

Course: Android App Development
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Assignment 2

Create a dice roller app that tells you the number the dice has rolled and showing the image of the number that the nice has rolled.

Solution:

<https://drive.google.com/drive/folders/1b0ahXTmKnmYQPBmEgmOhKUDyKG3u244c?usp=sharing>

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layoutDirection="locale"
    android:orientation="vertical"
    android:visibility="visible">

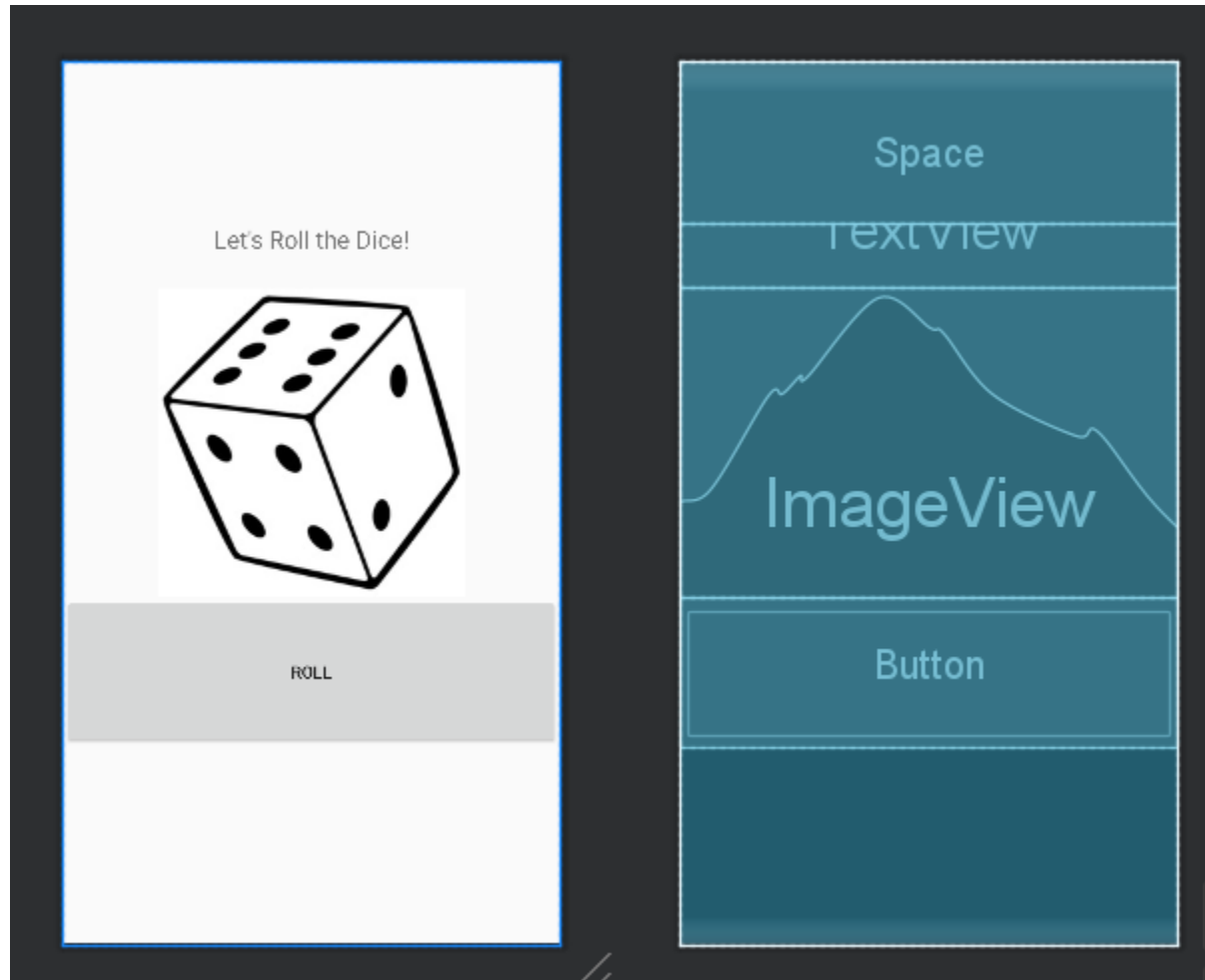
    <Space
        android:layout_width="match_parent"
        android:layout_height="134dp" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="match_parent"
        android:layout_height="54dp"
        android:text="Let's Roll the Dice!"
        android:textAlignment="center"
        android:textSize="20sp" />

    <ImageView
        android:id="@+id/imageView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:src="@drawable/diceroll"
        android:textAlignment="gravity" />

    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="124dp"
        android:layout_weight="0"
        android:text="Roll"
```

```
        android:textAlignment="gravity" />
    </LinearLayout>
```



MainActivity.kt

```
import android.os.Bundle
import android.widget.Button
import android.widget.ImageView
import android.widget.TextView
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.layout.fillMaxSize
import androidx.compose.material3.MaterialTheme
import androidx.compose.material3.Surface
import androidx.compose.material3.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Modifier
import androidx.compose.ui.tooling.preview.Preview
import com.example.test2.ui.theme.Test2Theme
import java.util.Random
```

```

class MainActivity : ComponentActivity() {
    private lateinit var textView : TextView
    private lateinit var button : Button
    private lateinit var imageView: ImageView

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        textView = findViewById(R.id.textView)
        button = findViewById(R.id.button)
        imageView = findViewById(R.id.imageView)

        button.setOnClickListener {
            rollDice()
        }
    }
    private fun rollDice() {
        val random = Random()
        val randomNumber = random.nextInt(6) + 1
        val resultText = "The dice rolled $randomNumber"
        textView.text=resultText

        if (randomNumber == 1) {
            imageView.setImageResource(R.drawable.d1)
        }else if (randomNumber == 2) {
            imageView.setImageResource(R.drawable.dice2)
        }else if (randomNumber == 3) {
            imageView.setImageResource(R.drawable.dice3)
        }else if (randomNumber == 4) {
            imageView.setImageResource(R.drawable.dice4)
        }else if (randomNumber == 5) {
            imageView.setImageResource(R.drawable.dice5)
        }else {
            imageView.setImageResource(R.drawable.dice6)
        }
    }
}

```