Introduction

Our mechanics garage system will be composed of six classes. The classes are as follows:

- Main
- Employees
- Services
- Cars
- Clients
- Appointments

Main

The main class will be the entry point for the program, with the main method calling to a menu method. This menu method will present a menu, allowing the user to navigate the program by typing the number of an action to be performed.

The main class will also handle getting the inputs from a user to create new objects, delete these objects, update information about these objects and read the information about the objects. Saving and retrieving data from files will also be handled in the main class.

The main class will also handle creating a report, which shows the amount of money made from the services class.

Employees

The employee class will have a constructor which takes a string for the name and a double for the salary and save these values to instance variables, creating an object of the class employee. This data will be written to a data file for later retrieval from the main class.

Cars

The cars class will have a constructor which takes a parameter for the make of the car which is saved into an instance variable. It will also have a subclass which will take parameters for models of the car. This data will then be saved into a data file for later retrieval, updating or deletion.

Clients

The client class will have a constructor which takes parameters for the clients name and what car they have. This data will then be saved for later retrieval, updating or deletion.

Appointments

The appointment class will have a constructor which takes parameters for:

- The name of the client
- The name of the employee the client is meeting with
- The date and time of the appointment

This data will then be saved in a data file for later retrieval, updating or deletion in the main class.

Services

The services class will have a constructor which takes multiple values. The values will be:

- The employee that will be performing the service
- The client that is receiving the service
- The make and model of vehicle being serviced
- What needs to be done to the vehicle
- The cost of the service

All these values will be saved, creating a new object of the class service. This data will then be written to a data file to be retrieved, updated, or deleted later.