

# 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:

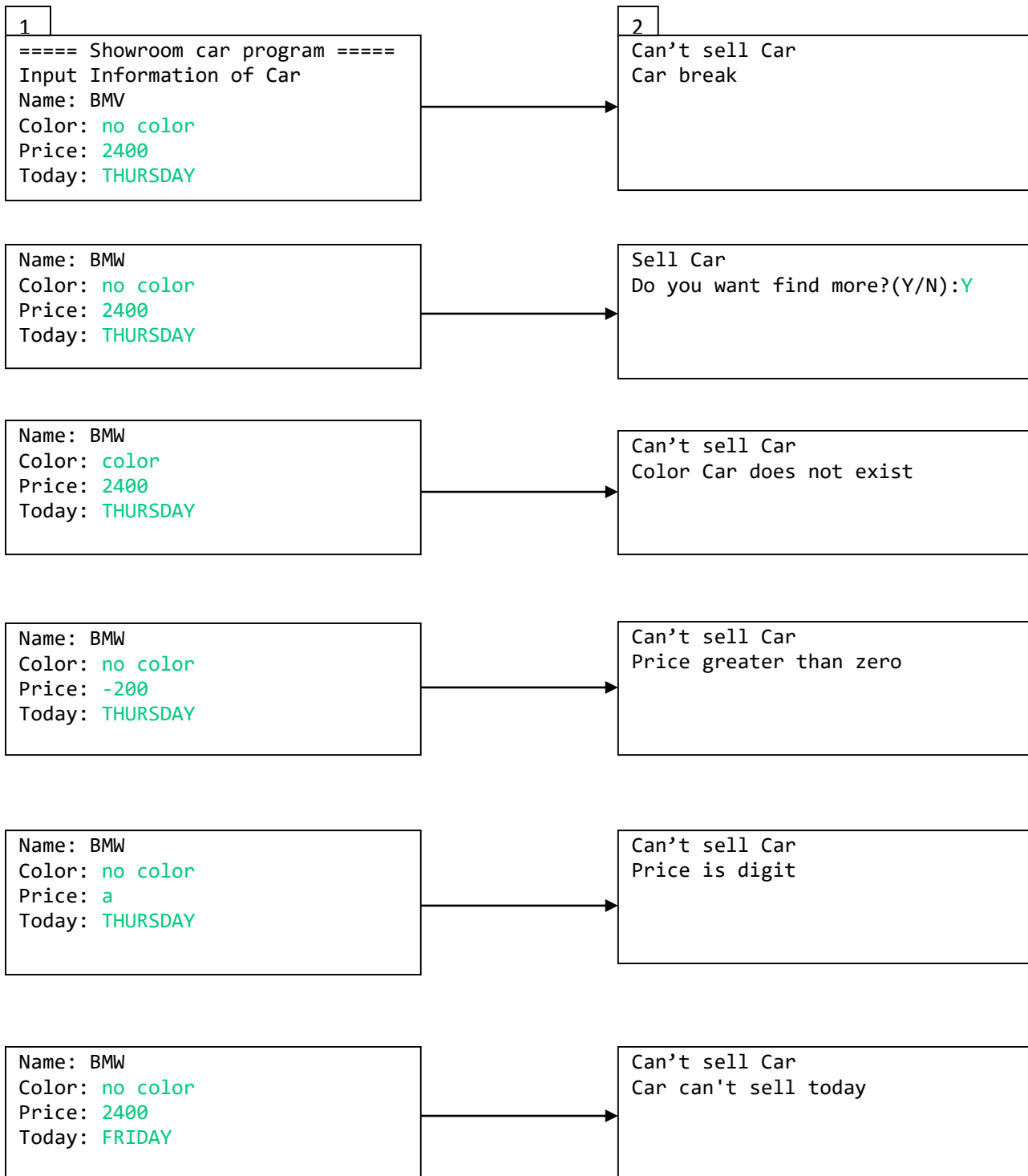
**Function 1:** Display Gui And Input Data.

- 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:
  - o Create methods getPrices, getColors, getDaySells which return the List of sale information.
  - o Create method Car getCar(String car)
- Create Enum Day:
  - o List all days in a week
  - o Create method Day getDay(String day), if day is not a Day Enum then return null.
- Create Enum Color:
  - o List all colors of car in showroom, and “no color” option.
  - o 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
  - o If name of car is not in Car Enum, enter null value using getCar method.
  - o If color of car is not in Color Enum, enter null value using getColor method.
  - o If the day is not in Day Enum, enter null value using getDay method.

### Function 1: Validate car sale information

- o 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