CSCI 3381 OO with Java Project 2

Graphical User Interface (GUI) of a Car quality predictor

Overview:

The program will create a Graphical Interface as a continuation of Project #1. Your target user is a car dealership that assesses what they should pay for a trade-in given the information on safety, passenger count, etc. Notice your program will display a dollar amount. You are welcome to create your own methodology for assigning worth given "unacc", "acc", "good" or "vgood". One approach might be have the user input the original purchase price of the car. Use the prediction to find the trade-in value as a percent of purchase price. Example if originally \$40,000 and "vgood", the trade-in value might be 75% of 40,000 or \$30,000. If "unacc", the trade-in value might only be 20% of 40,000 or \$8,000.

This project encourages your creative exploration of various GUI components. Although there are no set design criteria, here is a list of possible components and requirements:

- Picture / Graphics
- Label
- Text field
- Radio button
- Check box
- Drop Down list
- Slider
- Scroll bars
- Buttons
- Attractive layout of components and ease of use
- At least 8 different components
- At least one dynamic creation of a Drop Down List that displays the three cars most similar to the input car. If an exact match is found, then display only one car. This will require an additional method in the Predictor class.

A solution for Project 1 is provided for you if you need it. You are welcome to use this or your own.

Project Objective: in completing this project, you will

- Enhance your understanding of Object Oriented design.
- Enhance your understanding of Graphical Interfaces in Java
- Be Creative

Due Dates and Honor:

This project will be due by the end of day October 29th. This is an independent programming project, and it is very important that you understand and abide by the policy concerning programming projects. Remember, your personal honor and integrity is far more important than your grade on the project.

Project #2 Rubric – 100 points

Scoring	High (100% of points)	Medium (75%)	Low (50%)	Missing (0%)
GUI Components - At least 8 different components & one dynamically created dropdown list (50 points)	Component contains no compilation errors and uses all components. Attractive and easy to use layout.	Component contains no compilation errors and uses most components. Less attractive or not easy to use layout.	Component contains compilation errors or does not implement many components. Difficult to use.	Not submitted
Using the Predictor - Allows user to correctly input car data, process prediction and display reasonable trade-in value (20 points)	Component contains no compilation errors and implements a reasonable use of the Predictor from Project #1	Component contains no compilation errors but does not fully implement the use of the Predictor	Component contains compilation errors or does not implement use of Predictor	Not submitted
Documentation (10 points)	Includes: Name, course, method descriptions, variable descriptions and explanation of complex sections of code	Missing some documentation	Missing most documentation	None
Submission (20 points)	10 poin	ts – importable jar file	10 points – runnable ja	ar file

What to Submit via Blackboard:

- Export your project as a jar file. You should test this by creating a blank workspace and importing your exported jar file. If it runs and you can see the java files, then you create the jar file correctly.
- Export your project as a runnable jar file Click File-Export-Java-Runnable JAR file. Set options like below:

