Coursework Report – 5COSC019C Object Oriented Programming

Student Name: Hiniduma Kapuge Thisari
Student ID: 20221688 / w1956338

Have you submitted the <u>video with the demonstration</u> of your system? ☒ Yes ☐ No

If the video has been submitted specify where:
☐ Blackboard
☒ On the cloud (file shared from Google drive). **Copy here the link:**
https://drive.google.com/file/d/1jp2dcCRCeVzITl2-QrCTm7GDT-42xS18/view?usp=sharing

Phase 1 – Design and class implementation

Task	Did you attempt the task?	Student's comments (To which extent you implemented the task? Have you encountered any problems or issue?)
Design a UML Use Case Diagram of your system (submitted in a separate file).	☒ Yes ☐ No	Successfully completed the task.
Design a UML Class Diagram of your system (submitted in a separate file).	☒ Yes ☐ No	Successfully completed the task.
Implementation Class Product	☒ Yes ☐ No	Successfully completed the task.
Implementation Class Electronics	☒ Yes ☐ No	Successfully completed the task.
Implementation Class Clothing	☒ Yes ☐ No	Successfully completed the task.
Implementation Class User	☒ Yes ☐ No	Successfully completed the task.
Implementation Class Shopping Cart	☒ Yes ☐ No	Successfully completed the task.
Implementation Interface WestminsterShoppingManager	☒ Yes ☐ No	Successfully completed the task.

Phase 2 – Console menu implementation

Task	Did you attempt the task?	Student's comments (To which extent you implemented the task? Have you encountered any problems or issue?)
Add a product in the system with all the relative information (max 50 doctors)	☒ Yes ☐ No	Successfully completed the task.
Delete a product from the system by selecting the product ID. Display a message to confirm it has been removed and the total number of products in the system.	☒ Yes ☐ No	Successfully completed the task.
Print on the screen the list of the products in the system with all the relative information. The list should be ordered alphabetically.	☒ Yes ☐ No	Successfully completed the task.
Save in a file entered by the user so far. The user should be able to load back the information running a new instance of the application.	☒ Yes ☐ No	Successfully completed the task.

Phase 3 – GUI Implementation

Task	Did you attempt the task?	Student's comments (To which extent you implemented the task? Have you encountered any problems or issue?)
The user can select the category through the drop down menu	☒ Yes ☐ No	Successfully completed the task.
The GUI is open and a list of products with the information as per specification has been displayed	☒ Yes ☐ No	Successfully completed the task.
Items with low availability are highlighted in red	☐ Yes ☒ No	Could not complete the task.
The user can select a product and all the details are displayed as per specification in the below panel	☒ Yes ☐ No	Successfully completed the task.
The user can add products to the shopping cart and all the information are displayed in a separate frame	☒ Yes ☐ No	Successfully completed the task.
The final price is displayed correctly	☒ Yes ☐ No	Successfully completed the task.

| The discounts, if applicable, are displayed as per specification and the final price updated accordingly | ☒ Yes ☐ No | 20% discount for 3 products from same category was completed.
10% discount for customers first purchase could not be completed. |

Phase 4 – Testing and system validation

Task	Did you attempt the task?	Student's comments (To which extent you implemented the task? Have you encountered any problems or issue?)
Test plan. (Submitted in a separate file).	☒ Yes ☐ No	Successfully completed the task.
Implementation of an automated unit test for each scenario in the console menu.	☐ Yes ☒ No	Could not complete the task.
Error Handling across all the code, input validation and code quality.	☒ Yes ☐ No	Successfully completed the task.