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Submission Date: 12th April, 2021

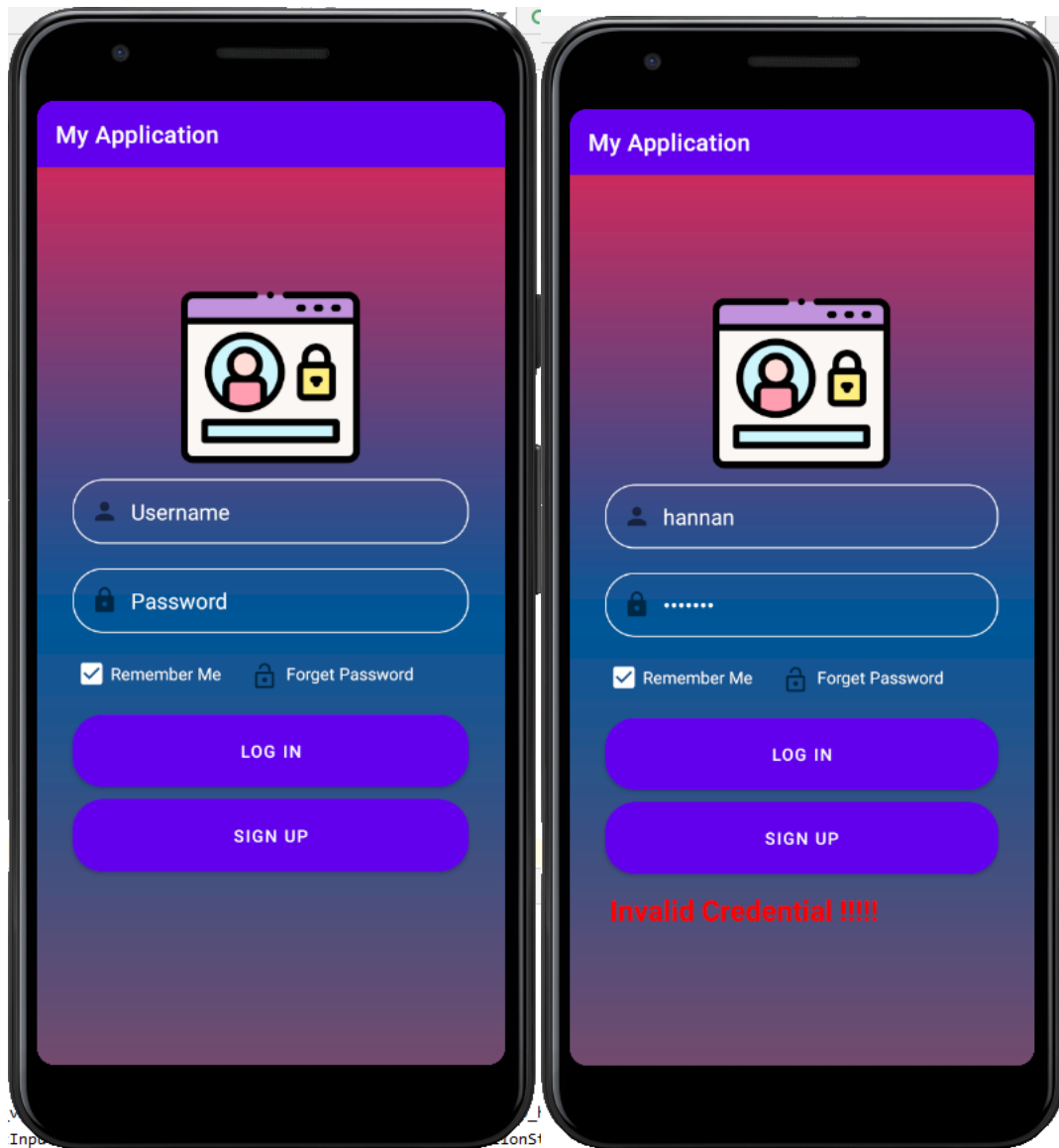
Q1: Design a Quiz Application in android studio. Your application must have following functionality: (5 + 5 + 5)

1. Your first activity is a login page.
 - a. Save login ID and password in a variable and upon login, compare the user entered ID and password with the saved one. If login successful move to the next activity.
2. Your second activity is a quiz form.
 - a. You can add scroll view for quiz questions (add 10 questions at least).
 - b. On submitting the quiz, move to the next activity.
3. Your third activity displayed the result of the quiz.
 - a. If marks are greater than or equal to 50%, font color of the marks will be green.
 - b. If marks are less than 50%, font color of the marks will be red.

Assignment#2: Mobile Application Development (CSC-341)

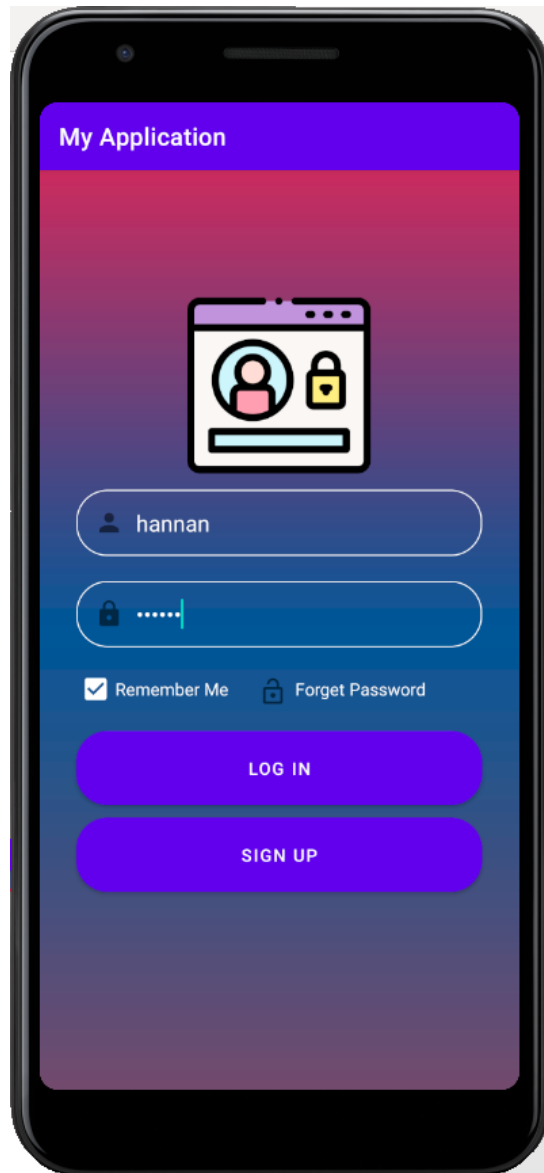
1. Your first activity is a login page.

a. Save login ID and password in a variable and upon login, compare the user entered ID and password with the saved one. If login successful move to the next activity.



- This is my login page where we enter our username and password to proceed to the next activity.
- If you enter wrong credentials, then it will show you a warning ("Invalid Credential!!!!").
- If you enter valid username or password, then your quiz will begin.

Assignment#2: Mobile Application Development (CSC-341)



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="@drawable/gradient"
    android:orientation="vertical"
    android:gravity="center"
    android:padding="20dp">

    <ImageView
        android:layout_width="150dp"
```

Assignment#2: Mobile Application Development (CSC-341)

```
android:layout_height="150dp"
android:src="@drawable/user"
android:contentDescription="@string/todo" />
```

```
<EditText
    android:id="@+id/username"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:autofillHints=""
    android:background="@drawable/shapeemail"
    android:drawableStart="@drawable/ic_baseline_person_24"
    android:drawablePadding="10dp"
    android:hint="@string/email"
    android:inputType="text"
    android:padding="15dp"
    android:textColor="@color/white"
    android:textColorHighlight="@color/white"
    android:textColorHint="@color/white" />
```

```
<EditText
    android:id="@+id/passwordtext"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:autofillHints=""
    android:background="@drawable/shapeemail"
    android:drawableStart="@drawable/ic_baseline_lock_24"
    android:drawablePadding="10dp"
    android:hint="@string/password"
    android:inputType="textPassword"
    android:padding="15dp"
    android:textColor="@color/white"
    android:textColorHighlight="@color/white"
    android:textColorHint="@color/white" />
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
```

```
    <CheckBox
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/remember_me"
        android:layout_marginRight="10dp"
        android:layout_marginLeft="10dp"
        android:layout_marginBottom="10dp"
        android:layout_marginTop="0dp"
        android:textColor="@color/white"
        android:buttonTint="@color/white"
        android:checked="true"/>
```

```
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
```

Assignment#2: Mobile Application Development (CSC-341)

```
        android:text="@string/forget_password"
        android:layout_marginRight="10dp"
        android:layout_marginLeft="10dp"
        android:layout_marginBottom="10dp"
        android:layout_marginTop="0dp"
        android:textColor="@color/white"
        android:drawablePadding="6dp"
        android:padding="4dp"
        app:drawableStartCompat="@drawable/ic_baseline_lock_open_24" />
```

```
</LinearLayout>
```

```
<Button
```

```
    android:id="@+id/loginbtn"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginLeft="10dp"
    android:layout_marginTop="0dp"
    android:layout_marginRight="10dp"
    android:layout_marginBottom="10dp"
    android:background="@drawable/shapellogin"
    android:backgroundTint="@color/white"
    android:padding="15dp"
    android:shadowColor="@android:color/transparent"
    android:text="@string/log_in" />
```

```
<Button
```

```
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginLeft="10dp"
    android:layout_marginTop="0dp"
    android:layout_marginRight="10dp"
    android:layout_marginBottom="10dp"
    android:background="@drawable/shapesignup"
    android:padding="15dp"
    android:shadowColor="@android:color/transparent"
    android:text="@string/sign_up"
    android:textColor="@color/white" />
```

```
<TextView
```

```
    android:id="@+id/verification"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginLeft="10dp"
    android:layout_marginTop="0dp"
    android:layout_marginRight="10dp"
    android:layout_marginBottom="10dp"
    android:drawablePadding="6dp"
    android:padding="4dp"
    android:text=""
    android:textSize="24sp"
    android:textStyle="bold" />
```

Assignment#2: Mobile Application Development (CSC-341)

</LinearLayout>

MainActivity.java:

```
package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    EditText user, password;
    Button login;

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

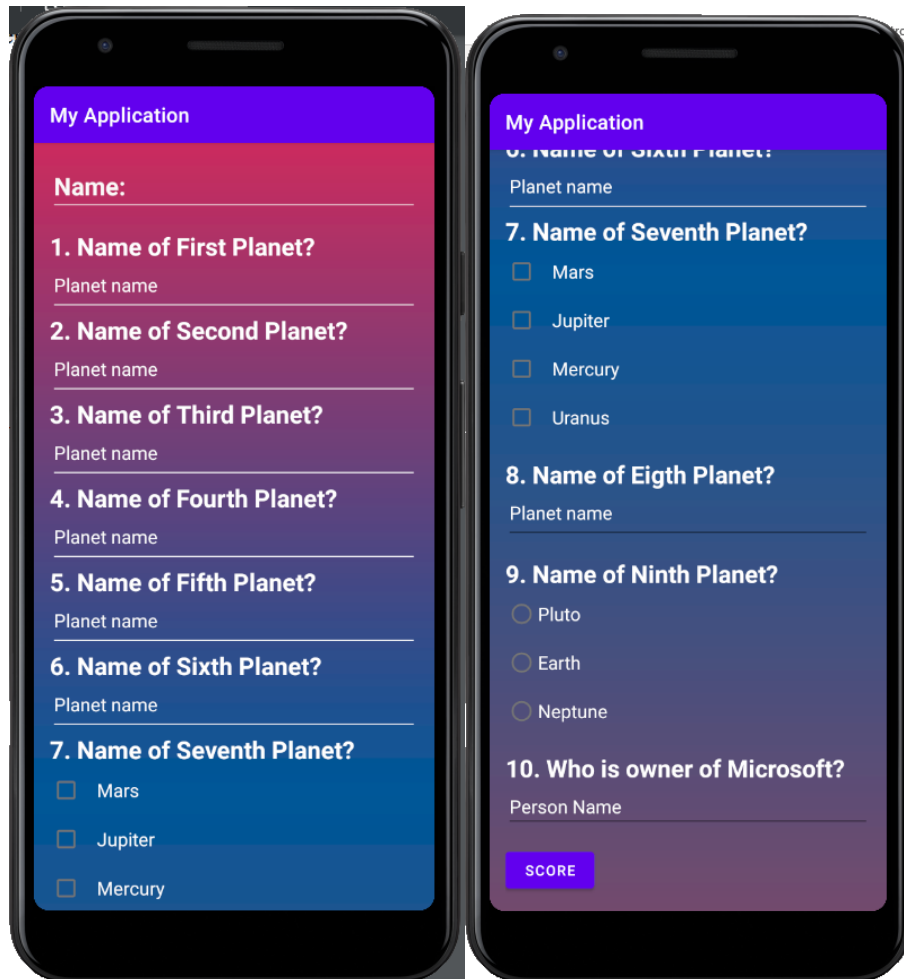
        Login();
    }

    void Login() {
        user = (EditText) findViewById(R.id.username);
        password = (EditText) findViewById(R.id.passwordtext);
        login = (Button) findViewById(R.id.Loginbtn);
        TextView txt = (TextView) findViewById(R.id.verification);
        login.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if (user.getText().toString().equals("hannan") &&
password.getText().toString().equals("hannan")) {
                    Intent intent = new Intent(MainActivity.this, Quiz.class);
                    startActivity(intent);
                } else {
                    txt.setTextColor(Color.parseColor("#FF0000"));
                    txt.setText("Invalid Credential !!!!!");
                }
            }
        });
    }
}
```

Assignment#2: Mobile Application Development (CSC-341)

2. Your second activity is a quiz form.

- a. You can add scroll view for quiz questions (add 10 questions at least).
- b. On submitting the quiz, move to the next activity.



- This page will appear after clicking the login button.
- This is our quiz page in which we use scroll view for scrolling the screen.
- This quiz consists of 10 question including 8 typed questions and 2 mcqs.

Activity_quiz.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<ScrollView xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <LinearLayout
```

Assignment#2: Mobile Application Development (CSC-341)

```
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="vertical"
android:paddingBottom="16dp"
android:paddingLeft="16dp"
android:background="@drawable/gradient"
android:paddingRight="16dp"
android:paddingTop="16dp"
tools:context=".Quiz">
```

```
<EditText
    android:id="@+id/name_field"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginBottom="16dp"
    android:backgroundTint="#FFFFFF"
    android:fontFamily="sans-serif"
    android:hint="@string/name"
    android:importantForAutofill="no"
    android:inputType="textCapWords"
    android:textColor="#FFFFFF"
    android:textColorHighlight="@color/white"
    android:textColorHint="#FBF9F9"
    android:textSize="24sp"
    android:textStyle="bold" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/Question1"
    android:fontFamily="sans-serif"
    android:textColor="#FFFFFF"
    android:textSize="24sp"
    android:textStyle="bold"
    android:typeface="monospace" />
```

```
<EditText
    android:id="@+id/one_ans"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:backgroundTint="#FAF9F9"
    android:hint="@string/planetname"
    android:importantForAutofill="no"
    android:inputType="textCapWords"
    android:paddingBottom="16dp"
    android:textColor="@color/white"
    android:textColorHighlight="@color/white"
    android:textColorHint="#FFFFFF" />
```

```
<TextView
```


Assignment#2: Mobile Application Development (CSC-341)

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="@string/Question2"
android:fontFamily="sans-serif"
android:textColor="#FFFFFF"
android:textSize="24sp"
android:textStyle="bold"
android:typeface="monospace" />
```

```
<EditText
    android:id="@+id/two_ans"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:backgroundTint="#FFFFFF"
    android:hint="@string/planetname"
    android:importantForAutofill="no"
    android:inputType="textCapWords"
    android:paddingBottom="16dp"
    android:textColor="@color/white"
    android:textColorHint="@color/white" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/Question3"
    android:fontFamily="sans-serif"
    android:textColor="#FFFFFF"
    android:textSize="24sp"
    android:textStyle="bold"
    android:typeface="monospace" />
```

```
<EditText
    android:id="@+id/three_ans"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:backgroundTint="#FFFFFF"
    android:hint="@string/planetname"
    android:importantForAutofill="no"
    android:inputType="textCapWords"
    android:paddingBottom="16dp"
    android:textColor="@color/white"
    android:textColorHint="@color/white" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/Question4"
    android:fontFamily="sans-serif"
    android:textColor="#FFFFFF"
    android:textSize="24sp"
    android:textStyle="bold"
    android:typeface="monospace" />
```

```
<EditText
```

Assignment#2: Mobile Application Development (CSC-341)

```
android:id="@+id/four_ans"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:autofillHints=""
android:backgroundTint="#FFFFFF"
android:hint="@string/planetname"
android:inputType="textCapWords"
android:paddingBottom="16dp"
android:textColor="@color/white"
android:textColorHint="@color/white" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/Question5"
    android:fontFamily="sans-serif"
    android:textColor="#FFFFFF"
    android:textSize="24sp"
    android:textStyle="bold"
    android:typeface="monospace" />
```

```
<EditText
    android:id="@+id/fifth_ans"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:backgroundTint="#FFFFFF"
    android:hint="@string/planetname"
    android:importantForAutofill="no"
    android:inputType="textCapWords"
    android:paddingBottom="16dp"
    android:textColor="@color/white"
    android:textColorHint="#FFFFFF" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:fontFamily="sans-serif"
    android:hint="@string/planetname"
    android:text="@string/Question6"
    android:textColor="#FFFFFF"
    android:textColorHint="@color/white"
    android:textSize="24sp"
    android:textStyle="bold"
    android:typeface="monospace" />
```

```
<EditText
    android:id="@+id/six_ans"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:backgroundTint="#FDFBFB"
    android:hint="@string/planetname"
    android:importantForAutofill="no"
    android:inputType="textCapWords"
    android:paddingBottom="16dp"
    android:textColor="@color/white"
```

Assignment#2: Mobile Application Development (CSC-341)

```
        android:textColorHint="@color/white" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/Question7"
    android:fontFamily="sans-serif"
    android:textColor="#FFFFFF"
    android:textSize="24sp"
    android:textStyle="bold"
    android:typeface="monospace" />

<CheckBox
    android:id="@+id/question7_choice1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:paddingStart="14dp"
    android:paddingEnd="0dp"
    android:text="@string/question7_choice1"
    android:textColor="@color/white"
    android:textSize="18sp" />

<CheckBox
    android:id="@+id/question7_choice2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:paddingStart="14dp"
    android:paddingEnd="0dp"
    android:text="@string/question7_choice2"
    android:textColor="@color/white"
    android:textSize="18sp" />

<CheckBox
    android:id="@+id/question7_choice3"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:paddingStart="14dp"
    android:paddingEnd="0dp"
    android:text="@string/question7_choice3"
    android:textColor="@color/white"
    android:textSize="18sp" />

<CheckBox
    android:id="@+id/question7_choice4"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:paddingStart="14dp"
    android:paddingEnd="0dp"
    android:text="@string/question7_choice4"
    android:textColor="@color/white"
    android:textSize="18sp" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

Assignment#2: Mobile Application Development (CSC-341)

```
android:fontFamily="sans-serif"
android:paddingTop="16dp"
android:text="@string/Question8"
android:textColor="@color/white"
android:textSize="24sp"
android:textStyle="bold"
android:typeface="monospace" />
```

```
<EditText
    android:id="@+id/eigth_ans"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="@string/planetname"
    android:importantForAutofill="no"
    android:inputType="textCapWords"
    android:paddingBottom="16dp"
    android:textColorHint="@color/white" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:paddingTop="16dp"
    android:text="@string/Question9"
    android:fontFamily="sans-serif"
    android:textColor="#FFFFFF"
    android:textSize="24sp"
    android:textStyle="bold"
    android:typeface="monospace" />
```

```
<RadioGroup
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical">
```

```
<RadioButton
    android:id="@+id/question9_choice1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:checked="false"
    android:text="@string/question9_choice1"
    android:textColor="@color/white"
    android:textSize="18sp" />
```

```
<RadioButton
    android:id="@+id/question9_choice2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:checked="false"
    android:text="@string/question9_choice2"
    android:textColor="@color/white"
    android:textSize="18sp"/>
```

```
<RadioButton
    android:id="@+id/question9_choice3"
    android:layout_width="wrap_content"
```

Assignment#2: Mobile Application Development (CSC-341)

```
        android:layout_height="wrap_content"
        android:checked="false"
        android:text="@string/question9_choice3"
        android:textColor="@color/white"
        android:textSize="18sp"
    />
</RadioGroup>

<TextView
    android:paddingTop="16dp"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/Question10"
    android:fontFamily="sans-serif"
    android:textColor="#FFFFFF"
    android:textSize="24sp"
    android:textStyle="bold"
    android:typeface="monospace" />

<EditText
    android:id="@+id/ten_ans"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="@string/BILLGATES"
    android:importantForAutofill="no"
    android:inputType="textCapWords"
    android:textColor="@color/white"
    android:textColorHint="@color/white" />

<Button
    android:id="@+id/ansbtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:onClick="submitScore"
    android:text="@string/score" />

</LinearLayout>
</ScrollView>
```

Quiz.Java:

```
package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;
import android.content.Intent;
import android.graphics.Color;
import android.net.Uri;
```

Assignment#2: Mobile Application Development (CSC-341)

```
import android.os.Bundle;
import android.view.Gravity;
import android.view.View;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.TextView;
import android.widget.Toast;

public class Quiz extends AppCompatActivity {
    String successresult;
    String Failresult;
    int s1, s2, s3, s4, s5, s6, s7, s8, s9, s10;
    int final_score = 0;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_quiz);
        Button btn = (Button)findViewById(R.id.ansbtn);
        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                submitScore(v);
            }
        });
    }

    public void submitScore(View v) {
        EditText nameField = (EditText) findViewById(R.id.name_field);
        String name = nameField.getText().toString();

        EditText firstans = (EditText) findViewById(R.id.one_ans);
        String ans1 = firstans.getText().toString();
        if (ans1.equals("Mercury")||ans1.equals("mercury")) {
            s1 = 1;
        } else {
            s1 = 0;
        }
        EditText secondnas = (EditText) findViewById(R.id.two_ans);
        String ans2 = secondnas.getText().toString();
        if (ans2.equals("Venus")||ans1.equals("venus")) {
            s2 = 1;
        } else {
            s2 = 0;
        }
        EditText thirdans = (EditText) findViewById(R.id.three_ans);
        String ans3 = thirdans.getText().toString();
        if (ans3.equals("Earth")||ans1.equals("earth")) {
            s3 = 1;
        } else {
            s3 = 0;
        }
        EditText fourthans = (EditText) findViewById(R.id.four_ans);
```

Assignment#2: Mobile Application Development (CSC-341)

```
String ans4 = fourthans.getText().toString();
if (ans4.equals("Mars") || ans1.equals("mars")) {
    s4 = 1;
} else {
    s4 = 0;
}
EditText fifthans = (EditText) findViewById(R.id.fifth_ans);
String ans5 = fifthans.getText().toString();
if (ans4.equals("Jupiter") || ans1.equals("jupiter")) {
    s5 = 1;
} else {
    s5 = 0;
}
EditText sixthans = (EditText) findViewById(R.id.six_ans);
String ans6 = fifthans.getText().toString();
if (ans4.equals("Saturn") || ans1.equals("saturn")) {
    s6 = 1;
} else {
    s6 = 0;
}
CheckBox question7_choice4 = (CheckBox) findViewById(R.id.question7_choice4);
boolean answer7_choice4 = question7_choice4.isChecked();
if (answer7_choice4) {
    s7 = 1;
} else {
    s7 = 0;
}
EditText eigthans = (EditText) findViewById(R.id.eigth_ans);
String ans8 = eigthans.getText().toString();
if (ans8.equals("Neptune") || ans1.equals("neptune")) {
    s8 = 1;
} else {
    s8 = 0;
}

RadioButton question9_choice1 = (RadioButton)
findViewById(R.id.question9_choice1);
boolean answer1 = question9_choice1.isChecked();
if (answer1) {
    s9 = 1;
} else {
    s9 = 0;
}
EditText tenthans = (EditText) findViewById(R.id.ten_ans);
String ans10 = tenthans.getText().toString();
if (ans10.equals("BillGates") || ans1.equals("billgates")) {
    s10 = 1;
} else {
    s10 = 0;
}
final_score = s1 + s2 + s3 + s4 + s5 + s6 + s7 + s8 + s9 + s10;

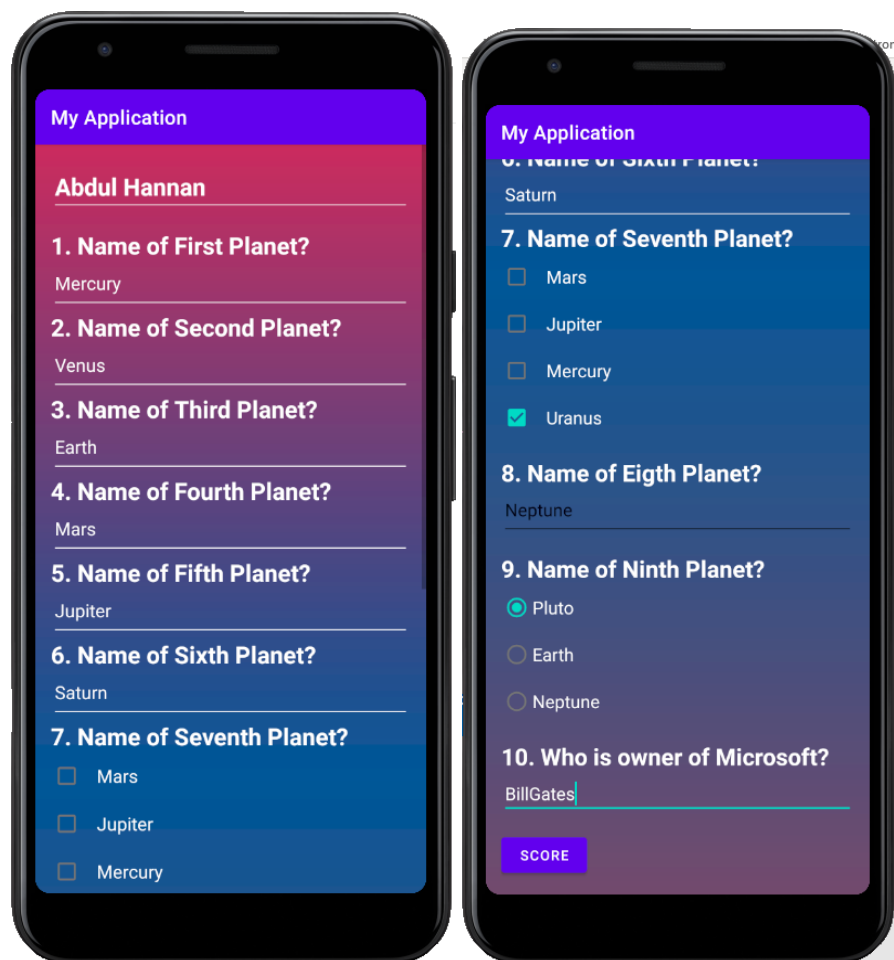
if (final_score >= 5) {
    successresult = name + " Perfect! You scored " + final_score + "out of 10
Well done";
}
```

Assignment#2: Mobile Application Development (CSC-341)

```
Intent intent = new Intent(Quiz.this, Score.class );
intent.putExtra("SuccessResult", successresult);
startActivity( intent );
} else {
    Failresult = name + " Try again. You scored " + final_score + " out of
10";

    Intent intent = new Intent(Quiz.this, Score.class );
    intent.putExtra("FailResult", Failresult);
    startActivity( intent );
}
}
}
```

Output:



3. Your third activity displayed the result of the quiz.

- a. If marks are greater than or equal to 50%, font color of the marks will be green.
- b. If marks are less than 50%, font color of the marks will be red.

Activity_score.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:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/gradient"
    tools:context=".Score">

    <TextView
        android:id="@+id/textView"
        android:layout_width="254dp"
        android:layout_height="102dp"
        android:layout_marginStart="78dp"
        android:layout_marginTop="142dp"
        android:layout_marginEnd="79dp"
        android:layout_marginBottom="487dp"
        android:text=""
        android:textSize="24sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="1.0" />

    <TextView
        android:id="@+id/textView1"
        android:layout_width="254dp"
        android:layout_height="102dp"
        android:layout_marginStart="78dp"
        android:layout_marginTop="20dp"
        android:layout_marginEnd="79dp"
        android:layout_marginBottom="364dp"
        android:text=""
        android:textSize="24sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

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Score.java:

```
package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;
import android.content.Intent;
import android.graphics.Color;
import android.net.Uri;
import android.os.Bundle;
import android.view.Gravity;
import android.view.View;
import android.widget.CheckBox;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.TextView;
import android.widget.Toast;

public class Score extends AppCompatActivity {
    TextView tv;
    TextView tv1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_score);
        tv = (TextView)findViewById(R.id.textView);
        tv1 = (TextView)findViewById(R.id.textView1);
        String s_r=getIntent().getStringExtra("SuccessResult");
        tv.setTextColor(Color.parseColor("#008000"));
        tv.setText(s_r);
        String f_r=getIntent().getStringExtra("FailResult");
        tv1.setTextColor(Color.parseColor("#FF0000"));
        tv1.setText(f_r);
    }
}
```

- After filling the quiz page, there is a button labeled as score to find out the final result.
- After clicking that button, a new screen will appear containing the obtained marks in the quiz.
- If you answered more than 5 questions accurately than the result will appear in green color.
- But if you failed to answer less than 5 questions correctly then the result will appear in red color.

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