CS 3140 – C++ Programming Language

Lab 8

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Deadline: April 18th, 2023

By using C++, create a Car\_Dealership class where you will generate a car stock every new day, show the stock, and a user can check if the specific car combo is in stock.

Requirements:

1) Create three files:

a) car\_dealership.h - where you will create your Car\_Dealership class

b) test.cpp - where you will test all your methods/functions

d) fancy.cpp - where you will create an interactive environment, where a user can choose between these actions:

1) See today's stock of all cars.

2) See a specific stock of a certain car.

3) Go to a new day.

4) Leave the dealership.

2) Create these private arrays:

a) string car\_bodytype[5] = {"Sedan", "Pickup", "MV", "SUV", "Conver"};

b) string car\_type[3] = {"Ford", "Chevy", "Ferrari"};

c) string availability\_choice[2] = {"Yes","No"};

d) string availability[3][5];

3) Create these public functions:

a) void car\_availability() - with the use of the random library, choose Yes or No from the availability\_choice array randomly and assign them to the availability array randomly each new day to generate new stock.

b) void current\_stock() - output the current stock of the dealership in a nice table in the terminal

c) void new\_day() - whenever this function is called, you will generate new stock and output the new stock to the terminal

d) bool user\_choice(int bodytype\_choice, int type\_choice) - by taking in the user's input, the user can check if the selected combo of the car bodytype and type is in stock and will return either true or false.

4) Use these libraries: <iostream>, <string>, <random>, <time.h>