

CE00527-5 Further Object Oriented Programming Tutorial 8

Part 1 - Reading and writing Vehicle data from/to a text file - Basic Exercise

In tutorial 1 you developed a Vehicle/Showroom application to manage a list of Vehicles. The application could step through the list of Vehicles, add a Vehicle, and delete a Vehicle.

1. Extend your application from week 1 so that you can save the information pertaining to the current Vehicle to a text file.
2. Extend your application from week 1 so that you can add new Vehicles from a text file. The file can contain data for any number of Vehicles (including zero).

Test this new functionality, either using JUnit tests, or by writing a simple main method with text output. You do not need to create a GUI interface.

Part 2 - Serialization - Advanced Exercise

3. Extend your Vehicle/Showroom application you developed in week 1 so that it uses Serialization to read and write the entire list of Vehicle objects to a file.

Part 3 - String manipulation - Basic Exercise

4. Write a simple program that uses String and StringBuilder methods to change the String "obdurate" to the String "obliteration"
5. Now change "reminisce" to "romanesque"
6. Combine some StringBuilder and String methods to convert a string of your choice to another String. Be sure to test them, either in a method or by using JUnit, to make sure they behave as you expect. Then give the sequence of method calls to another student and see if they can work out the output.

You should put in your portfolio

- **the new methods that you added to your Vehicle/Showroom system to save and load Vehicle information in Part 1**
- **a description of the changes you have made, including a listing of any new code, to the Vehicle/Showroom system to read and write the list of Vehicles to a file in Part 2**
- **evidence of testing this new functionality (Parts 1 and 2)**
- **code listing and output for all the exercises in Part 3**