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/*
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 * Test Score program
 */

//import statements
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.text.DecimalFormat;

public class Main extends JFrame implements ActionListener{

    static float avg; //track average score

    //screen components
    JTextArea outputArea = new JTextArea("", 10, 30);
    JButton btnCalculate = new JButton("Calculate");
    JLabel txtEarned = new JLabel("Points Earned");
    JTextField pointsEarnedField = new JTextField(10);
    JLabel txtTotal = new JLabel("Total Points Possible");
    JTextField pointsTotalField = new JTextField(10);
    DecimalFormat f = new DecimalFormat("##.00");

    public static void main(String[] args){
        Main frame = new Main();
        frame.setSize(500,500);
        frame.setVisible(true);
    }

    public Main(){
        //application bar name
        super("Test Score");
        setDefaultCloseOperation(EXIT_ON_CLOSE);

        //layout manager
        setLayout(new FlowLayout());

        //add screen components
        add(txtEarned);
        add(pointsEarnedField);
        add(txtTotal);
        add(pointsTotalField);
        add(outputArea);
        add(btnCalculate);

        //add listener for button
        btnCalculate.addActionListener(this);
    }

    public void actionPerformed(ActionEvent event){
        Object objSource = event.getSource();
        int pointsEarned, pointsTotal; //declare variables for points earned and total points
        possible on an assignment
    }
}
```

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if (objSource == btnCalculate){
    outputArea.setText(""); //refresh contents of text area on every btn click

    //grab strings from textboxes and convert into integers for calculation
    pointsEarned = Integer.parseInt(pointsEarnedField.getText());
    pointsTotal = Integer.parseInt(pointsTotalField.getText());

    //create calculate class object and feed in inputs
    calculate calculate = new calculate(pointsEarned, pointsTotal);

    //grab results from calculation class and assign to variables
    char letterGrade = calculate.getLetterGrade();
    float highestScore = calculate.getTopScore();
    float avg = calculate.getAvg();
    String outputString = "";

    //ouput
    outputString = "Score: " + pointsEarned + "/" + pointsTotal + "\n" +
        "Letter Grade: " + letterGrade + "\n" +
        "Highest Score (%): " + f.format(highestScore * 100) + "\n" +
        "Average Score (%): " + f.format(avg * 100);
    outputArea.append(outputString);
}
}
```