# Coursework Report – 5COSC019C Object Oriented Programming

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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, or OneDrive or DropBox, etc), or		
https://drive.google.com/file/d/1f4GXtKyOaTkgEUCGWW3Jng3TeKqtRHW1/vi	ew?usp=sharing .	•••••

### Phase 1 – Design and class implementation

Task	Did you	Student's comments (To which extent you
	attempt the	implemented the task? Have you encountered any
	task?	problems or issue?)
Design a UML Use Case Diagram of your	Yes No	Submitted the UML use case diagram in a
system (submitted in a separate file).		separate pdf.
Design a UML Class Diagram of your	Yes No	
system (submitted in a separate file).		Submitted the UML class diagram in a separate pdf.
Implementation Class Product	Yes No	Implemented the Product Class as an abstract super class.
Implementation Class Electronics	Yes No	Implemented the Electronics Class sub class.
Implementation Class Clothing	✓ Yes ☐ No	Implemented the Clothing Class sub class.
Implementation Class User	Yes No	Implemented the User class.
Implementation Class Shopping Cart	Yes No	Implemented the Shopping Cart class.
Implementation Interface WestminsterShoppingManager	Yes No	Implemented the WestminsterShoppingManager class.

### Phase 2 - Console menu implementation

Task	Did you attempt the task?	<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)	Yes No	Can add new Clothing product with their information of the name, available items, price, size and colour.  Can add new electronics with their name, brand, warranty period.
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	Can delete a product entering the product Id. Display the remaining number of products.
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	Can print the list of products and their information.
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	Can save all the products and their information in a text file.  It should be able to load back the information running a new instance of the application.

### 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	user can select the category through the drop- down menu
The GUI is open and a list of products with the information as per specification has been displayed	Yes No	A list of products with the information as per specification has been displayed
Items with low availability are highlighted in red	Yes No	Items with low availability are highlighted in red
The user can select a product and all the details are displayed as per specification in the below panel	Yes No	The user can select a product and all the details are displayed as per specification in the below panel

The user can add products to the shopping cart and all the information are displayed in a separate frame	Yes No	The user can add products to the shopping cart
The final price is displayed correctly	Yes No	The final price is displayed correctly
The discounts, if applicable, are displayed as per specification and the final price updated accordingly	Yes No	The discounts, if applicable, are displayed as per specification.

## 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	Submitted test plan in a separate fille.
Implementation of an automated unit test for each scenario in the console menu.	Yes No	Implement an automated unit test for each scenario in the console menu.
Error Handling across all the code, input validation and code quality.	Yes No	Used try catch statements for the error handling.