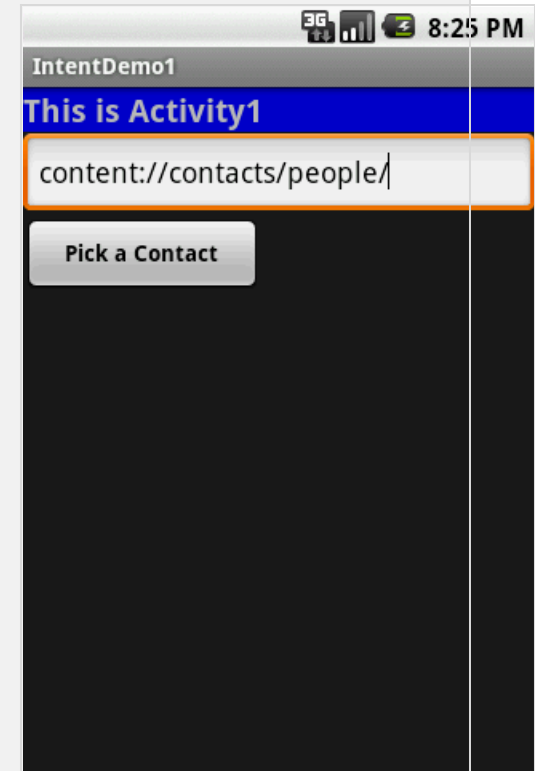
} // IntentDemo2

```

Intents

Example2. *Calling a sub-activity, receiving results.*

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent" >
    <TextView
        android:id="@+id/label1"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:background="#ff0000cc"
        android:text="This is Activity1"
        android:textStyle="bold"
        android:textSize="20sp"/>
    <EditText
        android:id="@+id/text1"
        android:layout_width="fill_parent"
        android:layout_height="54px"
        android:text="content://contacts/people/"
        android:textSize="18sp" />
    <Button
        android:id="@+id/btnPickContact"
        android:layout_width="149px"
        android:layout_height="wrap_content"
        android:text="Pick a Contact"
        android:textStyle="bold" />
</LinearLayout>
```



Intents

Example3. Showing Pictures and Video - Calling a sub-activity, receiving results.

```
private void showSoundTracks() {

    Intent myIntent = new Intent();
    myIntent.setType("video/*, images/*");
    myIntent.setAction(Intent.ACTION_GET_CONTENT);
    startActivityForResult(myIntent, 0);

} //showSoundTracks

@Override
protected void onActivityResult(int requestCode, int resultCode, Intent intent)
{
    super.onActivityResult(requestCode, resultCode, intent);

    if ((requestCode == 0) && (resultCode == Activity.RESULT_OK))

        { String selectedImage = intent.getDataString();

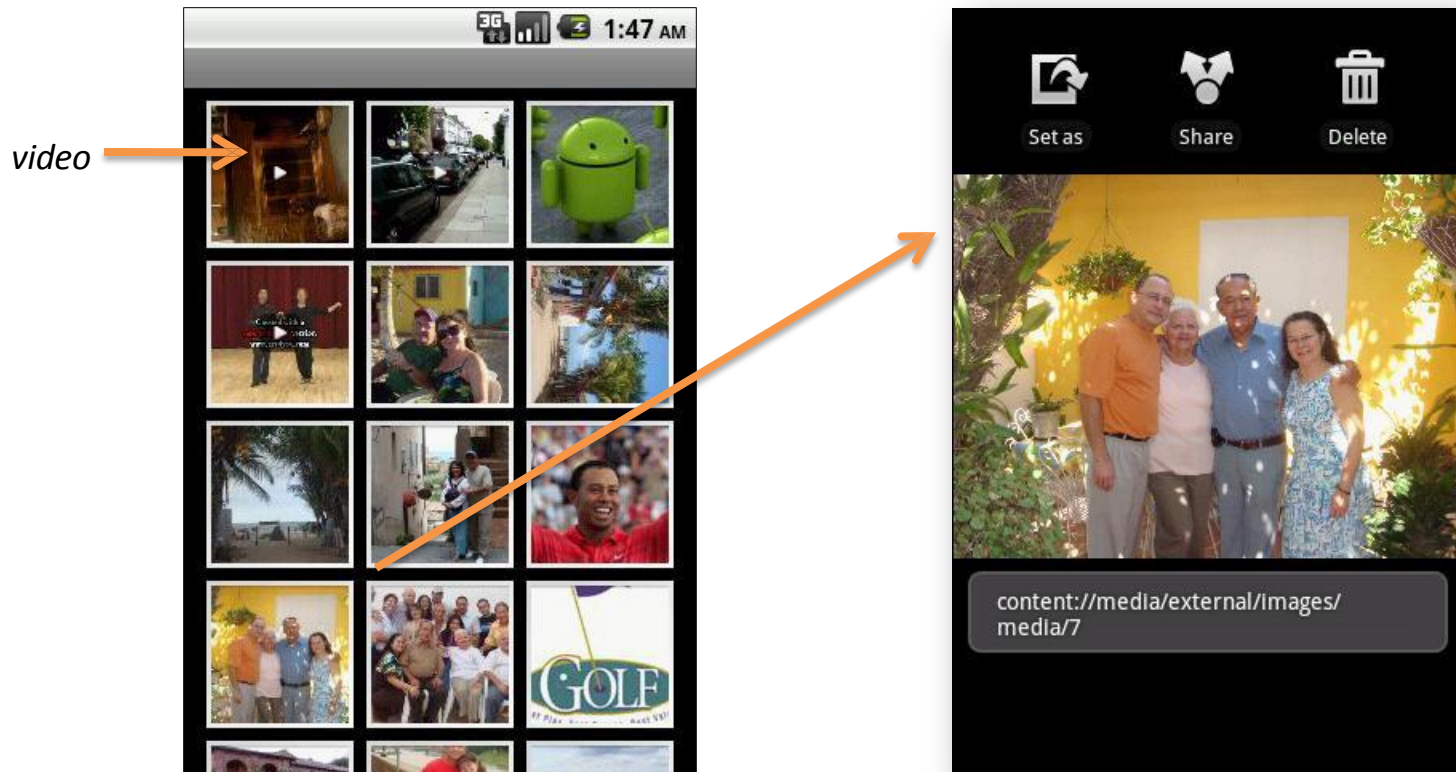
        Toast.makeText(this, selectedImage, 1).show();

        // show a 'nice' screen with the selected image
        Intent myAct3 = new Intent(Intent.ACTION_VIEW, Uri.parse(selectedImage));
        startActivity(myAct3);
    }
} //onActivityResult
```

All videos and all still images

Intents

Example3. Showing Pictures and Video - Calling a sub-activity, receiving results.



Intents

Example4. Showing/Playing Sound Tracks - Calling a sub-activity, receiving results.

```
private void showSoundTracks() {
    Intent myIntent = new Intent();
    myIntent.setType("audio/mp3");
    myIntent.setAction(Intent.ACTION_GET_CONTENT);
    startActivityForResult(myIntent, 0);
} // showSoundTracks
```

The returned string value is similar to the following
 “content://media/external/audio/media/14”
 ACTION_VIEW on that Uri would produce a result
 similar to the image on the right

