## Android fundamentals 01.2 Part B: The layout editor

### **QUESTION 1**

Which two layout constraint attributes on the **Zero** Button position it vertically equal distance between the other two Button elements? (Pick 2 answers.)

- app:layout constraintBottom toTopOf="@+id/button count"
- android:layout marginBottom="8dp"
- android:layout marginStart="16dp"
- app:layout constraintTop toBottomOf="@+id/button toast"
- android:layout marginTop="8dp"

#### **OUESTION 2**

Which layout constraint attribute on the **Zero** Button positions it horizontally in alignment with the other two Buttonelements?

- app:layout constraintLeft toLeftOf="parent"
- app:layout constraintBottom toTopOf="@+id/button count"
- android:layout marginBottom="8dp"
- app:layout constraintTop toBottomOf="@+id/button toast"

#### **OUESTION 3**

What is the correct signature for a method used with the android:onClick XML attribute?

- public void callMethod()
- public void callMethod(View view)
- private void callMethod(View view)
- public boolean callMethod(View view)

#### **OUESTION 4**

The click handler for the **Count** Button starts with the following method signature: public void countUp(View view)

Which of the following techniques is more efficient to use within this handler to change the Button element's background color? Choose one:

- Use findViewById to find the Count Button. Assign the result to a View variable, and then use <u>setBackgroundColor()</u>.
- Use the view parameter that is passed to the click handler with setBackgroundColor(): view.setBackgroundColor()

Android fundamentals 01.3: Text and scrolling views

## **QUESTION 1**

How many views can you use within a ScrollView? Choose one:

- One view only
- One view or one view group
- As many as you need

## **QUESTION 2**

Which XML attribute do you use in a LinearLayout to show views side by side? Choose one:

- android:orientation="horizontal"
- android:orientation="vertical"
- android:layout width="wrap content"

## **QUESTION 3**

Which XML attribute do you use to define the width of the LinearLayout inside the scrolling view? Choose one:

- android:layout width="wrap content"
- android:layout width="match parent"
- android:layout\_width="200dp"

# 01.4: Learn to help yourself

## **QUESTION 1**

Within an Android Studio project, what menu command can you use to open the list of sample apps? Choose one:

- File > Open
- File > New > Import Sample
- File > New > Import Module
- File > New > Import Project

## **QUESTION 2**

Which buttons does the Basic Activity template provide as part of the UI? Choose two:

- Navigation buttons
- Options menu overflow button
- Floating action button
- Button class button with the text "Button"

## **QUESTION 3**

Which source of documentation is the official documentation for Android developers? Choose one:

- stackoverflow.com
- officialandroid.blogspot.com
- developer.android.com
- github.com

## Android fundamentals 01.4: Learn to help yourself

## **QUESTION 1**

What changes are made when you add a second Activity to your app by choosing **File > New > Activity** and an Activity template? Choose one:

- The second Activity is added as a Java class. You still need to add the XML layout file.
- The second Activity XML layout file is created and a Java class added. You still need to define the class signature.
- The second Activity is added as a Java class, the XML layout file is created, and the AndroidManifest.xml file is changed to declare a second Activity.
- The second Activity XML layout file is created, and the AndroidManifest.xml file is changed to declare a second Activity.

#### **QUESTION 2**

What happens if you remove the android:parentActivityName and the <metadata> elements from the second Activity declaration in the AndroidManifest.xml file? Choose one:

- The second Activity no longer appears when you try to start it with an explicit Intent.
- The second Activity XML layout file is deleted.
- The Back button no longer works in the second Activity to send the user back to the main Activity.
- The Up button in the app bar no longer appears in the second Activity to send the user back to the parent Activity.

#### **OUESTION 3**

Which constructor method do you use to create a new explicit Intent? Choose one:

- new Intent()
- new Intent(Context context, Class<?> class)
- new Intent(String action, Uri uri)
- new Intent(String action)

#### **QUESTION 4**

In the HelloToast app homework, how do you add the current value of the count to the Intent? Choose one:

- As the Intent data
- As the Intent TEXT REQUEST
- As an Intent action
- As an Intent extra

## **QUESTION 5**

In the HelloToast app homework, how do you display the current count in the second "Hello" Activity? Choose one:

- Get the Intent that the Activity was launched with.
- Get the current count value out of the Intent.
- Update the TextView for the count.
- All of the above.

Android fundamentals 02.2: Activity lifecycle and state

### **QUESTION 1**

If you run the homework app before implementing on SaveInstanceState(), what happens if you rotate the device? Choose one:

- The EditText no longer contains the text you entered, but the counter is preserved.
- The counter is reset to 0, and the EditText no longer contains the text you entered.
- The counter is reset to 0, but the contents of the EditText is preserved.
- The counter and the contents of the EditText are preserved.

## **QUESTION 2**

What Activity lifecycle methods are called when a device-configuration change (such as rotation) occurs? Choose one:

- Android immediately shuts down your Activity by calling onStop(). Your code must restart the Activity.
- Android shuts down your Activity by calling onPause(), onStop(), and onDestroy(). Your code must restart the Activity.
- Android shuts down your Activity by calling onPause(), onStop(), and onDestroy(), and then starts it over again, calling onCreate(), onStart(), and onResume().
- Android immediately calls onResume().

## **QUESTION 3**

When in the Activity lifecycle is on SaveInstanceState() called? Choose one:

- onSaveInstanceState() is called before the onStop() method.
- onSaveInstanceState() is called before the onResume() method.
- onSaveInstanceState() is called before the onCreate() method.
- onSaveInstanceState() is called before the onDestroy() method.

## **QUESTION 4**

Which Activity lifecycle methods are best to use for saving data before the Activity is finished or destroyed? Choose one:

- onPause() or onStop()
- onResume() or onCreate()
- onDestroy()
- onStart() or onRestart()

## **Android fundamentals 02.3: Implicit intents**

## **QUESTION 1**

Which constructor method do you use to create an implicit Intent to launch a camera app?

- new Intent()
- new Intent(Context context, Class<?> class)
- new Intent(String action, Uri uri)
- new Intent(String action)

## **QUESTION 2**

When you create an implicit Intent object, which of the following is true?

- Don't specify the specific Activity or other component to launch.
- Add an Intent action or Intent categories (or both).
- Resolve the Intent with the system before calling startActivity() or startActivityforResult().
- All of the above.

## **QUESTION 3**

Which Intent action do you use to take a picture with a camera app?

- Intent takePicture = new Intent(Intent.ACTION VIEW);
- Intent takePicture = new Intent(Intent.ACTION MAIN);
- Intent takePicture = new Intent(MediaStore.ACTION IMAGE CAPTURE);
- Intent takePicture = new Intent(Intent.ACTION\_GET\_CONTENT);

Android fundamentals 03.1: The debugger

# **QUESTION 1**

Run the SimpleCalc app without the debugger. Leave one or both of the EditText elements empty, and try any calculation. Why did the error occur?

- java.lang.NumberFormatException: empty String
- W/OpenGLRenderer: Failed to choose config with EGL SWAP BEHAVIOR PRESERVED
- The app may be doing too much work on its main thread.
- The code cache capacity was increased to 128KB.

## **QUESTION 2**

Which function do you perform in the Debug pane in order to execute the current line where the breakpoint is, and then stop at the next line in the code? Choose one:

- Step Into
- Step Over
- Step Out
- Resume

## **QUESTION 3**

Which function do you perform in the Debug pane in order to jump to the execution of a method call from the current line where the breakpoint is? Choose one:

- Step Into
- Step Over
- Step Out
- Resume

## Android fundamentals 03.2: Unit tests

# **QUESTION 1**

Which statement best describes a local unit test? Choose one:

- Tests that run on an Android-powered device or emulator and have access to the Android framework.
- Tests that enable you to write automated UI test methods.
- Tests that are compiled and run entirely on your local machine with the Java Virtual Machine (JVM).

# **QUESTION 2**

Source sets are collections of related code. In which source set are you likely to find unit tests? Choose one:

- app/res
- com.example.android.SimpleCalcTest
- com.example.android.SimpleCalcTest (test)
- com.example.android.SimpleCalcTest (androidTest)

## **QUESTION 3**

Which annotation is used to mark a method as an actual test? Choose one:

- @RunWith(JUnit4.class)
- @SmallTest
- @Before
- @Test

Android fundamentals 03.3: Support libraries

#### **QUESTION 1**

Which class appears when you first Step

Into the ContextCompat.getColor() method? Choose one:

- MainActivity
- ContextCompat
- AppCompatActivity
- Context

## **QUESTION 2**

In the class that appears, which statement is executed if the build version is API version 23 or newer? Choose one:

- return context.getColor(id);
- return context.getResources().getColor(id);
- throw new IllegalArgumentException("permission is null");
- return mResources == null ? super.getResources() : mResources;

## **QUESTION 3**

If you change the ContextCompat.getColor() method back to the getColor() method, what will happen when you run the app? Choose one:

- If your minSdkVersion is 15, the word getColor is underlined in red in the code editor. Hover your pointer over it, and Android Studio reports "Call requires API 23 (current min is 15)".
- The app will run without error on emulators and devices using API 23 or newer.
- The app will crash when the user taps **Change Color** if the emulator or device is using API 17.
- All of the above.

