

**DEPARTMENT OF COMPUTER & INFORMATION SYSTEMS ENGINEERING
BACHELORS IN COMPUTER SYSTEMS ENGINEERING**

Course Code: CS-116

Course Title: Object Oriented Programming

Complex Engineering Activity

FE Batch 2021, Spring Semester 2022

Grading Rubric

TERM PROJECT

Group Members:

Student No.	Name	Roll No.
S1	Aaliyan Mansoor	CS-146
S2	Babar Ali	CS-145
S3	Syed Shazain Hassan	CS-128
S4	Maaz Khan	CS-019

CRITERIA AND SCALES					Marks Obtained		
					S1	S2	S3
Criterion 1: Does the application meet the desired specifications and produce the desired outputs? (CPA-2)							
1	2	3	4				
The application does not meet the desired specifications and is producing incorrect outputs.	The application partially meets the desired specifications and is producing incorrect or partially correct outputs.	The application meets the desired specifications but is producing incorrect or partially correct outputs.	The application meets all the desired specifications and is producing correct outputs.				
Criterion 2: How well is the code organization?							
1	2	3	4				
The code is poorly organized and very difficult to read.	The code is readable only to someone who knows what it is supposed to be doing.	Some part of the code is well organized, while some part is difficult to follow.	The code is well organized and very easy to follow.				
Criterion 3: How friendly is the application interface? (CPA-2)							
1	2	3	4				
The application interface is difficult to understand and use.	The application interface is easy to understand and but not that comfortable to use.	The application interface is very easy to understand and use.	The application interface is very interesting/innovative and easy to understand and use.				
Criterion 4: How does the student performed individually and as a team member? (CPA-1, CPA-2)							
1	2	3	4				
The student did not work on the assigned task.	The student worked on the assigned task, and accomplished goals partially.	The student worked on the assigned task, and accomplished goals satisfactorily.	The student worked on the assigned task, and accomplished goals beyond expectations.				
Criterion 5: Does the report adhere to the given format and requirements?							
1	2	3	4				
The report does not contain the required information and is formatted poorly.	The report contains the required information only partially but is formatted well.	The report contains all the required information but is formatted poorly.	The report contains all the required information and completely adheres to the given format.				
Total Marks:							



CEP REPORT

OBJECT-ORIENTED PROGRAMMING CS-116

REPORT BY:

AALIYAN MANSOOR CS-146

BABAR ALI CS-145

SYED SHAHZAIN HASSAN CS-128

MAAZ KHAN CS-019

Problem Description:

Online Shopping Cart is a virtual shopping trolley which allows the user to put items in his/her cart by simply selecting them from the cursor. The user can select the desired quantity for each product. The user has multiple categories to browse from and he/she can shop from his/her desired category. The administrator can add or remove the items from each category.

Distinguishing features:

- Interactive GUI
- Payment process
- Inheritance
- Association
- Method overriding
- Abstract class
- Exception handling
- More than 10 products in each category

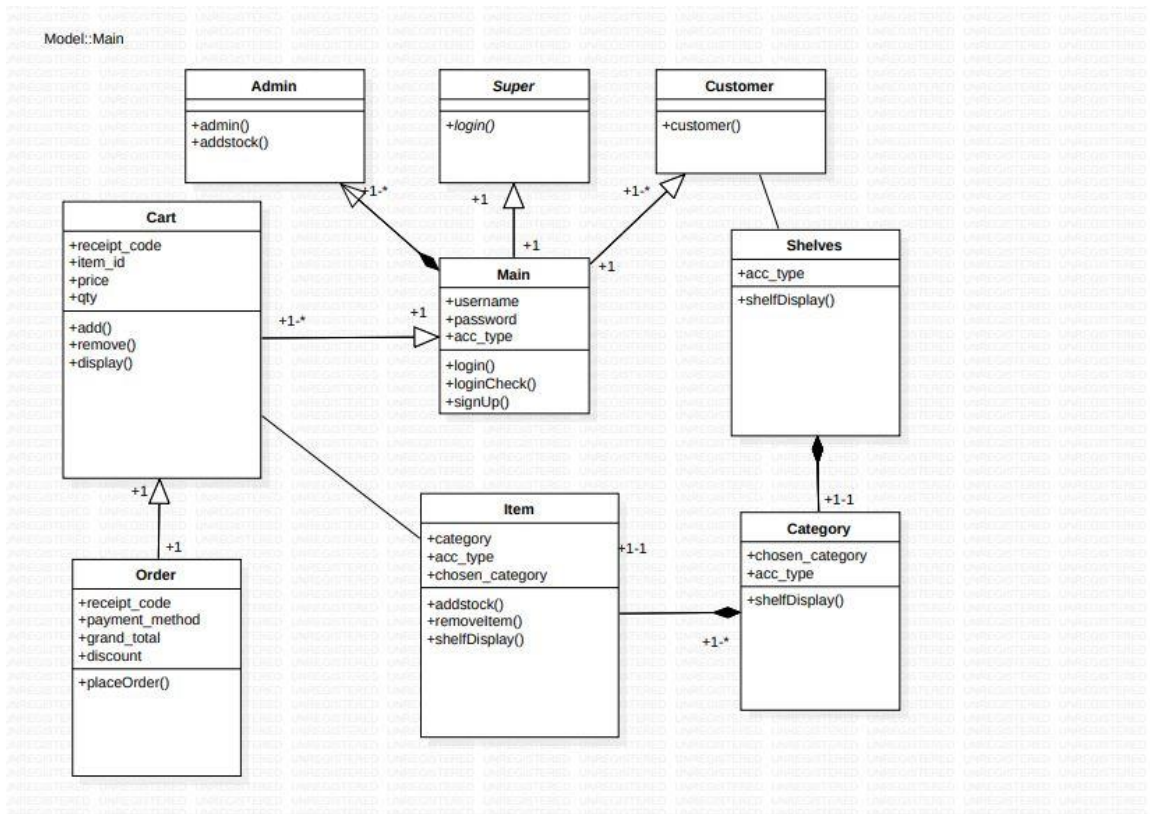
The most challenging part:

The most challenging parts were integrating the GUI, storing and retrieving data from files, and implementing the code according to UML.

Future Expansions:

Future Expansions can be done by adding more shopping categories, A web interface can also be made for the application. Using the same concepts and features, some sort of bank applications can also be made or apps to keep track of finances.

The Flow of the project:



New things learnt while working on the project:

- The Tkinter module
- Usage of class diagrams
- The UUID module (to generate unique IDs)
- Working with multiple files
- The use of f-strings.

References:

Menu widget in Tkinter. (2019, April 12). Geeksforgeeks. Retrieved July 24, 2022, from <https://www.geeksforgeeks.org/python-menu-widget-in-tkinter/?ref=lbp>

OOP. (n.d.). Stack overflow. Retrieved July 24, 2022, from <https://stackoverflow.com/>

Test Runs:

