

University of Westminster

Informatics Institute of Technology

Object Oriented Programming

5COSC019C.1

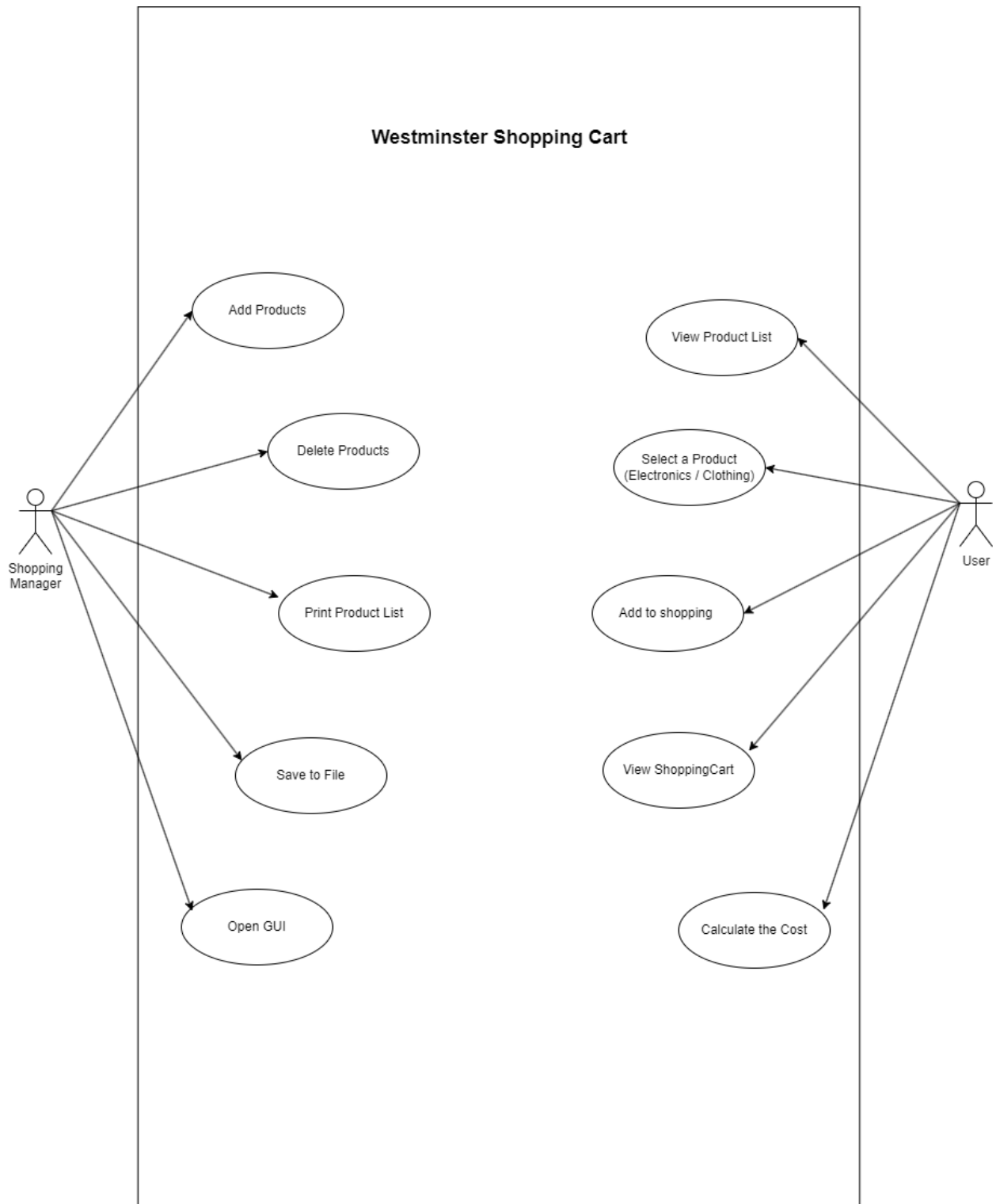
Module Name Object Oriented Programming

Module Leader Mr. Saman Hettiarachchi

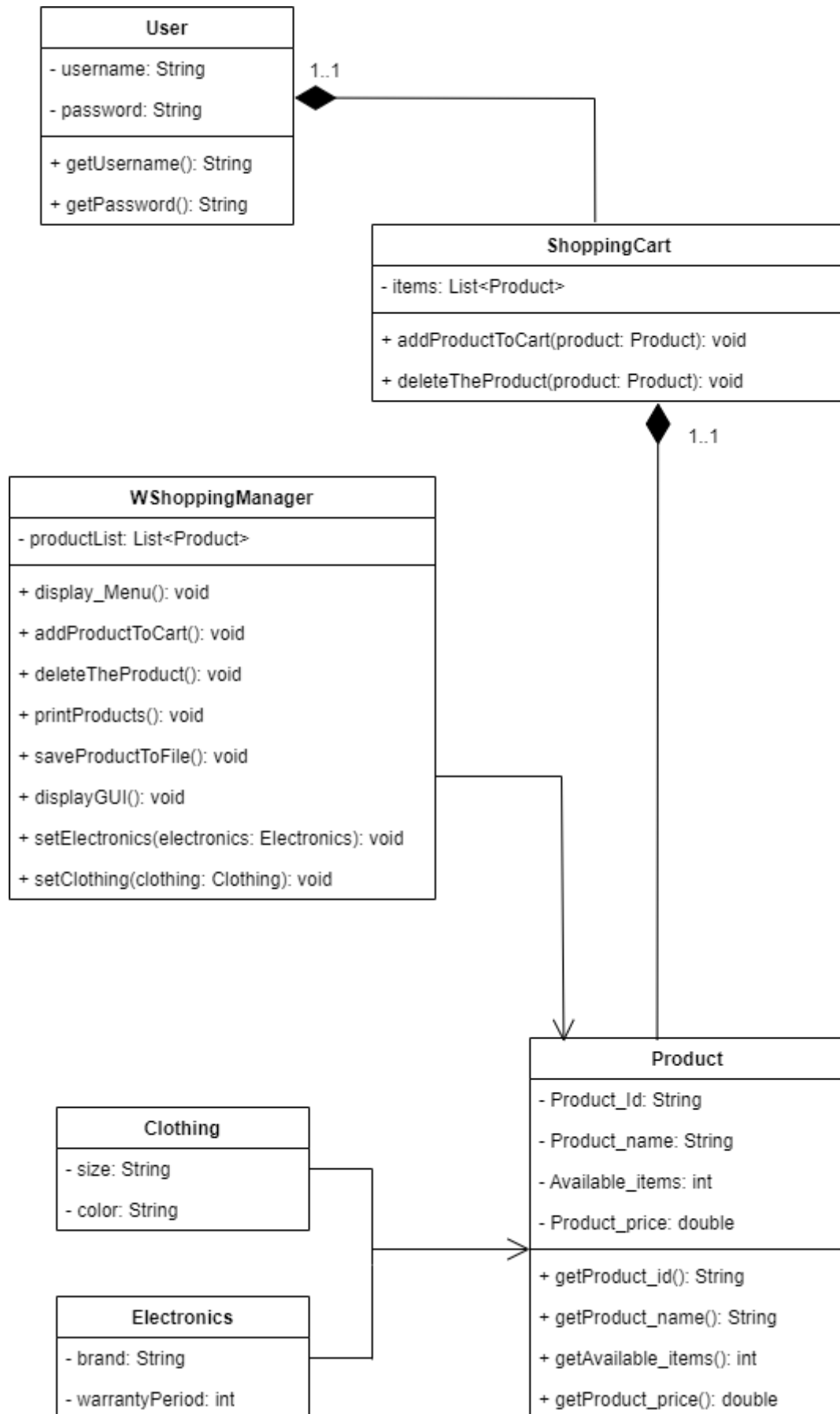
Student Name P.F.C. Samuditha

Student ID 20220467 / w1954016

Use Case Diagram



Class Diagram



Coursework Report – 5COSC019C Object Oriented Programming

Student Name: P.F. Chamath Samuditha

Student ID: 20020467

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/18cArX3WHRzmMAAvJzIlKAgFARQa1KBzE/view?usp=sharing>

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).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered
Design a UML Class Diagram of your system (submitted in a separate file).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered
Implementation Class Product	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered
Implementation Class Electronics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered
Implementation Class Clothing	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered
Implementation Class User	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered
Implementation Class Shopping Cart	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered
Implementation Interface WestminsterShoppingManager	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered

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)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem 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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered
Print on the screen the list of the products in the system with all the relative information. The list should be ordered alphabetically.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem 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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No Problem Encountered

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	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
The GUI is open and a list of products with the information as per specification has been displayed	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Items with low availability are highlighted in red	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	encountered some challenges while trying to integrate the custom cell renderer. Resolving these issues involved making sure that the cell renderer was correctly applied to the specific column and that the data type conversions were handled appropriately.
The user can select a product and all the details are displayed as per specification in the below panel	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
The user can add products to the shopping cart and all the information are displayed in a separate frame	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	In the current implementation, the primary focus of the code is on displaying product information, filtering products by category, and sorting them. Unfortunately, the specific functionality for users

		to add products to a shopping cart is not present in my code.
The final price is displayed correctly	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	While the majority of the implemented tasks, such as displaying product information, filtering, and sorting, have been successfully addressed, I regret to inform you that there seems to be an issue with the final price display. The final price is not reflecting the expected values as per the specified rules.
The discounts, if applicable, are displayed as per specification and the final price updated accordingly	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	While the code successfully displays product information, allows filtering, and enables sorting, I'm disappointed to report that the discounts, as specified, are not functioning as expected.

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).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Implementation of an automated unit test for each scenario in the console menu.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The current code does not include automated unit tests for the console menu scenarios. This represents a potential area for future improvement to ensure the reliability and correctness of the application.
Error Handling across all the code, input validation and code quality.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

