Intro Obj Oriented Prog-Java Assignment 3.

Group 19 Members

Sam Otitoomah Cherish

Hediyeh Sedaghat

Vasu Rajayavardhan

MAIN JAVA FILE

CODE:

```java
package hw3;
import javafx.application.Application;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.control.Label;
import javafx.scene.control.TextField;
import javafx.scene.layout.VBox;
import javafx.stage.Stage;
public class SimpleGame extends Application {

    private int score;
    private static int highScore;

    public SimpleGame() {
        score = 0;
    }

    public static void main(String[] args) {
        launch(args);
    }
```

```java
    @Override
    public void start(Stage primaryStage) {
        primaryStage.setTitle("Simple Game");

        Label guessLabel = new Label("Enter your guess (1-10): ");
        TextField guessTextField = new TextField();
        Button guessButton = new Button("Guess");
        Label resultLabel = new Label();
        Label playAgainLabel = new Label("Do you want to play again? (yes/no): ");
        TextField playAgainTextField = new TextField();
        Button playAgainButton = new Button("Play Again");
        Label finalScoreLabel = new Label();

        guessButton.setOnAction(e-> {
            int guess = Integer.parseInt(guessTextField.getText());
            int randomNumber = (int) (Math.random() * 10) + 1;

            if (guess == randomNumber) {
                resultLabel.setText("Congratulations! You guessed it right!");
                score++;
            } else {
                resultLabel.setText("Sorry, wrong guess. The number was: " +
randomNumber);
            }
        });

        playAgainButton.setOnAction(e-> {
            String playAgainInput = playAgainTextField.getText();
            if (playAgainInput.equalsIgnoreCase("yes")) {
                guessTextField.clear();
                resultLabel.setText("");
                playAgainTextField.clear();
                playGame();
            } else {
```

```java
            primaryStage.close();
            }
        });

        VBox layout = new VBox(10);
        layout.getChildren().addAll(guessLabel, guessTextField, guessButton, resultLabel,
                playAgainLabel, playAgainTextField, playAgainButton, finalScoreLabel);

        Scene scene = new Scene(layout, 300, 250);
        primaryStage.setScene(scene);
        primaryStage.show();

        playGame();
    }

    public void playGame() {
        score = 0;
    }
}
```
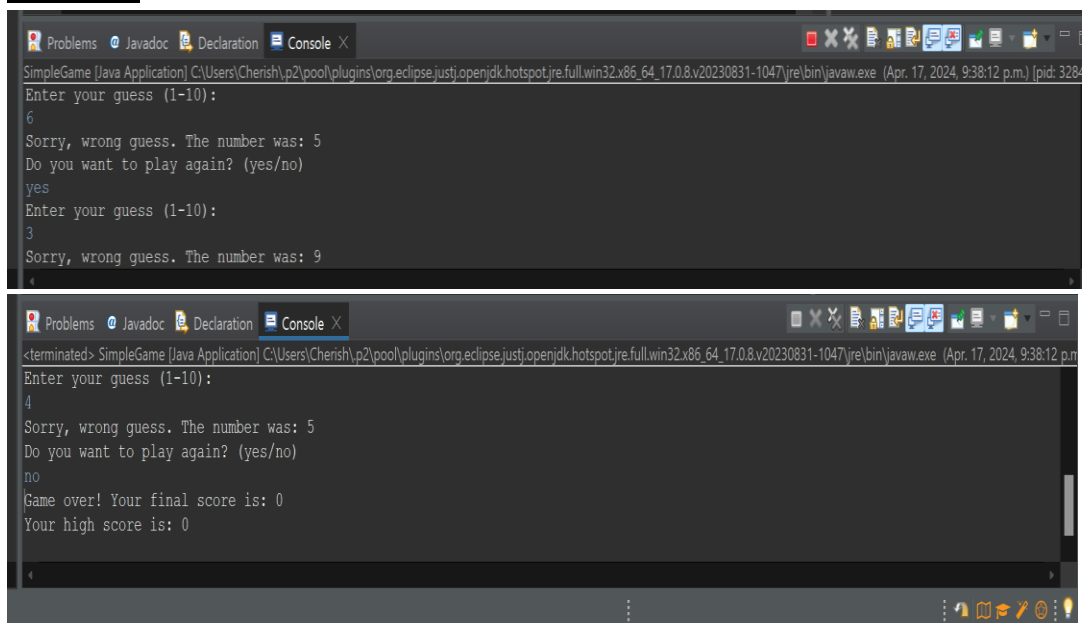
RESULT:


```
Problems  @ Javadoc  Declaration  Console X
SimpleGame [Java Application] C:\Users\Cherish\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.8.v20230831-1047\jre\bin\javaw.exe  (Apr. 17, 2024, 9:38:12 p.m.) [pid: 3284
Enter your guess (1-10):
6
Sorry, wrong guess. The number was: 5
Do you want to play again? (yes/no)
yes
Enter your guess (1-10):
3
Sorry, wrong guess. The number was: 9
```



```
Problems  @ Javadoc  Declaration  Console X
<terminated> SimpleGame [Java Application] C:\Users\Cherish\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.8.v20230831-1047\jre\bin\javaw.exe  (Apr. 17, 2024, 9:38:12 p.m
Enter your guess (1-10):
4
Sorry, wrong guess. The number was: 5
Do you want to play again? (yes/no)
no
Game over! Your final score is: 0
Your high score is: 0
```