1.0 Assignment Requirements

The assignment is to design and implement a GUI-based APU Automotive Service Centre (AASC). There are 3 types of end users interacting to the AASC:

- Manager
- Technicians
- Customers

All the end users are required to login for authentication and authorisation purposes.

a) The following functionalities should be provided for the manager's interface:

- To register new end users.
- To delete, search, and update all users' information.
- To set the price of normal service and major service.
- To assist customers for booking service appointments.
  - Normal service – 1 hour
  - Major service – 3 hours
- To assign service appointments to specific technicians.
- To generate receipts and collect payments from the customers.

b) The following functionalities should be provided for the technicians' interface:

- To edit individual profile.
- To check assigned appointments.
- To access comments from customers.
- To provide feedbacks after the appointments.

c) The following functionalities should be provided for the customers' interface:

- To edit individual profile.
- To access service and payment histories.
- To access feedbacks.
- To provide comments for the technicians.

2.0 General Requirements

- The program submitted should compile and be executed without errors
- Validation should be done for each entry from the users in order to avoid logical errors.
- The implementation code must highlight the use of object oriented programming concepts as required by the solution.
- Students should use text files for storing and retrieving data required for the system.
- Not allowed to use any database tools like access / oracle etc.

3.0 Assignment Deliverables

The deliverable consists of a design document and source code. The design document should describe the system and the deliverable as a single Java project is to be sent to the Admin (burned on a CD) on or before the project due date (18th November 2018, 5 pm). Your design documents should include the following content:

- A cover page and Table of contents (with page numbering).
- Assumptions.
- Design of the system – UML use case diagram, use case specification, and class diagram.
- Description of at least 4 object-oriented programming concepts that are applied in the solution and evidence of the implementation code being documented.
- Screen capture of the output of the program with appropriate explanation to sufficiently describe the program.
- Description and evidence of at least 2 additional features which have been incorporated in the solution.
- References

4.0 Knowledge/Presentation

This is an individual assignment. Upon submission of your assignment, you would be required to present your assignment at a date and time specified by your module lecturer.

- Able to provide all information and / or answer all questions with regards to the component of the project.
- Answers questions accurately and confidently.

5.0 Academic Integrity

- You are expected to maintain the utmost level of academic integrity during the duration of the course.
- Plagiarism is a serious offence and will be dealt with according to APU and Staffordshire University regulations on plagiarism.