**package** com.pru\_ybs.musicquiz;  
  
**import** android.annotation.SuppressLint;  
**import** android.content.res.ColorStateList;  
**import** android.graphics.Color;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.RadioButton;  
**import** android.widget.RadioGroup;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** java.util.Collections;  
**import** java.util.List;  
  
**public class** QuizActivity **extends** AppCompatActivity {  
 **private** TextView **textViewQuestion**;  
 **private** TextView **textViewScore**;  
 **private** TextView **textViewQuestionCount**;  
 **private** TextView **textViewCountDown**;  
 **private** RadioGroup **rbGroup**;  
 **private** RadioButton **rb1**;  
 **private** RadioButton **rb2**;  
 **private** RadioButton **rb3**;  
 **private** Button **buttonConfirmNext**;  
  
 **private** ColorStateList **TextColorDefaultRb**;  
  
 **private** List<Question> **questionList**;  
 **private int questionCounter**;  
 **private int questionCountTotal**;  
 **private** Question **currentQuestion**;  
  
 **private int score**;  
 **private boolean answered** ;  
  
 **public** QuizActivity(RadioButton rb2, RadioButton rb3) {  
 **this**.**rb2** = rb2;  
 **this**.**rb3** = rb3;  
 }  
  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_quiz***);  
 **textViewQuestion** = findViewById(R.id.***text\_view\_question***);  
 **textViewScore** = findViewById(R.id.***text\_view\_score***);  
 **textViewQuestionCount** = findViewById(R.id.***text\_view\_question\_count***);  
 **textViewCountDown** = findViewById(R.id.***text\_view\_countdown***);  
 **rbGroup** = findViewById(R.id.***radio\_group***);  
 **rb1** = findViewById(R.id.***radio\_button1***);  
 **rb1** = findViewById(R.id.***radio\_button2***);  
 **rb1** = findViewById(R.id.***radio\_button3***);  
 **buttonConfirmNext** = findViewById(R.id.***button\_confirm\_next***);  
  
 **TextColorDefaultRb** =**rb1**.getTextColors();  
  
  
 QuizHelper dbHelper = **new** QuizHelper(**this**);  
 **questionList** = dbHelper.getAllQuestions();  
 **questionCountTotal** =**questionList**.size();  
 Collections.*shuffle*(**questionList**);  
  
 showNextQuestion();  
  
 **buttonConfirmNext**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 **if**(!**answered**){  
 **if** (**rb1**.isChecked() || **rb2**.isChecked() ||**rb3**.isChecked() ){  
 checkAnswer();  
 }**else**{  
 Toast.*makeText*(QuizActivity.**this**, **"Please select an answer"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 }**else**{  
 showNextQuestion();  
 }  
 }  
 });  
  
  
 }  
 @SuppressLint(**"SetTextI18n"**)  
 **private void** showNextQuestion() {  
 **rb1**.setTextColor(**TextColorDefaultRb**);  
 **rb2**.setTextColor(**TextColorDefaultRb**);  
 **rb3**.setTextColor(**TextColorDefaultRb**);  
 **rbGroup**.clearCheck();  
 **if** (**questionCounter** < **questionCountTotal**) {  
 **currentQuestion** = **questionList**.get(**questionCounter**);  
  
 **textViewQuestion**.setText(**currentQuestion**.getQuestion());  
 **rb1**.setText(**currentQuestion**.getOption1());  
 **rb2**.setText(**currentQuestion**.getOption2());  
 **rb3**.setText(**currentQuestion**.getOption3());  
  
 **questionCounter**++;  
 **textViewQuestionCount**.setText(**"Question: "** + **questionCounter** + **"/"** + **questionCountTotal**);  
  
 **answered** = **false**;  
 **buttonConfirmNext**.setText(**"Confirm"**);  
  
  
 } **else** {  
 finishQuiz();  
  
 }  
 }  
 @SuppressLint(**"SetTextI18n"**)  
 **private void** checkAnswer(){  
 **answered**=**true**;  
  
 RadioButton rbSelected =findViewById(**rbGroup**.getCheckedRadioButtonId());  
 **int** answerNr = **rbGroup**.indexOfChild(rbSelected) + 1;  
  
 **if** (answerNr ==**currentQuestion**.getAnswerNr()){  
 **score**++;  
 **textViewScore**.setText(**"Score: "**+**score**);  
 }  
 showSolution();  
 }  
 @SuppressLint(**"SetTextI18n"**)  
 **private void** showSolution(){  
 **rb1**.setTextColor(Color.***RED***);  
 **rb2**.setTextColor(Color.***RED***);  
 **rb3**.setTextColor(Color.***RED***);  
  
 **switch** (**currentQuestion**.getAnswerNr()){  
 **case** 1:  
 **rb1**.setTextColor(Color.***GREEN***);  
 **textViewQuestion**.setText(**"Answer 1 is correct"**);  
 **break**;  
 **case** 2:  
 **rb1**.setTextColor(Color.***GREEN***);  
 **textViewQuestion**.setText(**"Answer 2 is correct"**);  
 **break**;  
 **case** 3:  
 **rb1**.setTextColor(Color.***GREEN***);  
 **textViewQuestion**.setText(**"Answer 3 is correct"**);  
 **break**;  
 }  
 **if** (**questionCounter** < **questionCountTotal**){  
 **buttonConfirmNext**.setText(**"Next"**);  
 }**else**{  
 **buttonConfirmNext**.setText(**"Finish"**);  
 }  
 }  
 **private void** finishQuiz(){  
 finish();  
 }  
  
 **public void** setTextViewCountDown(TextView textViewCountDown) {  
 **this**.**textViewCountDown** = textViewCountDown;  
 }  
  
 **public** TextView getTextViewCountDown() {  
 **return textViewCountDown**;  
 }  
}