Slide 8.15: Java source code: MainActivity.java (cont.) Slide 8.17: Java source code: MainActivity.java (cont.) Home



Java Source Code (Cont.)

Line 08: import android.widget.EditText;

It is a thin veneer over <u>TextView</u> that configures itself to be editable.

Line 09: import android.support.v7.app.AppCompatActivity;

It is a base class for activities that use the support library action bar features.

Line 10: import android.view.Menu;

It is the interface for managing the items in a menu.

Line 11: import android.view.MenuItem;

It is the interface for direct access to a previously created menu item.

Line 13: public class MainActivity extends AppCompatActivity {

It creates a class definition for the activity we said we wanted (MainActivity). There are two methods almost all subclasses of Activity will implement:

- onCreate(Bundle), where you initialize your activity, and
- <u>onPause</u>, where you deal with the user leaving your activity. Any changes made by the user should at this point be committed.

To be of use with <u>Context.startActivity</u>(), all activity classes must have a corresponding <activity> declaration in their package's <u>AndroidManifest</u>.

Line 14: @Override

It is used to mark methods that override a method declaration in a superclass. Compilers produce an error if a method annotated with @Override does not override a method in a superclass.

HelloWorld/app/src/main/java/com/example/wenchen/helloworld/MainActivity.java

```
01
   package com.example.wenchen.helloworld;
02
03
   import android.app.Activity;
04 import android.content.Intent;
   import android.os.Bundle;
06 import android.view.View;
    import android.widget.Button;
   import android.widget.EditText;
   import android.support.v7.app.AppCompatActivity;
   import android.view.Menu;
   import android.view.MenuItem;
12
13
   public class MainActivity extends AppCompatActivity {
14
      @Override
15
      protected void onCreate( Bundle savedInstanceState ) {
16
        super.onCreate( savedInstanceState );
17
        setContentView( R.layout.activity_main );
18
        final EditText name = (EditText) findViewById( R.id.name );
19
        final Button button = (Button)
                                        findViewById( R.id.next );
20
        button.setOnClickListener(
21
          new View.OnClickListener( ) {
22
            public void onClick( View v ) {
23
              /** Here i calls a new screen. **/
24
              Intent i = new Intent( MainActivity.this, NextActivity.class );
25
              i.putExtra( "name", name.getText( ).toString( ) );
26
              startActivity( i );
27
            }
28
          }
29
        );
      }
30
31
32
      @Override
33
      public boolean onCreateOptionsMenu( Menu menu ) {
        // Inflate the menu; this adds items to the action bar if it is present.
35
        getMenuInflater( ).inflate( R.menu.menu_main, menu );
36
        return true;
37
38
39
      @Override
40
      public boolean onOptionsItemSelected( MenuItem item ) {
41
        // Handle action bar item clicks here. The action bar will
42
        // automatically handle clicks on the Home/Up button, so long
43
        // as you specify a parent activity in AndroidManifest.xml.
44
        int id = item.getItemId( );
45
46
        // noinspection SimplifiableIfStatement
47
        if ( id == R.id.action_settings ) {
48
          return true;
49
        }
50
        else if ( id == R.id.next ) {
          Intent i = new Intent( MainActivity.this, NextActivity.class );
51
          startActivity( i );
```

```
53    }
54    return super.onOptionsItemSelected( item );
55    }
56 }
```

Slide 8.15: Java source code: MainActivity.java (cont.) Slide 8.17: Java source code: MainActivity.java (cont.) Home

