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|  | **SUKKUR IBA UNIVERSITY**  MERIT – QUALITY – EXCELLENCE  Lab handout 14 | | | |  |
| Mobile Application Development (CSE-426), Fall 2022, BE-EE(CS)-VIII | | | | | |
| Name: Shakir Ali | | CMS ID#: 031-19-0009 | | Instructor: Dr. Abdul Aziz | |
| Section: A Lab group: NA | | Department: Electrical Engineering | | Marks obtained out of 100% | |
| **NOTE: Must follow submission instructions** | | |  | | |

**Design and Develop an application of your choice using concepts learned in the course**

**Lab Exercise and Submission**

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| Exercise 1 |
| Design and Develop an application of your choice using concepts learned in the course.  (**Quiz App** ) |
| Screenshot of AVD output here: |
| Insert XML code for layout here:  *<?*xml version="1.0" encoding="utf-8"*?>* <RelativeLayout 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="@color/teal\_200"  android:padding="24dp"  tools:context=".MainActivity">   <TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:id="@+id/total\_question"  android:text="Total Questions "  android:layout\_centerHorizontal="true"  android:textSize="20dp"/>    <TextView  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:id="@+id/question"  android:textStyle="bold"  android:text="This will be the question"  android:textColor="@color/white"  android:textSize="24dp"  android:textAlignment="center"  android:layout\_margin="20dp"  android:layout\_above="@id/choices\_layout"/>    <LinearLayout  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:id="@+id/choices\_layout"  android:layout\_centerInParent="true"  android:orientation="vertical">   <Button  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:id="@+id/ans\_A"  android:layout\_margin="5dp"  android:backgroundTint="@color/white"  android:text="Ans A"  android:textColor="@color/black"/>   <Button  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:id="@+id/ans\_B"  android:layout\_margin="5dp"  android:backgroundTint="@color/white"  android:text="Ans B"  android:textColor="@color/black"/>   <Button  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:id="@+id/ans\_C"  android:layout\_margin="5dp"  android:backgroundTint="@color/white"  android:text="Ans C"  android:textColor="@color/black"/>  <Button  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:id="@+id/ans\_D"  android:layout\_margin="5dp"  android:backgroundTint="@color/white"  android:text="Ans D"  android:textColor="@color/black"/>   </LinearLayout>   <Button  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:id="@+id/submit\_btn"  android:text="Submit"  android:layout\_below="@id/choices\_layout"  android:layout\_marginTop="40dp"/>    </RelativeLayout> |
| Insert Activity code here: (MainActivity)  package com.example.myquizapplication;  import androidx.appcompat.app.AppCompatActivity;  import android.app.AlertDialog; import android.graphics.Color; import android.os.Bundle; import android.view.View; import android.widget.Button; import android.widget.TextView;  public class MainActivity extends AppCompatActivity implements View.OnClickListener{   TextView totalQuestionsTextView;  TextView questionTextView;  Button ansA, ansB, ansC, ansD;  Button submitBtn;   int score=0;  int totalQuestion = QuestionAnswer.*question*.length;  int currentQuestionIndex = 0;  String selectedAnswer = "";   @Override  protected void onCreate(Bundle savedInstanceState) {  super.onCreate(savedInstanceState);  setContentView(R.layout.*activity\_main*);   totalQuestionsTextView = findViewById(R.id.*total\_question*);  questionTextView = findViewById(R.id.*question*);  ansA = findViewById(R.id.*ans\_A*);  ansB = findViewById(R.id.*ans\_B*);  ansC = findViewById(R.id.*ans\_C*);  ansD = findViewById(R.id.*ans\_D*);  submitBtn = findViewById(R.id.*submit\_btn*);   ansA.setOnClickListener(this);  ansB.setOnClickListener(this);  ansC.setOnClickListener(this);  ansD.setOnClickListener(this);  submitBtn.setOnClickListener(this);   totalQuestionsTextView.setText("Total questions : "+totalQuestion);   loadNewQuestion();      }   @Override  public void onClick(View view) {   ansA.setBackgroundColor(Color.*WHITE*);  ansB.setBackgroundColor(Color.*WHITE*);  ansC.setBackgroundColor(Color.*WHITE*);  ansD.setBackgroundColor(Color.*WHITE*);   Button clickedButton = (Button) view;  if(clickedButton.getId()==R.id.*submit\_btn*){  if(selectedAnswer.equals(QuestionAnswer.*correctAnswers*[currentQuestionIndex])){  score++;  }  currentQuestionIndex++;  loadNewQuestion();    }else{  *//choices button clicked* selectedAnswer = clickedButton.getText().toString();  clickedButton.setBackgroundColor(Color.*MAGENTA*);   }   }   void loadNewQuestion(){   if(currentQuestionIndex == totalQuestion ){  finishQuiz();  return;  }   questionTextView.setText(QuestionAnswer.*question*[currentQuestionIndex]);  ansA.setText(QuestionAnswer.*choices*[currentQuestionIndex][0]);  ansB.setText(QuestionAnswer.*choices*[currentQuestionIndex][1]);  ansC.setText(QuestionAnswer.*choices*[currentQuestionIndex][2]);  ansD.setText(QuestionAnswer.*choices*[currentQuestionIndex][3]);   }   void finishQuiz(){  String passStatus = "";  if(score > totalQuestion\*0.60){  passStatus = "Passed";  }else{  passStatus = "Failed";  }   new AlertDialog.Builder(this)  .setTitle(passStatus)  .setMessage("Score is "+ score+" out of "+ totalQuestion)  .setPositiveButton("Restart",(dialogInterface, i) -> restartQuiz() )  .setCancelable(false)  .show();    }   void restartQuiz(){  score = 0;  currentQuestionIndex =0;  loadNewQuestion();  }  } |
| Any other relevant data:  Insert Activity code here: (QuestionAnswer.java)  package com.example.myquizapplication;  public class QuestionAnswer {   public static String *question*[] ={  "Which company owns the android?",  "Which one is not the programming language?",  "Where you are watching this video?",  "Which company owns the Apple?"  };   public static String *choices*[][] = {  {"Google","Apple","Nokia","Samsung"},  {"Java","Kotlin","Notepad","Python"},  {"Facebook","Whatsapp","Instagram","Youtube"},  {"Google","Apple","Nokia","Samsung"}  };   public static String *correctAnswers*[] = {  "Google",  "Notepad",  "Youtube",  "Apple"  };  } |