import javax.swing.\*;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class QuizApp extends JFrame {

private int score;

private int currentQuestion;

private JLabel questionLabel;

private JRadioButton[] options;

private JButton nextButton;

private String[][] questions = {

{"What is the capital of France?", "Paris", "Madrid", "Rome", "Berlin"},

{"Which planet is known as the Red Planet?", "Mars", "Venus", "Jupiter", "Saturn"}

};

private int[] correctAnswers = {0, 0};

public QuizApp() {

// Initialize frame

setTitle("Quiz App");

setSize(400, 300);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

// Initialize components

questionLabel = new JLabel();

options = new JRadioButton[4];

for (int i = 0; i < 4; i++) {

options[i] = new JRadioButton();

}

nextButton = new JButton("Next");

nextButton.setEnabled(false);

// Set layout

setLayout(new GridLayout(6, 1));

// Add components to frame

add(questionLabel);

for (JRadioButton option : options) {

add(option);

}

add(nextButton);

// Add action listeners

for (int i = 0; i < options.length; i++) {

final int index = i;

options[i].addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) {

nextButton.setEnabled(true);

evaluateAnswer(index);

}

});

}

nextButton.addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) {

loadNextQuestion();

}

});

// Initialize quiz

score = 0;

currentQuestion = -1;

loadNextQuestion();

}

private void loadNextQuestion() {

currentQuestion++;

if (currentQuestion < questions.length) {

questionLabel.setText(questions[currentQuestion][0]);

for (int i = 0; i < options.length; i++) {

options[i].setText(questions[currentQuestion][i + 1]);

options[i].setSelected(false);

}

nextButton.setEnabled(false);

} else {

showResults();

}

}

private void evaluateAnswer(int selectedOption) {

if (selectedOption == correctAnswers[currentQuestion]) {

score++;

}

}

private void showResults() {

JOptionPane.showMessageDialog(this, "Quiz completed!\nYour score: " + score + " out of " + questions.length, "Results", JOptionPane.INFORMATION\_MESSAGE);

System.exit(0);

}

public static void main(String[] args) {

SwingUtilities.invokeLater(new Runnable() {

@Override

public void run() {

new QuizApp().setVisible(true);

}

});

}

}