# Coursework Report – 5COSC019C Object Oriented Programming

Student Name: G.T.T.Palliyaguruge

Student ID:20222110

|  |  |  |
| --- | --- | --- |
| Have you submitted the video with the demonstration of your system? | Yes |  |

If the video has been submitted specify where:

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/1h8OlY91AuMJ8DO82vjk-57aV-gLWSHMz/view?usp=sharing**

|  |  |  |
| --- | --- | --- |
| **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 | Implemented the Use Case Diagram.Used cases represent the key functionalities of the system. |
| Design a UML Class Diagram of your system (submitted in a separate file). | Yes | Implemented the Class Diagram.This show the relationships and sttributes of the shopping manager system |
| Implementation Class Product | Yes | Implemented the product class.This is the super class of the Clothing and Electronic |
| Implementation Class Electronics | Yes | Created the Electronic class.This inherit from the Product class |
| Implementation Class Clothing | Yes | Created the Clothing class.This implement from the Product class. |
| Implementation Class User | Yes | Created the User class.Define the attributes and methords. |
| Implementation Class Shopping Cart | Yes | Created shopping Class.This use to manage the shopping cart functionality and remove and addition of the items. |
| Implementation Interface WestminsterShoppingManager | Yes | Implemented the WestminsterShoppingManager interface. |

**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 | Successfully add the product |
| 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 | Successfully delete the product |
| Print on the screen the list of the products in the system with all the relative information. The list should be ordered alphabetically. | Yes | Successfully save the file. |
| 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 | Implemented the file handling for saving and loading product information. |

**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 | Implemented the dropdown menu for selecting the category |
| The GUI is open and a list of products with the information as per specification has been displayed | Yes | Successfully integrated GUI |
| Items with low availability are highlighted in red | Yes | Successfully displayed |
| The user can select a product and all the details are displayed as per specification in the below panel | Yes | Successfully integrated the shopping cart functionality |
| The user can add products to the shopping cart and all the information are displayed in a separate frame | Yes | Successfully displayed the all the details of added product |
| The final price is displayed correctly | Yes | Successfully display the final price |
| The discounts, if applicable, are displayed as per specification and the final price updated accordingly | Yes | Successfully worked |

**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 | Created the test plane |
| Implementation of an automated unit test for each scenario in the console menu. | Yes | implemented |
| Error Handling across all the code, input validation and code quality. | yes | Implemented the error handling |