

Design an OOP program that can be used to process car and service data.

Your program should create and use a **Service** class to store and process the service's data, such as the service description, number of months between two services, date of the last service and the date of the next service. The program should get all necessary data from the user except the date of the next service which will be computed by the program. The **Service** class should contain a function that will compute the date of the next service using the date of the last service and the number of months between two services.

Your program should also create and use a **Car** class to store and process the car's data, such as the car model, license plate number and year when the car was made.

In addition to the **Service** and **Car** class your program should create an **AutoBody** class that inherits **Service** and **Car**. This class should contain a static member function, which displays the current system date and time, in addition to all other necessary data members and functions.

The program should enable the user to:

- Get, process, and display data for any number of cars and their services.
- Display the current system date and time.
- Search for a specific date and display all cars that have to be serviced on this date including the required service info.

You should design an appropriate menu(s) with all necessary menu options to perform the required tasks.

### Program requirements:

It is required to use the following C++ language constructs/tools:

1. Inheritance
2. Operator functions (at least two different operators)
3. Static member functions (at least one)
4. Constructor functions

**Project documentation** should contain the following:

- Signed Academic Honesty Statement that is attached to this project
- Pseudocode
- Printout of the source code
- Samples of the program output (e.g., screen captures), which includes the data that you used to test your program.

### Hand in the following:

- A source code file that is submitted electronically on the BlackBoard
- A printout of the project documentation

Please note that under no circumstances will an extension be granted for this project.