

LAB211 Assignment

Type:
Code:
LOC:
Slot(s):

Short Assignment
J1.S.P0066
63
1

Title

Car showroom.

Background

N/A

Program Specifications

There are three types of car in the showroom:

AUDI:

- Available colors: *WHITE, YELLOW, ORANGE*
- Price: 5500, 3000, 4500 \$
- Sold on: *FRIDAY SUNDAY MONDAY*

MERCEDES:

- Available colors: *GREEN, BLUE, PURPLE*
- Price: 5000, 6000, 8500 \$
- Sold on: *TUESDAY, SATURDAY, WEDNESDAY*

BMW:

- Available colors: *PINK, RED, BROWN*
- Price: 2500, 3000, 3500 \$
- Sold on: *MONDAY, SUNDAY, THURSDAY*

Write a program to help salesmen to check that the customer's needs match the current cars showroom is selling.

- Given that customers can choose unpainted car to get \$100 discount.
- Customers can choose other options which will be added to the final price of the car.

Function details:

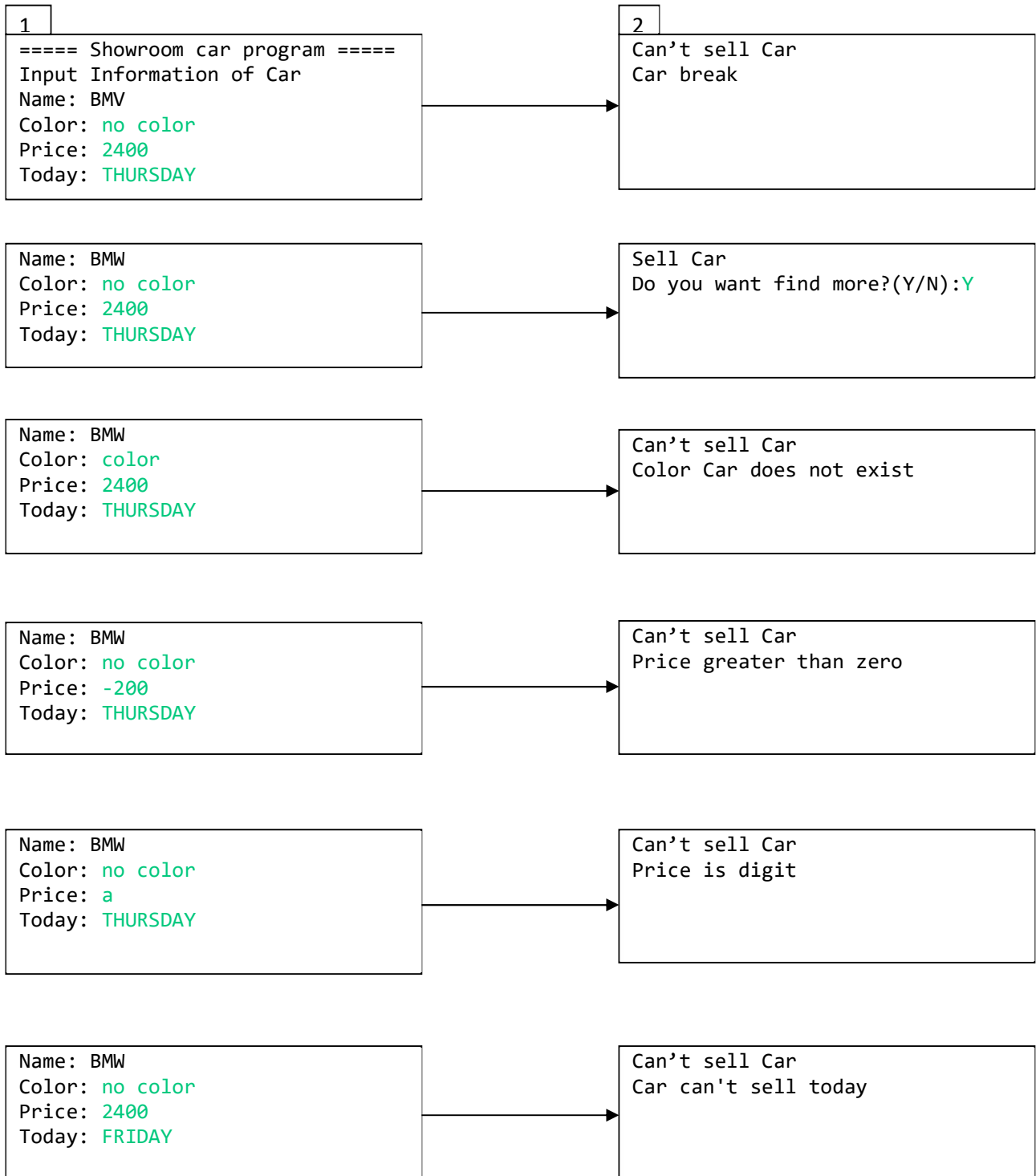
Function 1: Display Gui And Input Data.

- User runs the program. The program prompts user to input data.
- Auto next **Function 2**.

Function 2: Perform function

- Program displays information of customer's request, and check if they match the cars in showroom?
- Display message and exit program.

Expectation of User interface:



Guidelines

Student must implement methods

- checkCar
- getPrices
- getColors
- getDaySells

in startup code.

Hint

- Create ExceptionCar class which inherits Exception class; pass the message content to the constructor.
- Create Car Enum:
 - Create methods getPrices, getColors, getDaySells which return the List of sale information.
 - Create method Car getCar(String car)
- Create Enum Day:
 - List all days in a week
 - Create method Day getDay(String day), if day is not a Day Enum then return null.
- Create Enum Color:
 - List all colors of car in showroom, and “no color” option.
 - Create method Color getColor(String color), if color is not a Color Enum then return null.
- Create method checkCar whose input is the information of customer’s request. It validates the information and return the Car Enum if matched, if not it throws the ExceptionCar.
- In Main, use scanner to enter the car information
 - If name of car is not in Car Enum, enter null value using getCar method.
 - If color of car is not in Color Enum, enter null value using getColor method.
 - If the day is not in Day Enum, enter null value using getDay method.

Function 1: Validate car sale information

- Method name: public Car checkCar(Car car, String color, Day day, String price) throws ExceptionCar
 - Input:
 - car: Enum Car
 - color: Enum Color
 - day: Enum Day
 - price: Prices of car
 - Return:
 - Enum Car
 - ExceptionCar