Programming Logic - Beginning

152-101

Unit 5 - Rent-A-Reck Program

20	
20	points

The following exercises give you additional practice working with Radio Button and Check Box controls and decision control structures. You can use the supplied skeleton project (RentAReck) or create your own. No welcome screen is required for this assignment.

Rent-A-Reck

A new rental company in town would like you to write a program to calculate the cost of renting a vehicle. This company charges on a daily basis. The cost is based on the type of car rented and any additional options the customer chooses to add. In addition to the information below, the owner would like you to capture the date the rental agreement starts.

The company rents 5 types of cars. The following identifies the car choices and the daily cost for each: Economy \$33.50, Luxury \$64.20, Van \$58.60, Truck \$48.75, SUV \$55.20.

For each car, you can select additional features. These features are charged at a one-time, flat rate (not daily rate). The additional features are: DVD player: \$7.50, Air conditioning: \$10.00, Car seat: \$15.00, Car insurance \$75.00.

The company is running a promotion: if you rent a luxury car for more than 3 days, you receive 15% off your total bill.

Develop flowcharts and pseudocode for all procedures.

When the calculate button is clicked, determine and display the vehicle rental for the total number of days (no add-ons), the total for the add-ons, the discount amount and the final rental total. Format outputs appropriately in the controls on the form.

In addition to showing the results in labels, display a message in a message box which includes: the type of car, the number of days rented and the total cost. You do not need to include the add-on selections. You do not need to include this in your design—it is for demonstration purposes only.

Extra Credit (1 point): Include the selected additional features in the message.

When the application loads, establish defaults for each group of radio buttons. Follow proper naming conventions for all controls. Establish appropriate focus on fields.

Rent-A-Reck Challenge Points - 1 point

Do research on how to determine the number of differing days based on 2 dates. Add another date picker. Use one for the rental date and one for the return date. Calculate the number of rental days based on these two controls instead of asking the user for the number of days.

Follow the class <u>programming standards</u>, incorporating all standards except those designated for Unit 6 or Programming Logic - Intermediate.