

# Coursework Report – 5COSC019C Object Oriented Programming

Student Name: W.M. Sanjana Geeth

Student ID: 20210715/w1953977

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/1tl6zWlrCjQAtAFQ5yeRuVbfS1hJsrBJk/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 the UML Use Case Diagram
Design a UML Class Diagram of your system (submitted in a separate file).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed the UML Class Diagram
Implementation Class Product	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed the Implementation Class Product
Implementation Class Electronics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed the Implementation Class Electronics
Implementation Class Clothing	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed the Implementation of Class Clothing
Implementation Class User	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed the Implementation of Class User
Implementation Class Shopping Cart	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed the Implementation of Class Shopping Cart
Implementation Interface WestminsterShoppingManager	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completed the Implementation of Interface WestminsterShoppingManager

## 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	Completely Implemented with no problems or 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	Completely Implemented with no problems or issues
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	Completely Implemented with no problems or issues
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	Completely Implemented with no problems or issues

### 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	Completely Implemented with no problems or issues
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	Completely Implemented with no problems or issues
Items with low availability are highlighted in red	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Not Implemented
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	Completely Implemented with no problems or issues
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	Completely Implemented with no problems or issues
The final price is displayed correctly	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completely Implemented with no problems or issues

The discounts, if applicable, are displayed as per specification and the final price updated accordingly	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Completely Implemented with no problems or issues

#### **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	
Implementation of an automated unit test for each scenario in the console menu.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Methods that require user input loops indefinitely without completing.
Error Handling across all the code, input validation and code quality.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Input validations and error handling are used in necessary places.