

# Coursework Report – 5COSC019C Object Oriented Programming

Student Name:H.M.Shashini Nilukshi

Student ID:20221258

Have you submitted the video with the demonstration of your system?

☒ Yes

☐ No

If the video has been submitted specify where:

☐ Blackboard

☒ On the cloud (file shared from Google drive, or OneDrive or DropBox, etc), or YouTube. **Copy here the link:**

<https://drive.google.com/file/d/1SJ2aBC7kk6t4Uu0WoWhP657aOaUMvLz7/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).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Design a UML Class Diagram of your system (submitted in a separate file).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Implementation Class Product	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Implementation Class Electronics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Implementation Class Clothing	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Implementation Class User	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Implementation Class Shopping Cart	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Implementation Interface WestminsterShoppingManager	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.

## **Phase 2 – Console menu implementation**

<b>Task</b>	<b>Did you attempt the task?</b>	<b>Student's comments</b> (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)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Print on the screen the list of the products in the system with all the relative information. The list should be ordered alphabetically.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.

### **Phase 3 – GUI Implementation**

<b>Task</b>	<b>Did you attempt the task?</b>	<b>Student's comments</b> (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	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
The GUI is open and a list of products with the information as per specification has been displayed	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Items with low availability are highlighted in red	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
The user can select a product and all the details are displayed as per specification in the below panel	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
The user can add products to the shopping cart and all the information are displayed in a separate frame	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
The final price is displayed correctly	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
The discounts, if applicable, are displayed as per specification and the final price updated accordingly	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.

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#### **Phase 4 – Testing and system validation**

<b>Task</b>	<b>Did you attempt the task?</b>	<b>Student's comments</b> (To which extent you implemented the task? Have you encountered any problems or issue?)
Test plan. (Submitted in a separate file).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Implementation of an automated unit test for each scenario in the console menu.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.
Error Handling across all the code, input validation and code quality.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed.