# 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/1tl6zWlrCjQAtAFQ5yeRuVbfS1hJsrBJk/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 | Completed the UML Use Case Diagram |
| Design a UML Class Diagram of your system (submitted in a separate file). | Yes  No | Completed the UML Class Diagram |
| Implementation Class Product | Yes  No | Completed the Implementation Class Product |
| Implementation Class Electronics | Yes  No | Completed the Implementation Class Electronics |
| Implementation Class Clothing | Yes  No | Completed the Implementation of Class Clothing |
| Implementation Class User | Yes  No | Completed the Implementation of Class User |
| Implementation Class Shopping Cart | Yes  No | Completed the Implementation of Class Shopping Cart |
| Implementation Interface WestminsterShoppingManager | Yes  No | Completed the Implementation of Interface WestminsterShoppingManager |

**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 | 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. | Yes  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. | Yes  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. | Yes  No | Completely Implemented with no problems or issues |

**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 | 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 | Yes  No | Completely Implemented with no problems or issues |
| Items with low availability are highlighted in red | Yes  No | Not Implemented |
| The user can select a product and all the details are displayed as per specification in the below panel | Yes  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 | Yes  No | Completely Implemented with no problems or issues |
| The final price is displayed correctly | Yes  No | Completely Implemented with no problems or issues |
| The discounts, if applicable, are displayed as per specification and the final price updated accordingly | Yes  No | Completely Implemented with no problems or issues |

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