**DEPARTMENT OF COMPUTER & INFORMATION SYSTEMS ENGINEERING**

**BACHELORS IN COMPUTER SYSTEMS ENGINEERING**

**Course Code: CS-115**

**Course Title: Computer Programming**

**Complex Engineering Problem**

**FE Batch 2021, Fall Semester 2021**

**Grading Rubric**

**TERM PROJECT Group Members:**

|  |  |  |
| --- | --- | --- |
| **Student No.** | **Name** | **Roll No.** |
| **S1** | **Muhammad Ali** | **CS-104** |
| **S2** | **Sameer Hussain** | **CS-106** |
| **S3** | **Nensi Batra** | **CS-86** |
| **S4** | **M. Raim Jamshed** | **CS-038** |

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| --- | --- | --- | --- | --- | --- | --- |
| **CRITERIA AND SCALES** | | | | **Marks Obtained** | | |
| **S1** | **S2** | **S3** |
| Criterion 1: Does the application meet the desired specifications and produce the desired outputs? (CPA-1, CPA-3) | | | |  |  |  |
| 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-1, CPA-3) | | | |  |  |  |
| 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-2, CPA-3) | | | |  |  |  |
| 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: | | | |  |  |  |

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Teacher’s Signature

**Complex Engineering Project Report**

# Problem Description:

Develop an online shopping cart where shoppers can and sign up, sign in their accounts using their correct password and emails and can buy products of their choice and admin can add products in stock, see customers records, make changes in quantity of products after checkout. And shoppers can remove the products during or before checkout according to their will.

# Distinguishing Features of Our Project:

* After customer buy the product its quantity from main stock reduces .
* Checking validity of credit card.
* Checking date of expiry of credit card.
* User attractive interface
* Admin can check the quantity of products available in the stock and if it’s too less it will be displayed in red.
* Admin can see customer record their login details
* Exception handling is performed while user buying the products so if any error occur while typing it won’t effect.
* Customer can view products without login or signup
* Inheritance is done in many parts of code
* Exception handling
* Association
* Method Overriding
* And other

NOTE: The admin and shopper have different password and accounts to log in.

# 3.Flow Of Our Project:

First user will be asked to enter as an admin or customer when he run the main program after that is he select customer part he have a choice to signin if he don’t have existing account then he can either signup or just view the products which are available in stock. If he choose to login or signup then he have to write his correct name, email, and password after that he will move to show products where he can see products. To order the products he have to enter their product id and quantity of individual. After that his bill will be displayed with total amount. for payment process he would be ask to enter his/her credit card after that it’s validity got checked.

If he selected admin 1st he would be asked to enter id and password of admin which is specific. After that he have a choice to whether he want to view product , add product, view customer record, display product or display quantity. In display product he would be asked to select which type of product he want to see

After that there is add product where he can add product, other domain is delete product, display products , display quantity and customer record.

# 3.Flow Of Our Project:

Admin

(login with unique password)

Customer

(sign in or sign up)

View Products

Add and delete Products

Select (category of products)

Choose products want to buy

Enter products ids to select

Checkout and bill payment

Select category

Products displayed!

Select category

Enter id of product to be deleted and added

Products will be added or deleted.

Checking credit card validity AND expiry date.

Checkout and bill payment

DISPLAY PRODUCT

# 4.Most Challenging Part for Us While Working on the Project:

* In admin side the challenging part was to delete the products from stock as it required lot of logic.
* In customer the challenging part was to create the bill as it require to get the price of the products from list.
* After creating the bill to subtract the quantity from stock requires lot of effort.

# 5.Any New Thing Learnt in Python While Working on the Project:

We have learn file handling , listing, exception handling, as well as how to team work

# 6.Individual Contributions:

*M.Raim Jamshed:*

* *Main class*
* *Ask (function of class admin)*
* *file(function of class admin)*
* *Ask\_more(function of class admin)*

*Sameer Hussain:*

* *Enter\_id and password(function of class admin)*
* *Add\_product(function of class admin)*
* *Delete product(function of class admin)*

*Nensi Bai:*

* *Customer record(function of class admin)*
* *Display\_stock(function of class admin)*
* *Class Date*

*Muhammad Ali:*

* *Class product*
* *Class shopping\_cart*
* *Class bill*
* *Class Register*
* *Class color*

1. Future Expansions, if any:

- GUI could be added which is more user friendly

- web frame work can be used

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**TEST RUN**

**Case 1** (Customer part)

**Case 2**(Display Cart)





