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 YouTube. **Copy here the link:****https://drive.google.com/file/d/1k8bqp6sIPczZrv4NxCkc02jWM9zHXSng/view?usp=drive_link**

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	No problems faced
Design a UML Class Diagram of your system (submitted in a separate file).	☒ Yes ☐ No	No problem faced
Implementation Class Product	☒ Yes ☐ No	Successfully implemented with no issues
Implementation Class Electronics	☒ Yes ☐ No	Successfully implemented with no issues
Implementation Class Clothing	☒ Yes ☐ No	Successfully implemented with no issues
Implementation Class User	☒ Yes ☐ No	Successfully implemented with no issues
Implementation Class Shopping Cart	☒ Yes ☐ No	Successfully implemented with no issues
Implementation Interface WestminsterShoppingManager	☒ Yes ☐ No	Successfully implemented with no issues

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 implemented with no 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.	☒ Yes ☐ No	Successfully implemented with no issues
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 implemented with no 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.	☒ Yes ☐ No	Successfully implemented with no issues

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 implemented with no issues
The GUI is open and a list of products with the information as per specification has been displayed	☒ Yes ☐ No	Successfully implemented with no issues
Items with low availability are highlighted in red	☒ Yes ☐ No	Successfully implemented with no issues
The user can select a product and all the details are displayed as per specification in the below panel	☒ Yes ☐ No	Successfully implemented with no issues

The user can add products to the shopping cart and all the information are displayed in a separate frame	☒ Yes ☐ No	Successfully implemented with no issues
The final price is displayed correctly	☒ Yes ☐ No	Successfully implemented with no issues
The discounts, if applicable, are displayed as per specification and the final price updated accordingly	☒ Yes ☐ No	Discounts gets appliyed and the final price gets updated accordingly but the firstPurchase discount is not implemented properly, the code behind it is done but its not implemented on the gui because once a user signs up the user is required to login which then takes off the condition of applying the firstPurchase discount for new users

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	Most test cases have been tested
Implementation of an automated unit test for each scenario in the console menu.	☒ Yes ☐ No	Unit tests are done for most methods some of the unit tests being wrong , the unit test for methods that require user input tends to wait indefinitely for an input although it is proviyed some issues arise due to the use of input.nextline() after using input.next()
Error Handling across all the code, input validation and code quality.	☒ Yes ☐ No	Input validations and error handlings are used on most places where its necessary