DURHAM COLLEGE | DCCONNECT

LAB 3

INFT 3101-01

Varun Singh(100865156)
Date Submitted: 04-10-2024

Table of Contents

COPY OF THE CODE

```java
package com.example.lab_3;

import ...

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable( $this$enableEdgeToEdge: this);
        setContentView(R.layout.activity_main);
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.second_sc_view), (v, insets) -> {
            Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
            return insets;
        });
    }


    public void main_btn_click(View btn) {  1 usage

        EditText inputText = findViewById(R.id.userName);
        TextView warn= findViewById(R.id.warning);
        String input_txt = inputText.getText().toString();

        if (TextUtils.isEmpty(inputText.getText().toString())) {

            warn.setText("NAME CAN NOTT BE EMPTY");
            warn.setVisibility(View.VISIBLE);
        } else {
            String textToSend = inputText.getText().toString();
            Intent secondScreen = new Intent( packageContext: MainActivity.this, second_page.class);
            secondScreen.putExtra( name: "sc1_name",inputText.getText().toString());
            warn.setVisibility(View.GONE);
            startActivity(secondScreen);

        }

    }
}
```

```xml
<?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:id="@+id/second_sc_view"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/back"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:fontFamily="casual"
        android:text="Welcome To Ez Learning"
        android:textColor="#3F51B5"
        android:textSize="34sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.126" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="197dp"
        android:layout_height="33dp"
        android:background="@android:color/transparent"
        android:backgroundTint="#00FFFFFF"
        android:text="Learning made easier"
        android:textColor="#94050505"
        android:textSize="20sp"
        android:textStyle="italic"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.209" />

    <View
        android:id="@+id/divider"
        android:layout_width="409dp"
        android:layout_height="4dp"
        android:background="#FC521414"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.277" />

    <ImageView
        android:id="@+id/imageView"
        android:layout_width="398dp"
        android:layout_height="116dp"
        android:src="@drawable/_957740_preview"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/divider"
        app:layout_constraintVertical_bias="1.0" />

    <TextView
        android:id="@+id/textView2"
        android:layout_width="156dp"
        android:layout_height="33dp"
        android:text="Learner's Name:"
        android:textAlignment="center"
        android:textSize="20sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.07"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.446" />
```

```xml
        <EditText
            android:id="@+id/userName"
            android:layout_width="199dp"
            android:layout_height="49dp"
            android:ems="10"
            android:hint="Name"
            android:inputType="text"
            android:textSize="20sp"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.885"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.445" />

        <Button
            android:id="@+id/start_click"
            android:layout_width="162dp"
            android:layout_height="54dp"
            android:background="#F5660B24"
            android:gravity="center_horizontal|center_vertical"
            android:onClick="main_btn_click"
            android:stateListAnimator="@android:anim/slide_in_left"
            android:text="Let's Roll"
            android:textAlignment="center"
            android:textColorLink="#230756"
            android:textSize="24sp"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.497"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.539" />

        <TextView
            android:id="@+id/warning"
            android:layout_width="225dp"
            android:layout_height="45dp"
            android:text="NAME CANNOT BE EMPTY"
```

```xml
            android:background="#F5660B24"
            android:gravity="center_horizontal|center_vertical"
            android:onClick="main_btn_click"
            android:stateListAnimator="@android:anim/slide_in_left"
            android:text="Let's Roll"
            android:textAlignment="center"
            android:textColorLink="#230756"
            android:textSize="24sp"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.497"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.539" />

        <TextView
            android:id="@+id/warning"
            android:layout_width="225dp"
            android:layout_height="45dp"
            android:text="NAME CANNOT BE EMPTY"
            android:textAlignment="center"
            android:textColor="#FD0808"
            android:textSize="16sp"
            android:textStyle="bold"
            android:visibility="invisible"
            app:layout_constraintBottom_toBottomOf="@+id/imageView"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.377" />

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

Screen 2

```java
package com.example.lab_3;

> import ...

public class second_page extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable( $this$enableEdgeToEdge: this);
        setContentView(R.layout.activity_second_page);
        String u_name = getIntent().getStringExtra( name: "sc1_name");
        TextView displayText = findViewById(R.id.p_name);
        displayText.setText(u_name);
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.second_sc_view), (v, insets) -> {
            Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
            return insets;
        });


    }
    public void check_quiz_ans(View btn2) { 1 usage
        int points=0;
        int rid=2131296782;
        Spinner myspinner= findViewById(R.id.spinner);
        CheckBox mycb1=findViewById(R.id.cb1);
        CheckBox mycb2=findViewById(R.id.cb2);
        CheckBox mycb3=findViewById(R.id.cb3);
        CheckBox mycb4=findViewById(R.id.cb4);
        RadioGroup myrbg=findViewById(R.id.rbg);
        Switch myans=findViewById(R.id.ans);

        String selectedSpin = myspinner.getSelectedItem().toString();
        boolean isChecked1 = mycb1.isChecked();
        boolean isChecked2 = mycb2.isChecked();
        boolean isChecked3 = mycb3.isChecked();
        boolean isChecked4 = mycb4.isChecked();

        boolean sw_val = myans.isChecked();
        if(selectedSpin.equals("Justin Trudeau")){
            points++;
```

```java
public class second_page extends AppCompatActivity {
    public void check_quiz_ans(View btn2) {  1 usage
        boolean isChecked2 = mycb2.isChecked();
        boolean isChecked3 = mycb3.isChecked();
        boolean isChecked4 = mycb4.isChecked();

        boolean sw_val = myans.isChecked();
        if(selectedSpin.equals("Justin Trudeau")){
            points++;
        }
        if(isChecked1 && isChecked3){
            if(!(isChecked2 || isChecked4)){
                points++;
            }
        }
        if(rid==myrbg.getCheckedRadioButtonId()){
            points++;
        }

        String ans_="ANS 1: Justin Trudeau \nANS 2: Ontario, Alberta\nANS 3: 10";
        System.out.println(points);
        Intent thirdScreen = new Intent( packageContext: second_page.this, answer_page.class);
        if(myans.isChecked()){
            thirdScreen.putExtra( name: "answers",ans_);
        }
        thirdScreen.putExtra( name: "result",points);

        startActivity(thirdScreen);

    }

    public void quit_pgn(){  no usages
        finishAffinity(); // Closes all activities and exits the app
        System.exit( status: 0);

    }
}
```

```xml
<?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:id="@+id/second_sc_view"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/back"
    tools:context=".second_page">

    <View
        android:id="@+id/divider2"
        android:layout_width="409dp"
        android:layout_height="4dp"
        android:background="@color/design_default_color_error"
        android:backgroundTint="@color/design_default_color_error"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.084" />

    <TextView
        android:id="@+id/textView4"
        android:layout_width="59dp"
        android:layout_height="35dp"
        android:text="Hello,"
        android:textAlignment="center"
        android:textColor="#92412749"
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.046"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.022" />

    <TextView
        android:id="@+id/p_name"
        android:layout_width="228dp"
        android:layout_height="33dp"
```

```xml
        android:layout_width="228dp"
        android:layout_height="33dp"
        android:layout_marginStart="4dp"
        android:textColor="#92412749"
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintStart_toEndOf="@+id/textView4"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.022" />

    <TextView
        android:id="@+id/textView6"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="QUIZ TIME!!"
        android:textSize="34sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.115" />

    <TextView
        android:id="@+id/textView7"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Q1. who is the prime minister of canada?"
        android:textAlignment="center"
        android:textSize="16sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.288"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.197" />

    <Spinner
```

```xml
                            app:layout_constraintVertical_bias="0.197" />

    <Spinner
        android:id="@+id/spinner"
        android:layout_width="207dp"
        android:layout_height="28dp"
        android:entries="@array/spinner_items"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.166"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.248" />

    <TextView
        android:id="@+id/textView8"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Q2. Which of the following are in Canada? "
        android:textSize="16sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.314"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.317" />

    <CheckBox
        android:id="@+id/cb1"
        android:layout_width="109dp"
        android:layout_height="43dp"
        android:text="Ontario"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.112"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.37" />
```

```xml
                            app:layout_constraintVertical_bias="0.37" />

    <CheckBox
        android:id="@+id/cb2"
        android:layout_width="108dp"
        android:layout_height="44dp"
        android:text="New York"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.57"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.369" />

    <CheckBox
        android:id="@+id/cb3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Alberta"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.102"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.455" />

    <CheckBox
        android:id="@+id/cb4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Bathinda"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.549"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.455" />

    <TextView
        android:id="@+id/textView9"
```

```xml
        <TextView
            android:id="@+id/textView9"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Q3. How many provinces are there in Canada?"
            android:textSize="16sp"
            android:textStyle="bold"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.414"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.535" />

        <RadioGroup
            android:id="@+id/rbg"
            android:layout_width="269dp"
            android:layout_height="148dp"
            android:orientation="vertical"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.239"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.703">

            <RadioButton
                android:id="@+id/rb1"
                android:layout_width="70dp"
                android:layout_height="wrap_content"
                android:text="10" />

            <RadioButton
                android:id="@+id/radioButton2"
                android:layout_width="127dp"
                android:layout_height="wrap_content"
                android:text="15" />

            <RadioButton
                android:id="@+id/radioButton3"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:text="20" />
        </RadioGroup>

        <TextView
            android:id="@+id/textView10"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Show Answers:"
            android:textSize="16sp"
            android:textStyle="bold"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.053"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.882" />

        <Switch
            android:id="@+id/ans"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="ON/OFF"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.453"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.882" />

        <Button
            android:id="@+id/check_quiz"
            android:layout_width="wrap_content"
```

```xml
        <Button
            android:id="@+id/check_quiz"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:onClick="check_quiz_ans"
            android:text="Submit"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.465"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.963" />

        <Button
            android:id="@+id/quit_btn"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:onClick="quir_pgm"
            android:text="Quit"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.996"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.002" />

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

Screen 3

```java
package com.example.lab_3;

import ...

public class answer_page extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable( $this$enableEdgeToEdge: this);
        setContentView(R.layout.activity_answer_page);
        Intent intent2=getIntent();
        int result = getIntent().getIntExtra( name: "result", defaultValue: 0);
        if(intent2.hasExtra( name: "answers")){
            TextView a_head_l=findViewById(R.id.a_head);
            a_head_l.setVisibility(View.VISIBLE);
            String answers = getIntent().getStringExtra( name: "answers");
            TextView ans_l=findViewById(R.id.a_head);
            String a_display=ans_l.getText()+answers;
            ans_l.setText(a_display);
        }
        TextView rs=findViewById(R.id.num_res);
        rs.setText(String.valueOf(result));
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
            Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
            return insets;
        });
    }
    public void quit_pgn(){  1 usage
        finishAffinity(); // Closes all activities and exits the app
        System.exit( status: 0);

    }
}
```

```xml
<?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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/back"
    tools:context=".answer_page">

    <View
        android:id="@+id/divider3"
        android:layout_width="409dp"
        android:layout_height="4dp"
        android:background="@color/design_default_color_error"
        android:backgroundTint="@color/design_default_color_error"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.084" />

    <TextView
        android:id="@+id/textView5"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="RESULT"
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.022" />

    <TextView
        android:id="@+id/textView11"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="YOU GOT "
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.174"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/num_res"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.062"
        app:layout_constraintStart_toEndOf="@+id/textView11"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/textView13"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="/3 CORRECT ANSWERS"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.089"
        app:layout_constraintStart_toEndOf="@+id/num_res"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/quit_btn2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:onClick="quit_pgn"
        android:text="QUIT"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.47"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.598" />

    <TextView
```
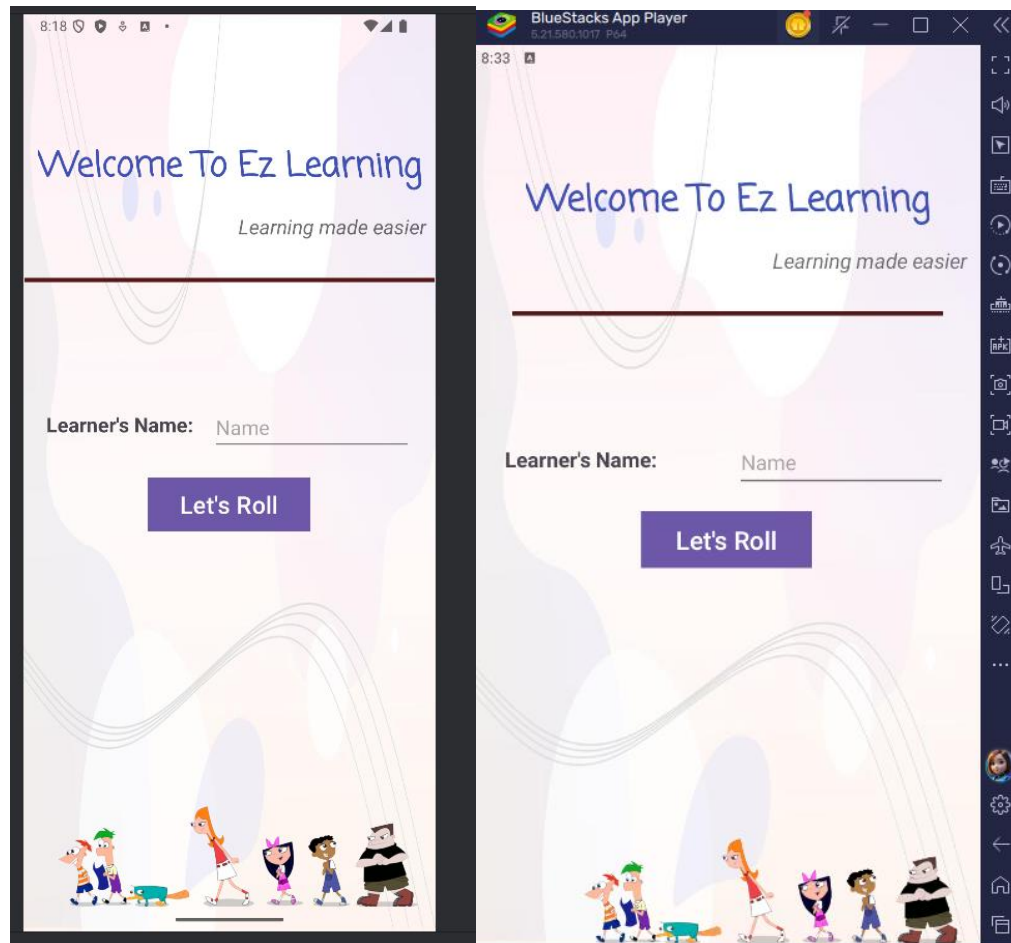
```
80        <TextView
81            android:id="@+id/a_head"
82            android:layout_width="wrap_content"
83            android:layout_height="wrap_content"
84            android:text="Answers"
85            android:textSize="24sp"
86            android:visibility="invisible"
87            app:layout_constraintBottom_toBottomOf="parent"
88            app:layout_constraintEnd_toEndOf="parent"
89            app:layout_constraintHorizontal_bias="0.442"
90            app:layout_constraintStart_toStartOf="parent"
91            app:layout_constraintTop_toTopOf="parent"
92            app:layout_constraintVertical_bias="0.107" />
93
94        <TextView
95            android:id="@+id/ans_label"
96            android:layout_width="wrap_content"
97            android:layout_height="wrap_content"
98            android:textSize="20sp"
99            app:layout_constraintBottom_toBottomOf="parent"
100           app:layout_constraintEnd_toEndOf="parent"
101           app:layout_constraintHorizontal_bias="0.065"
102           app:layout_constraintStart_toStartOf="parent"
103           app:layout_constraintTop_toTopOf="parent"
104           app:layout_constraintVertical_bias="0.196" />
105  </androidx.constraintlayout.widget.ConstraintLayout>
```

SCREENSHOTS OF SCREENS

Screen 1

Screen 2

Screen 3

YOU GOT   2   /3 CORRECT ANSWERS

QUIT

AnswersANS 1: Justin Trudeau
ANS 2: Ontario, Alberta
ANS 3: 10

YOU GOT   2   /3 CORRECT ANSWERS
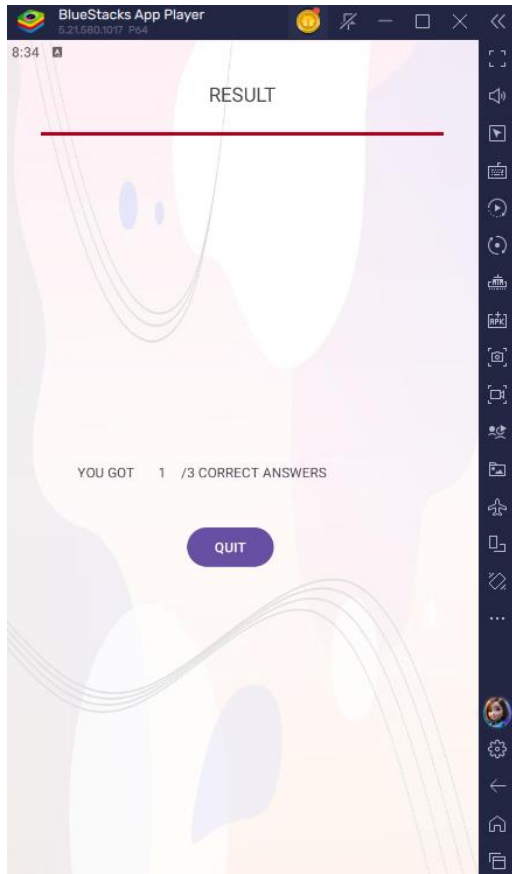
QUIT
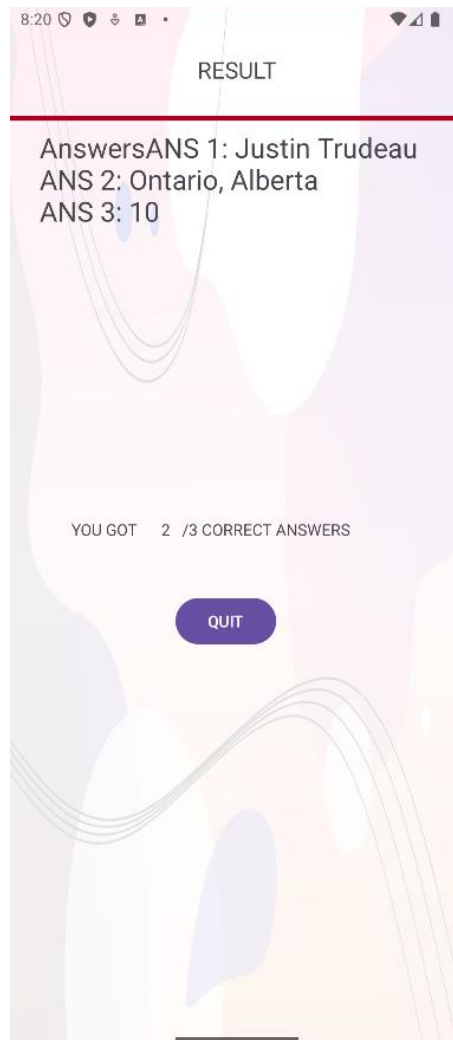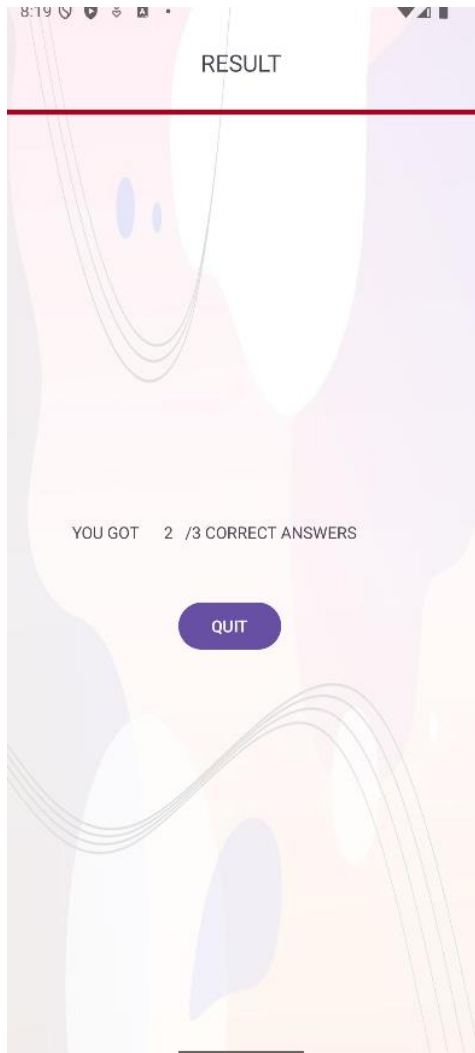
REFLECTION

This lab helped me reach new heights in terms of hands-on with Android Studio as several components were used in building the final application. Initially, we were just making designs through drag and drop which was later followed by logical Java code. The logic-building mechanism was the most fun part of this Lab. We had to make it multi screen which means there should be more than one interactive screen. Making them was easy, the only part which gave me a little hard time was figuring out how to connect them. The issue was resolved via some online readings and the app finally worked. To conclude, the lab was full of new experiences which were necessary in this ongoing journey of mine in Mobile Development.