

Working with TextView, Checkbox and Button

Reference:

This document describes how to work with checkboxes.

When inserting code, type in as much as possible and select the suggested line from the popup. For keywords that have more than one word, you can type the first letter of each word for it to popup. Be careful that letters are case sensitive. Press **Enter** to accept the suggestion from the popup. For example to enter **ImageView**, you can type **IV** then press **Enter**.

To resolve an error after typing in a statement correctly, put your cursor on the error highlighted in red and either press Alt+Enter, or click the red bulb that appears. Then select the correct suggestion from the popup. In most cases, this will correct the error by automatically inserting missing boilerplate code.

Create new project

1. Create a new **Empty Activity** project and name it **Checkbox**.

Adding a TextView, Checkbox and Button objects in the UI

Edit the activity_main.xml file

2. Add a textView, three CheckBox and a Button
3. Here's the complete **activity_main.xml** file.

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="40dp"
        android:text="Hello World!"
```

```

app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent" />

<CheckBox
    android:id="@+id/checkBox1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="20dp"
    android:text="Apple"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toLeftOf="@+id/checkBox2"
    app:layout_constraintTop_toBottomOf="@+id/textView" />

<CheckBox
    android:id="@+id/checkBox2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Banana"
    app:layout_constraintTop_toTopOf="@+id/checkBox1"
    app:layout_constraintLeft_toRightOf="@+id/checkBox1"
    app:layout_constraintRight_toLeftOf="@+id/checkBox3"
    />

<CheckBox
    android:id="@+id/checkBox3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Coconut"
    app:layout_constraintTop_toTopOf="@+id/checkBox1"
    app:layout_constraintLeft_toRightOf="@+id/checkBox2"
    app:layout_constraintRight_toRightOf="parent"
    />

<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Order"
    app:layout_constraintTop_toBottomOf="@+id/checkBox3"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    />

```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

Edit the MainActivity.java file

4. Declare the variables for the four objects in the MainActivity class.
5. Link the objects using **findViewById** in the onCreate method.
6. Set the **setOnClickListener** for the button.
7. Add the appropriate code in the **onClick** method.

8. Here's the complete code for the **MainActivity.java** file.

```
package com.mygadgets2.textview;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    // declare variables for the four objects
    TextView message;
    CheckBox apple, banana, coconut;
    Button order;

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

        // Link the variables to the objects
        message = findViewById(R.id.textView);
        apple = findViewById(R.id.checkBox1);
        banana = findViewById(R.id.checkBox2);
        coconut = findViewById(R.id.checkBox3);
        order = findViewById(R.id.button);

        order.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String msg = "You ordered ";
                // see if a checked box has been checked or not
                if (apple.isChecked()) {
                    msg = msg + "apple ";
                }
                if (banana.isChecked()) {
                    msg = msg + "banana ";
                }
                if (coconut.isChecked()) {
                    msg = msg + "coconut ";
                }
                message.setText(msg);
                // uncheck all boxes
                apple.setChecked(false);
                banana.setChecked(false);
                coconut.setChecked(false);
            }
        });
    }
}
```

}	}
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