



Experiment 2.2

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Subject Name: Mobile Application Development Lab

Subject Code: 20CSP-356

1. **Aim:**

Create an Android App using various controls such as EditText, CheckBox, RadioButton, RadioGroup, etc.

2. **System Requirements:**

- Microsoft Windows 7/8/10 (32-bit or 64-bit)
- 4 GB RAM minimum, 8 GB RAM recommended (plus 1 GB for the Android Emulator)
- 2 GB of available disk space minimum, 4 GB recommended (500 MB for IDE plus 1.5 GB for Android SDK and emulator system image)
- 1280 x 800 minimum screen resolution
- Java JDK5 or later version
- Java Runtime Environment (JRE) 6 Android Studio

3. **Steps/Program:**

Step 1: Create new Project

Step 2: Write the code and run the program

4. **Code:**

1. MainActivity.java

```
package com.example.experiment_5;

import android.support.v7.app.AppCompatActivity; import
android.os.Bundle; import android.view.View; import
android.widget.CheckBox; import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {    CheckBox ch, ch1, ch2,
ch3;

    @Override
```

```
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    // Binding MainActivity.java with activity_main.xml file
    setContentView(R.layout.activity_main);

    // Finding CheckBox by its unique ID
    ch=(CheckBox)findViewById(R.id.checkBox);
    ch1=(CheckBox)findViewById(R.id.checkBox2);    ch2=(CheckBox)findViewById(R.id.checkBox3);
    ch3=(CheckBox)findViewById(R.id.checkBox4);
}

// This function is invoked when the button is pressed.
public void Check(View v)
{
    String msg="";

    // Concatenation of the checked options in if

    // isChecked() is used to check whether // the CheckBox
    // is in true state or not.

    if(ch.isChecked())    msg = msg + "
Writing ";    if(ch1.isChecked())
msg = msg + " Reading ";
if(ch2.isChecked())    msg = msg + "
Playing ";    if(ch3.isChecked())
    msg = msg + " Cooking ";
    // Toast is created to display the
    // message using show() method.
    Toast.makeText(this, msg + "are selected by Gokul (UID- 20BCS9552)",
        Toast.LENGTH_LONG).show();
}
}
```

2. 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"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"    android:background="#ffffff"
    android:orientation="vertical"
    tools:context="com.example.experiment_5.MainActivity"
    tools:ignore="ExtraText">

    <TextView
        android:id="@+id/textView"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"
```

```
        android:layout_marginEnd="8dp"

        android:layout_marginStart="8dp"

        android:layout_marginTop="48dp"

        android:text="Choose your hobbies:"        android:textSize="24sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

<CheckBox
    android:id="@+id/checkBox"

    android:layout_width="match_parent"
    android:layout_height="wrap_content"

    android:text="Writing"        android:layout_marginTop="16dp"
    android:textSize="18sp" />

<CheckBox
    android:id="@+id/checkBox2"

    android:layout_width="match_parent"
    android:layout_height="wrap_content"

    android:text="Reading"        android:layout_marginTop="16dp"
    android:textSize="18sp" />

<CheckBox
    android:id="@+id/checkBox3"

    android:layout_width="match_parent"

    android:layout_height="wrap_content"

    android:layout_marginTop="16dp"
    android:text="Playing"        android:textSize="18sp"
    app:layout_constraintTop_toTopOf="@+id/textView"
    tools:layout_editor_absoluteX="382dp" />

<CheckBox
    android:id="@+id/checkBox4"

    android:layout_width="match_parent"

    android:layout_height="wrap_content"
```

```
        android:text="Cooking"    android:layout_marginTop="16dp"
        android:textSize="18sp"
        app:layout_constraintTop_toBottomOf="@+id/checkBox"
        tools:layout_editor_absoluteX="386dp" />

        <Button
            android:id="@+id/button"

            android:layout_width="match_parent"

            android:layout_height="wrap_content"

            android:layout_marginTop="16dp"
            android:onClick="Check"
            android:text="submit" />
    </LinearLayout>
```

5. OUTPUT:

