

# Coursework Report – 5COSC019C Object Oriented Programming

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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/1lm4q7Qvo7wyYiX3Ddnm4T8u7WQAUPA9k/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	No issues
Design a UML Class Diagram of your system (submitted in a separate file).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No issues
Implementation Class Product	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	I have added a class called "products" to the application.
Implementation Class Electronics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	I have added a class called " Electronics " to the application
Implementation Class Clothing	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	I have added a class called " Clothing " to the application
Implementation Class User	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	I have added a class called " User " to the application
Implementation Class Shopping Cart	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	I have added a class called " Shopping Cart " to the application
Implementation Interface WestminsterShoppingManager	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	I have added an Interface called "WestminsterShoppingManager " to the application

## 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)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The system can obtain product details without any issues
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	If a product is removed from the system, a notification identifying the removed product will appear
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	Program prints a list of items with all of the data without any mistakes on the screen.
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	The information saved in a file that the user has already entered. Reloading the data with a fresh instance of the program is an option for the user.

## 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	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	There are no mistakes in the product list visualization. It is arranged alphabetically as well.
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	No issues
Items with low availability are highlighted in red	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
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	There are no mistakes in the product list visualization, all the details of the products are displayed clearly
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	No issue with that part, it works correctly
The final price is displayed correctly	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Final price is displayed but discount prices are not available

The discounts, if applicable, are displayed as per specification and the final price updated accordingly	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
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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	The system's whole test plan has been uploaded to a new document
Implementation of an automated unit test for each scenario in the console menu.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Programme have run an automated test using Junit
Error Handling across all the code, input validation and code quality.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	When entering data incorrectly, the user may get error messages and be able to add or provide inputs more than once.