# 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/1l8JdObZH0Hh-akbgawsSWfpleHQQi1Xb/view?usp=sharing**](https://drive.google.com/file/d/1l8JdObZH0Hh-akbgawsSWfpleHQQi1Xb/view?usp=sharing) **……….**

**…….**

**Phase 1 – Design and class implementation**

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| **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 | Implemented completely, and NO issues encountered. |
| Design a UML Class Diagram of your system (submitted in a separate file). | Yes  No | Implemented completely, and NO issues encountered. |
| Implementation Class Product | Yes  No | Implemented completely, and NO issues encountered. |
| Implementation Class Electronics | Yes  No | Implemented completely, and NO issues encountered. |
| Implementation Class Clothing | Yes  No | Implemented completely, and NO issues encountered. |
| Implementation Class User | Yes  No | Implemented completely, and NO issues encountered. |
| Implementation Class Shopping Cart | Yes  No | Implemented completely, and NO issues encountered. |
| Implementation Interface WestminsterShoppingManager | Yes  No | Implemented completely, and NO issues encountered. |

**Phase 2 – Console menu implementation**

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| **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 | Implemented completely, and NO issues encountered. |
| 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 | Implemented completely, and NO issues encountered. |
| 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 | Implemented completely, and NO issues were encountered |
| 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 | I have implemented the functionality to load information into the GUI table. Overall, the implementation works well. When a manager adds products and saves the data to a file, the information is loaded into the GUI. However, there is an issue when the manager adds new data and selects case 5 to load the data directly. Additionally, when opening the GUI again, the updated loaded data is not displayed. Interestingly, the data saved to the text file is loaded successfully until the next time the manager saves new data. |

**Phase 3 – GUI Implementation**

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| **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 | Implemented completely, and NO issues encountered. |
| The GUI is open and a list of products with the information as per specification has been displayed | Yes  No | The GUI opens and the list of products with information is displayed completely.  I have successfully created a GUI interface that meets the specified requirements, although there is a slight deviation from the expected design. The table currently lacks a scroll panel; however, the display of products has been implemented comprehensively. Furthermore, when a user clicks on the table header, the products are sorted alphabetically. |
| Items with low availability are highlighted in red | Yes  No | Implemented completely, and NO issues encountered. |
| The user can select a product and all the details are displayed as per specification in the below panel | Yes  No | Implemented completely, but there is a slight difference in the bottom panel design. |
| The user can add products to the shopping cart and all the information are displayed in a separate frame | Yes  No | Implemented completely, but there is a slight difference in the bottom panel design. |
| The final price is displayed correctly | Yes  No | Implemented completely, and NO issues encountered. |
| The discounts, if applicable, are displayed as per specification and the final price updated accordingly | Yes  No | Implemented completely, and NO issues encountered. |

**Phase 4 – Testing and system validation**

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| **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 | Implemented completely, and NO issues encountered. |
| Implementation of an automated unit test for each scenario in the console menu. | Yes  No | Not completed |
| Error Handling across all the code, input validation and code quality. | Yes  No | Implemented completely, and NO issues encountered. |