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CSD420 Advanced Java Programming

Assignment 1.2

Code:

// Joel Atkinson October 24, 2025 CSD420 Advanced Java Programming Assignment 1.2  
/\* The purpose of this assignment is to write a JavaFX program that randomly displays 4 playing cards with a refresh  
button underneath the display and using Lambda Expressions \*/  
  
import javafx.application.Application;  
import javafx.scene.Scene;  
import javafx.scene.control.Button;  
import javafx.scene.image.Image;  
import javafx.scene.image.ImageView;  
import javafx.scene.layout.Pane;  
import javafx.stage.Stage;  
  
import java.util.ArrayList;  
  
public class CardDisplay extends Application {  
 private Pane pane = new Pane();  
 private ArrayList<Integer> usedCards = new ArrayList<>();  
  
 @Override  
 public void start(Stage primaryStage) {  
 displayRandomCards();  
  
 Button refreshButton = new Button("Refresh");  
 refreshButton.setLayoutX(150);  
 refreshButton.setLayoutY(250);  
 refreshButton.setOnAction(event -> {  
 pane.getChildren().clear();  
 usedCards.clear();  
 displayRandomCards();  
 pane.getChildren().add(refreshButton);  
 });  
  
 pane.getChildren().add(refreshButton);  
  
 Scene scene = new Scene(pane, 500, 350);  
 primaryStage.setTitle("Random Card Display");  
 primaryStage.setScene(scene);  
 primaryStage.show();  
 }  
  
 private void displayRandomCards() {  
 for (int i = 0; i < 4; i++) {  
 int cardNumber;  
 do {  
 cardNumber = (int) (Math.*random*() \* 52) + 1;  
 } while (usedCards.contains(cardNumber));  
 usedCards.add(cardNumber);  
  
 Image cardImage = new Image("AssignmentCards/" + cardNumber + ".png");  
 ImageView imageView = new ImageView(cardImage);  
 imageView.setX(50 + i \* 110);  
 imageView.setY(50);  
 imageView.setFitWidth(100);  
 imageView.setPreserveRatio(true);  
 pane.getChildren().add(imageView);  
 }  
 }  
  
 public static void main(String[] args) {  
 *launch*(args);  
 }

Screenshots of Output:

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer screen

AI-generated content may be incorrect.