**COP 2337C**

**Final Project**

**Car Salesperson**

**Due Date: Dec 6, 2018**

**150 points**

For your final project, you will design a GUI program that can be used by a car dealer. You are free to use any controls/code, even if it was not taught in class. Use whatever you want to make a great project.

Include the following in your window:

A randomly generated account number.

Prompts for the following customer info:

* Name
* Address
* Phone number

You will calculate the final cost of the car based on the following criteria:

You have four (4) models for sale:

|  |  |
| --- | --- |
| Model | Base Price |
| S40 | $27700 |
| S60 | $32500 |
| S70 | $36000 |
| S80 | $44000 |

The following two option packages are available:

* Package “A” ($2200): Available on all models. • Package “B” ($3250): Available only on S70 and S80.

Metallic paint is also an option for $650.00.

Sales tax is 6%, title and tags is $325.00.

Trade-ins should be allowed if desired by the customer. The trade-in price should be deducted from the sales price.

The customer should be able to choose financing (at 7%).

If the customer pays cash give him/her a discount of $750.00.

Display the final cost of the vehicle as well as any information you would like to see if you were the customer.

Include exception handling when possible.

Include an Exit Button on the window.

Make your program ***User Friendly*** and ***Be Creative!!***

**COP 2800C Final Project Grading Rubric:**

Sketch of Window Design (10) \_\_\_\_\_

Use of varied controls (30)\_\_\_\_\_

* Text Fields • Labels
* Check boxes
* Radio buttons
* ListBoxes/ComboBoxes
* Buttons
* Dialog boxes
* Images
* Color Schemes • Output

Calculations/

Accuracy (20) \_\_\_\_\_

* Base price
* Package Options
* Paint cost
* Tax
* Tags and title
* Trade-ins
* Financing options
* Account number generation • Exception Handling

Code Design (20) \_\_\_\_\_

* Code Organization
* Use of functions • Use of classes

Use of Listeners (10) \_\_\_\_\_

* ActionListeners • ItemListeners

Overall User Friendliness/

Creativity (10) \_\_\_\_\_ Presentation Criteria (50 points)

5 - 6 minutes total

Live Demo (30)

* Full test of all fields with valid data (10)
* Full test of all fields with invalid data (10)
* Describe your layouts (5) • Describe any extra features that you have added (5)

Presentation of code (20)

* Use of methods
* Use of classes
* Use of data structures (arrays, lists, etc) • What else do you want to tell us?