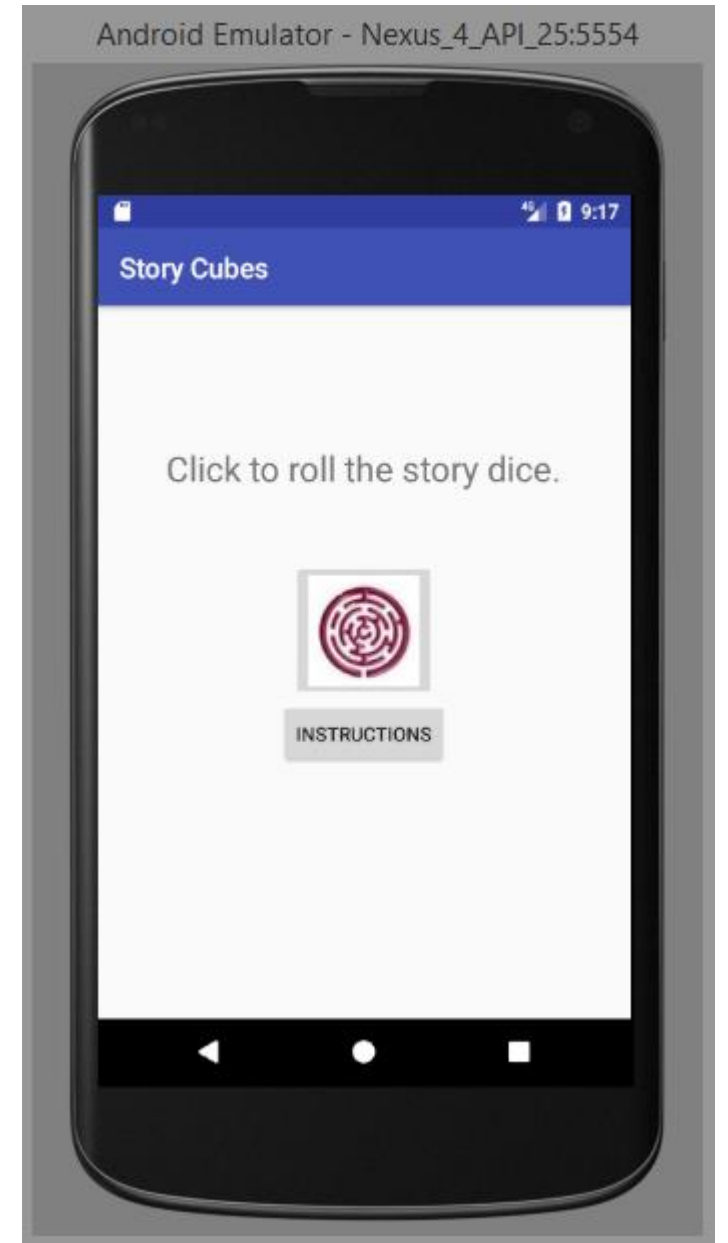
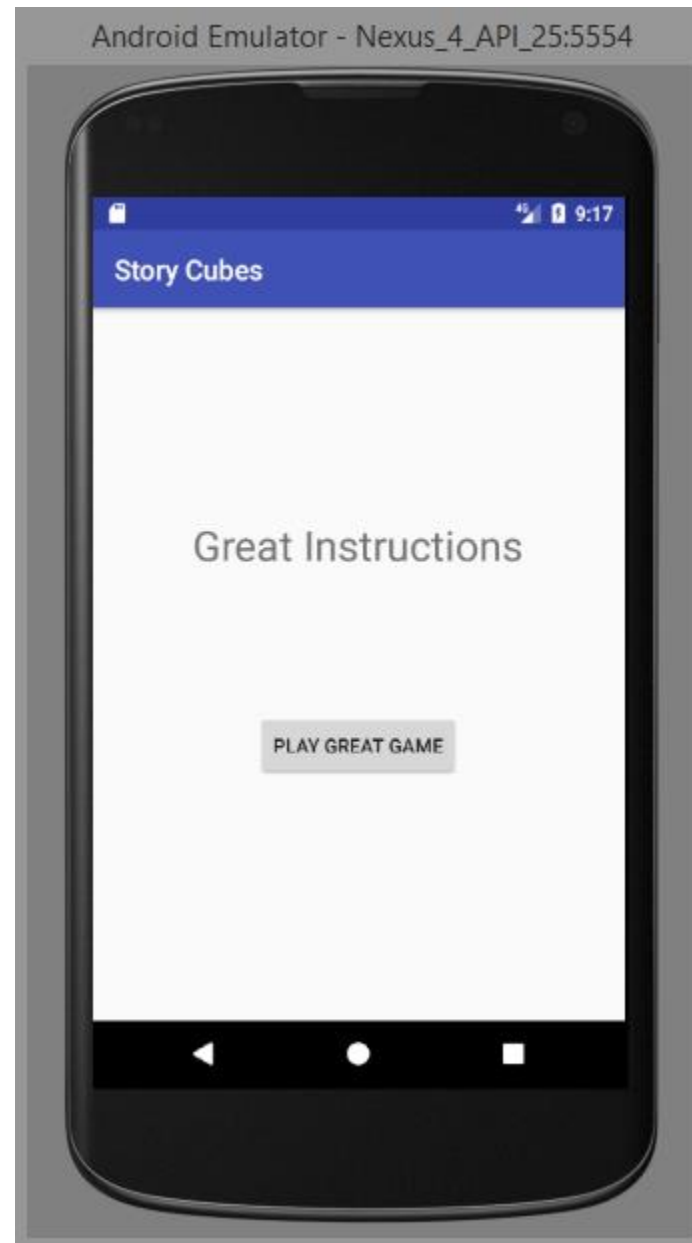
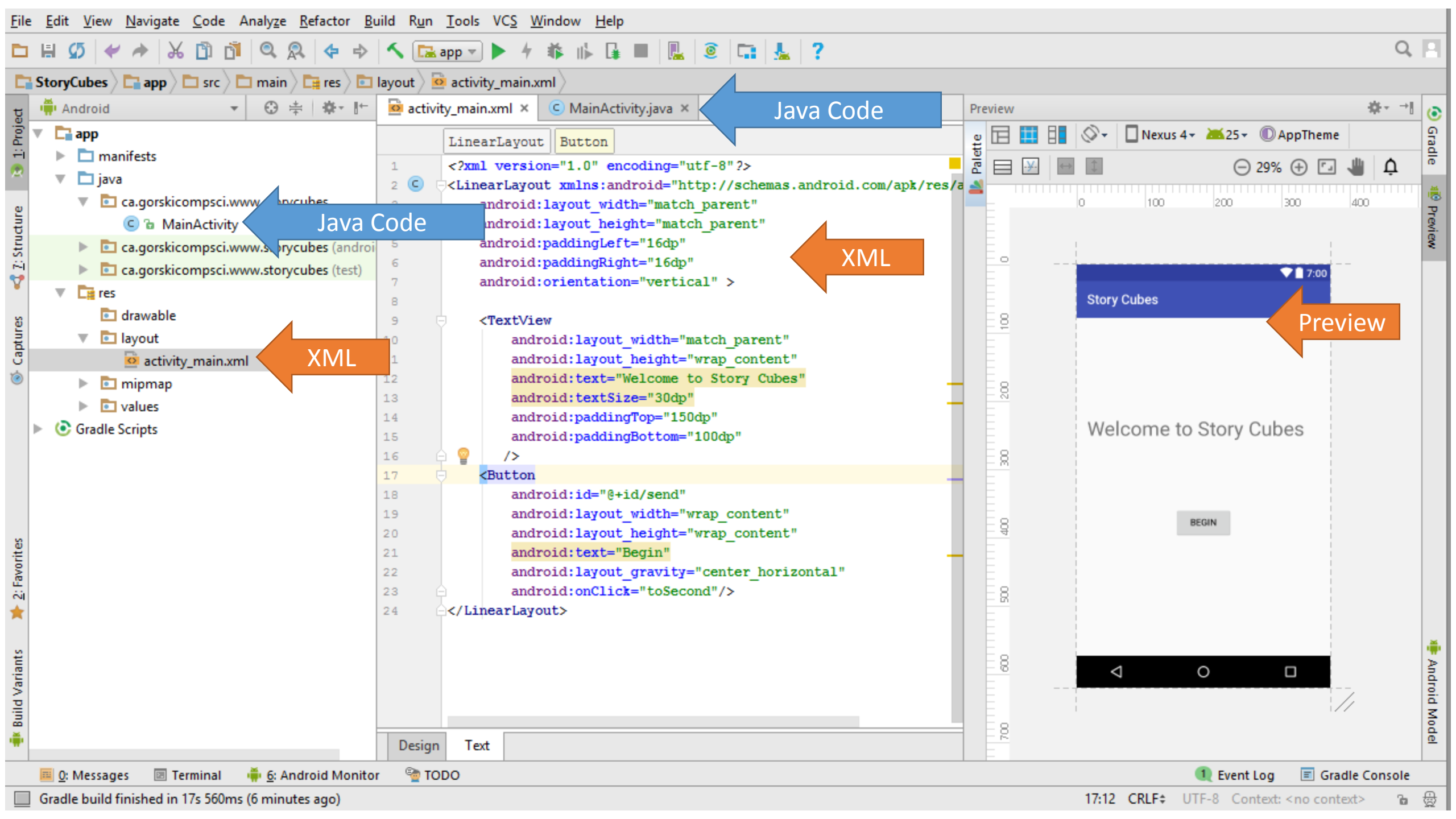


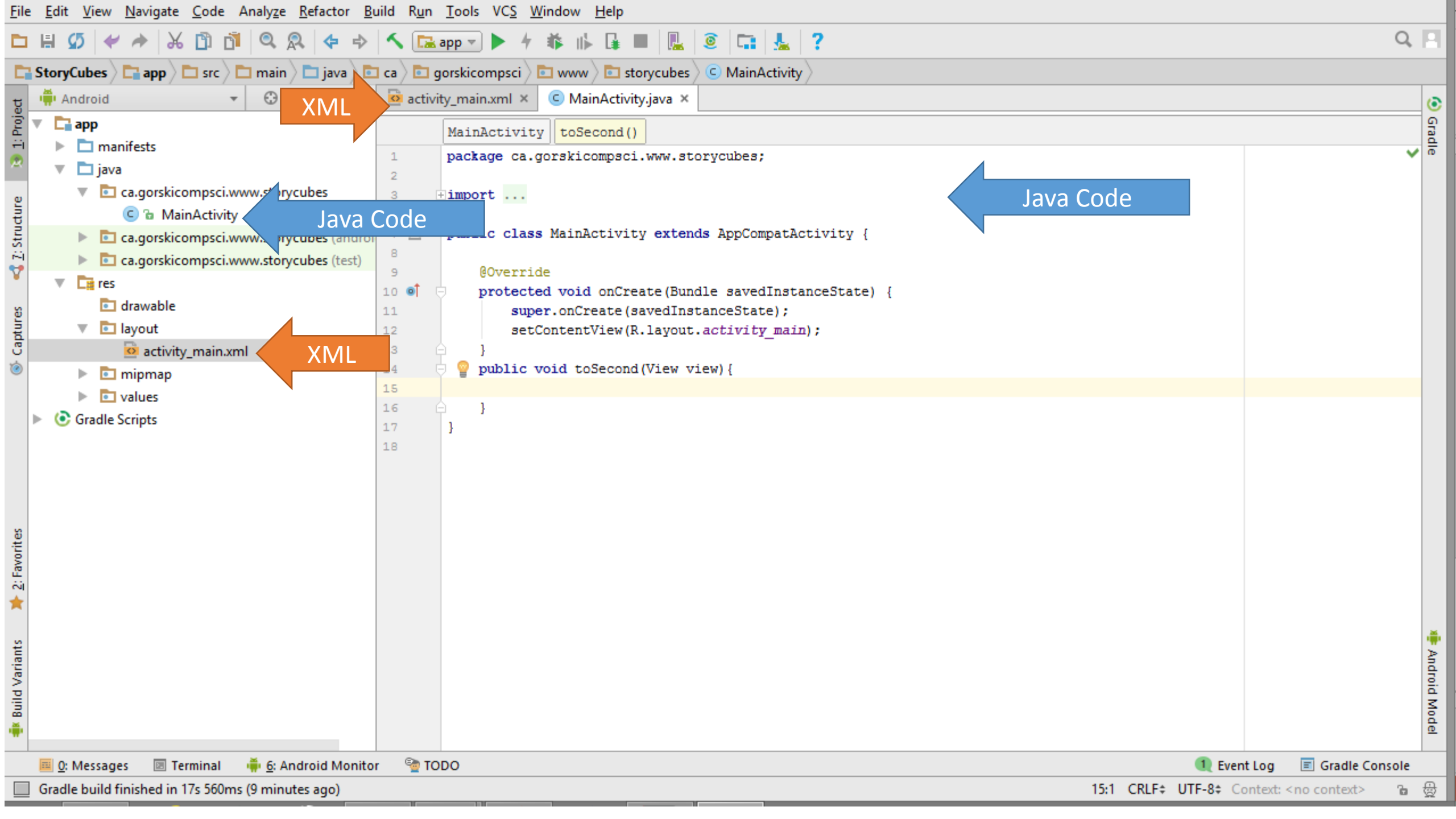
Intents

Your first app assignment

We will make this. Decidedly lackluster.







XML

Java Code

Java Code

XML

Buttons that work

<Button

```
android:id="@+id/send"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:text="Begin"  
android:layout_gravity="center_horizontal"  
android:onClick="toSecond"
```

/>

Id – needed only if the View changes OR for relative layout.

Method in Java file associated with this button.

Java file associated with last button...

```
package ca.gorskicompsci.www.storycubes;
```

```
import android.content.Intent;
```

```
import android.support.v7.app.AppCompatActivity;
```

```
import android.os.Bundle;
```

```
import android.view.View;
```

```
public class MainActivity extends AppCompatActivity {
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);
```

```
    }
```

```
    public void toSecond(View view) {
```

```
    }
```

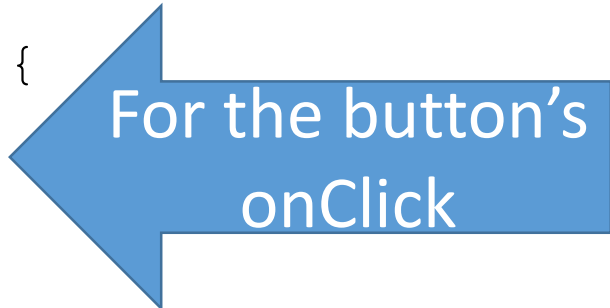
```
}
```



Libraries



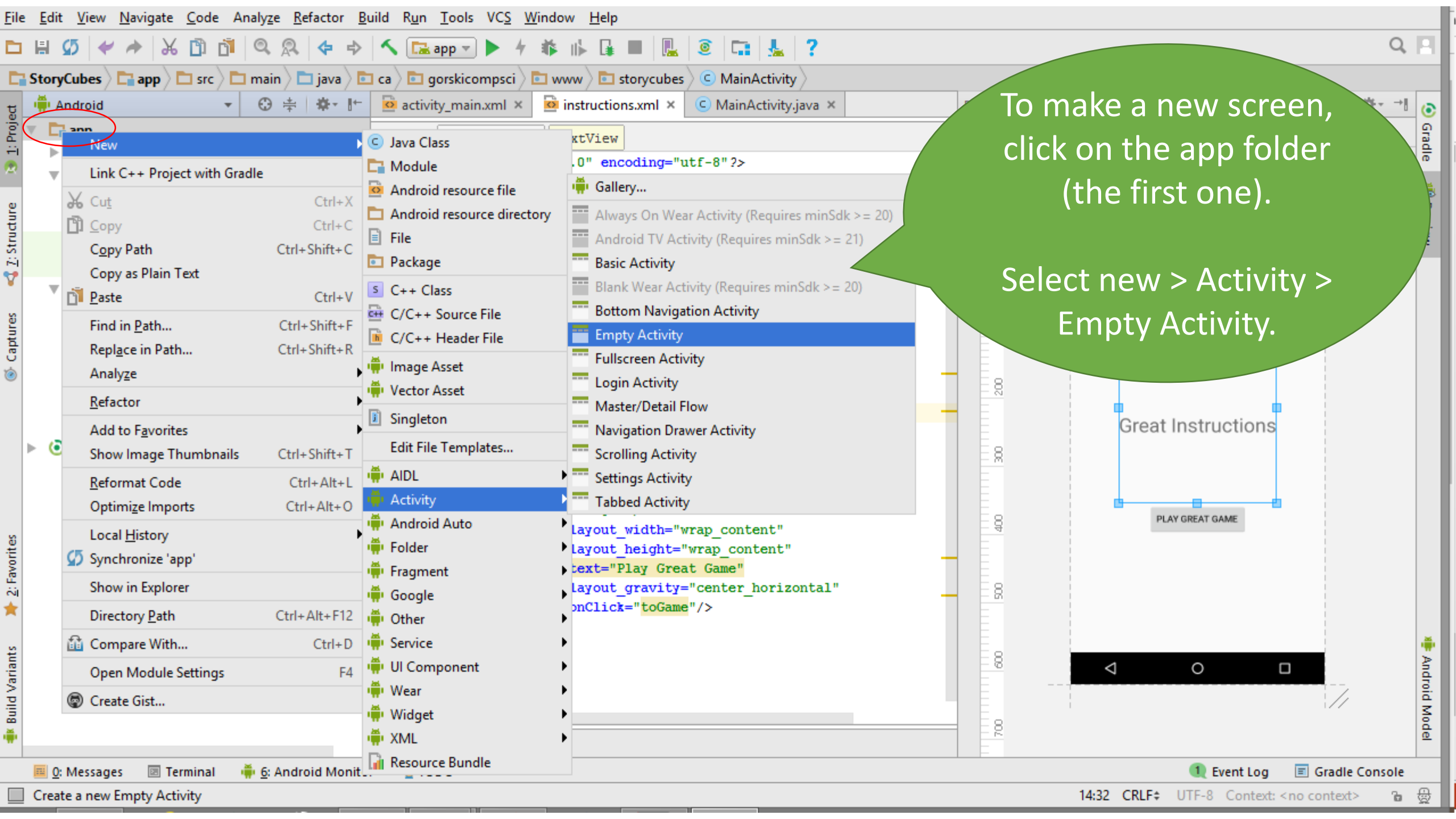
Inflation



For the button's
onClick

Making a new screen

Make a new activity and it will follow.




To make a new screen,
click on the app folder
(the first one).

Select new > Activity >
Empty Activity.

Great Instructions

PLAY GREAT GAME

New Android Activity

 **Configure Activity**
Android Studio

Creates a new empty activity

Activity Name:

Generate Layout File

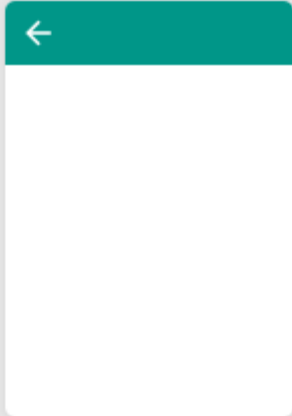
Layout Name:

Launcher Activity

Backwards Compatibility (AppCompat)

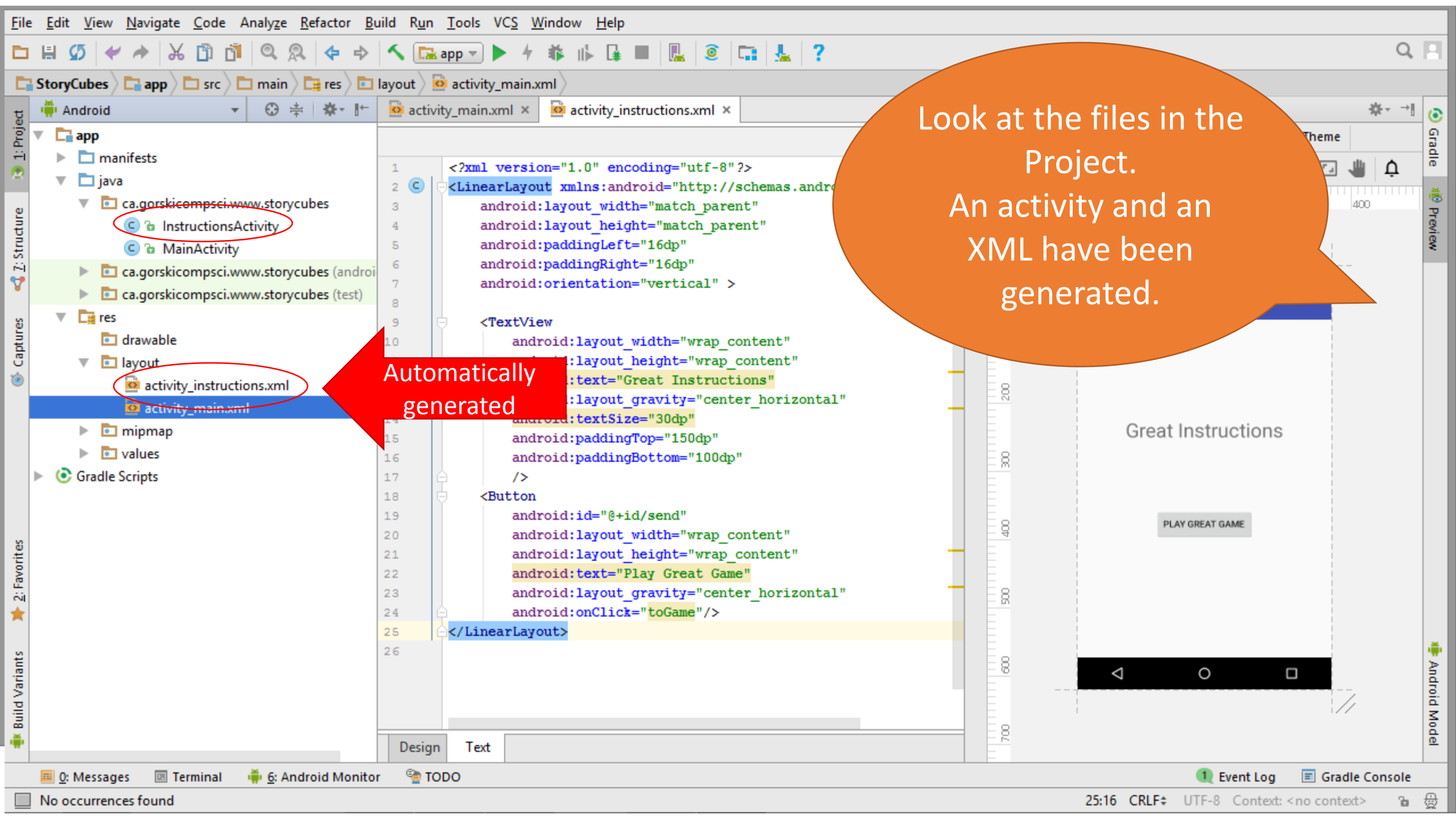
Package name:

Target Source Set:



The name of the activity class to create

Choose the name you want. Click finish.



Look at the files in the Project.
An activity and an XML have been generated.

Automatically generated

- Project Structure
 - app
 - manifests
 - java
 - ca.gorski.compsci.www.storycubes
 - InstructionsActivity
 - MainActivity
 - ca.gorski.compsci.www.storycubes (android)
 - ca.gorski.compsci.www.storycubes (test)
 - res
 - drawable
 - layout
 - activity_instructions.xml
 - activity_main.xml
 - mipmap
 - values
 - Gradle Scripts

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     android:layout_width="match_parent"
4     android:layout_height="match_parent"
5     android:paddingLeft="16dp"
6     android:paddingRight="16dp"
7     android:orientation="vertical" >
8
9     <TextView
10        android:layout_width="wrap_content"
11        android:layout_height="wrap_content"
12        android:text="Great Instructions"
13        android:layout_gravity="center_horizontal"
14        android:textSize="30dp"
15        android:paddingTop="150dp"
16        android:paddingBottom="100dp"
17    />
18
19    <Button
20        android:id="@+id/send"
21        android:layout_width="wrap_content"
22        android:layout_height="wrap_content"
23        android:text="Play Great Game"
24        android:layout_gravity="center_horizontal"
25        android:onClick="toGame"/>
26 </LinearLayout>
```



Project Structure:

- app
 - manifests
 - AndroidManifest.xml
 - java
 - ca.gorskicompsci.www.storycubes
 - Game
 - InstructionsActivity
 - MainActivity
 - ca.gorskicompsci.www.storycubes (android)
 - ca.gorskicompsci.www.storycubes (test)
 - res
 - drawable
 - sc1.jpg
 - sc2.jpg
 - sc3.jpg
 - sc4.jpg
 - sc5.jpg
 - sc6.jpg
 - layout
 - mipmap
 - values
 - Gradle Scripts

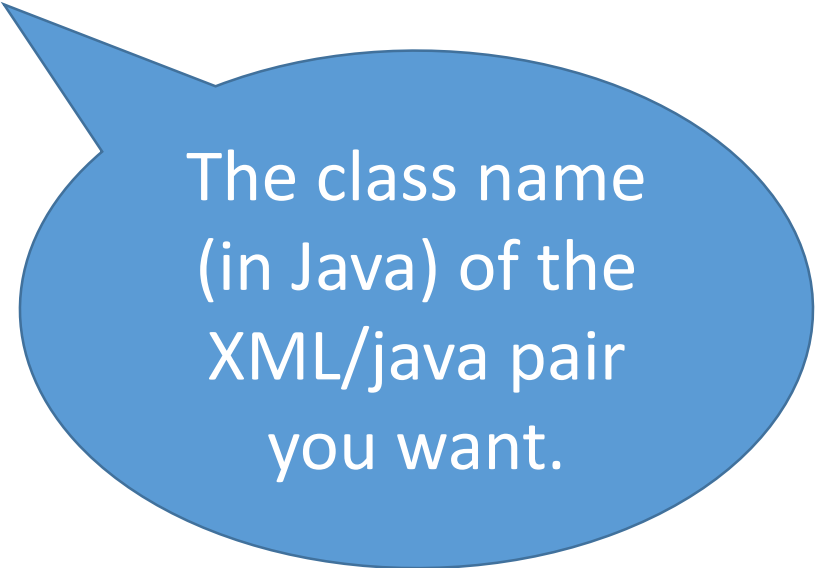
```
LinearLayout
1 <?xml version="1.0" encoding="utf-8" ?>
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     android:layout_width="match_parent"
4     android:layout_height="match_parent"
5     android:paddingLeft="16dp"
6     android:paddingRight="16dp"
7     android:orientation="vertical" >
8
9     <TextView
10         android:layout_width="wrap_content"
11         android:layout_height="wrap_content"
12         android:text="Click to roll the story dice."
13         android:layout_gravity="center_horizontal"
14         android:paddingTop="100dp"
15         android:paddingBottom="50dp"
16         android:textSize="25dp"/>
17
18     <ImageButton
19         android:layout_width="wrap_content"
20         android:layout_height="wrap_content"
21         android:layout_gravity="center_horizontal"
22         android:src="@drawable/sc1"
23         android:onClick="roll"
24         android:id="@+id/dice"
25     />
26
27     <Button
28         android:id="@+id/send"
29         android:layout_width="wrap_content"
30         android:layout_height="wrap_content"
31         android:text="Instructions"
32         android:layout_gravity="center_horizontal"
33     />
34 </LinearLayout>
```

Repeat until you have all of your screens. Then, build the basic XML for each.



To Switch Screens

```
public void toSecond(View view) {  
    Intent i = new Intent(this,  
                        InstructionsActivity.class);  
    startActivity(i);  
}
```



The class name
(in Java) of the
XML/java pair
you want.

Screen 1



```
<?xml version="1.0" encoding="utf-8" ?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    android:orientation="vertical" >

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Welcome to Story Cubes"
        android:textSize="30dp"
        android:paddingTop="150dp"
        android:paddingBottom="100dp"
    />

    <Button
        android:id="@+id/send"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Begin"
        android:layout_gravity="center_horizontal"
        android:onClick="toSecond"/>
</LinearLayout>
```

```
package ca.gorskicompsci.www.storycubes;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }

    public void toSecond(View view){
        Intent i = new Intent(this, InstructionsActivity.class);
        startActivity(i);
    }
}
```

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    android:orientation="vertical" >

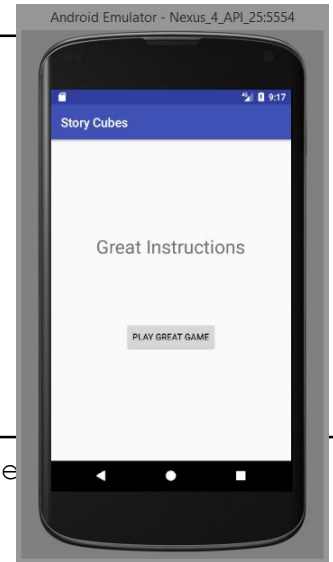
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Great Instructions"
        android:layout_gravity="center_horizontal"
        android:textSize="30dp"
        android:paddingTop="150dp"
        android:paddingBottom="100dp"
    />

    <Button
        android:id="@+id/send"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Play Great Game"
        android:layout_gravity="center_horizontal"
        android:onClick="toGame" />

</LinearLayout>

```

Screen
2



```

package ca.gorskicompsci.www.storycube

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;

public class InstructionsActivity extends
AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_instructions);
    }

    public void toGame(View view){
        Intent i = new Intent(this, Game.class);
        startActivity(i);
    }
}

```

```

<?xml version="1.0" encoding="utf-8" ?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    android:orientation="vertical" >

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Click to roll the story dice."
        android:layout_gravity="center_horizontal"
        android:paddingTop="100dp"
        android:paddingBottom="50dp"
        android:textSize="25dp" />

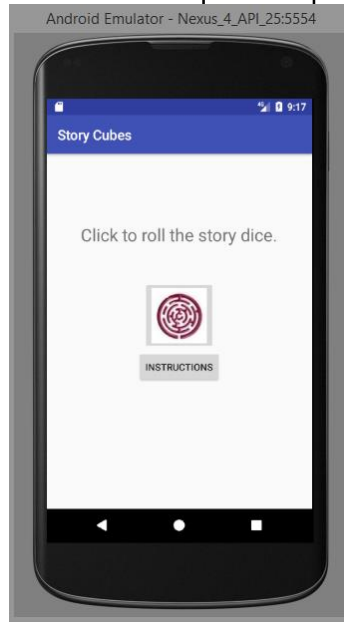
    <ImageButton
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:src="@drawable/sc1"
        android:onClick="roll"
        android:id="@+id/dice"
    />

    <Button
        android:id="@+id/send"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Instructions"
        android:layout_gravity="center_horizontal"
        android:onClick="backtoInstructions" />

</LinearLayout>

```

Screen 3



```

package ca.gorskicompsci.www.storycubes;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageButton;

public class Game extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_game);
    }

    public void backtoInstructions(View view) {
        Intent i = new Intent(this, InstructionsActivity.class);
        startActivity(i);
    }

    public void roll(View view) {
        ImageButton ib = (ImageButton) findViewById(R.id.dice);
        int num = (int) (Math.random()*6);
        if(num==1)
            ib.setImageResource(R.drawable.sc1);
        else if(num==2)
            ib.setImageResource(R.drawable.sc2);
        else if(num==3)
            ib.setImageResource(R.drawable.sc3);
        else if(num==4)
            ib.setImageResource(R.drawable.sc4);
        else if(num==5)
            ib.setImageResource(R.drawable.sc5);
        else
            ib.setImageResource(R.drawable.sc6);
    }
}

```

```
public void roll(View view) {  
    ImageButton ib = (ImageButton) findViewById(R.id.dice);  
    int num = (int) (Math.random()*6);  
    if(num==1)  
        ib.setImageResource(R.drawable.sc1);  
    else if(num==2)  
        ib.setImageResource(R.drawable.sc2);  
    else if(num==3)  
        ib.setImageResource(R.drawable.sc3);  
    else if(num==4)  
        ib.setImageResource(R.drawable.sc4);  
    else if(num==5)  
        ib.setImageResource(R.drawable.sc5);  
    else  
        ib.setImageResource(R.drawable.sc6);  
}
```

To Roll the Dice

