

Project Report: Online Shopping Cart for Abaya store.

Program Description:

The Abaya Shopping Application is an online store offering customizable abayas. Customers can choose from various styles, fabrics, colors, and sizes to create personalized garments. The platform features a user-friendly customization process, real-time pricing, and a flexible shopping cart. It streamlines the abaya buying experience, blending traditional designs with modern e-commerce convenience. The application caters to diverse tastes, from classic to contemporary, providing an efficient way for customers to design and purchase abayas tailored to their preferences.

Program Capabilities:

- **User Interaction:** The store allows users to choose each abaya's size, fabric, and style. Shopping
- **Cart Management:** Customers can add multiple abayas to their cart, review selections, and modify or remove items.
- **Customizable Products:** Abayas are tailored to user preferences, with prices adjusting based on fabric, style, and color. Users can further modify their abayas even after adding them to the cart.
- **Order Processing:** The program collects client information and handles payments via a credit card system.
- **Final Summary:** Users receive a comprehensive order summary and confirmation following successful payment.

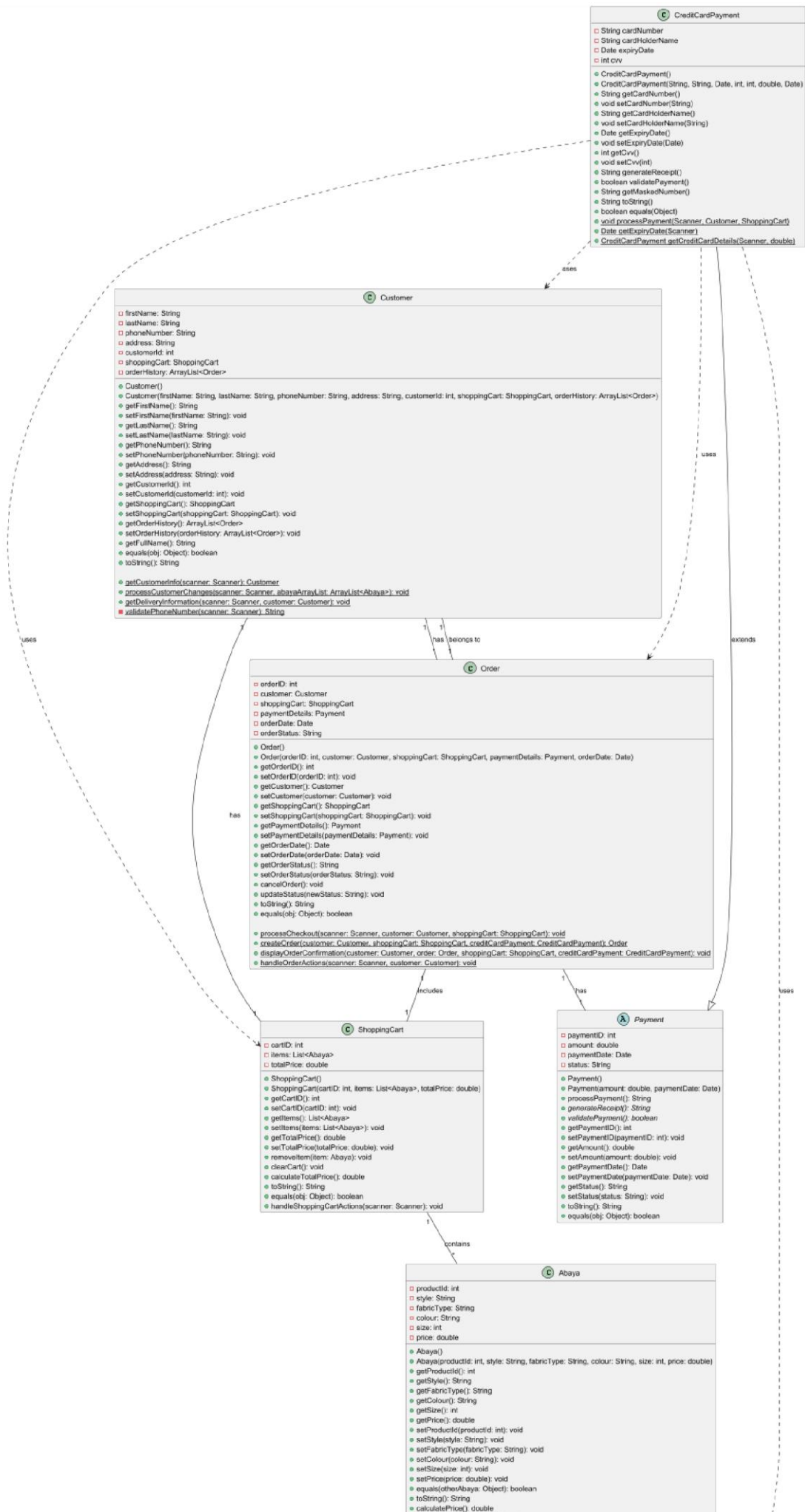
User-centric Program flow:

1. **Welcome and Setup**
 - User is greeted with a welcome message.
 - User enters their personal information.
2. **Abaya Customization Process**
 - User begins customizing their abaya by:
 - Choosing a fabric type.
 - Selecting a style.
 - Picking a color.
 - Specifying the size.
 - User has the option to customize multiple abayas.

3. **Review and Modify Customizations** ○ User reviews their customized abayas. ○ Option to make changes if needed.
4. **Shopping Cart Management**
 - User's selections are added to the shopping cart.
 - User can view and modify cart contents:
 - Remove items.
 - Add more items.
 - Review the total price.
5. **Checkout and Payment**
 - When ready to purchase, user proceeds to checkout. ○ User completes the payment process.
6. **Order Confirmation and Post-Purchase**
 - User receives an order confirmation and summary.
 - User can perform post-purchase actions (e.g., track the order).
7. **Exit**
 - User exits the application.

UML:

- The diagram is also available as a **PNG** in the project file, as well as a **.puml file** for viewing in **Plant UML plug-in**.



Program outputs:

1. Welcome screen and user information collection.

[illegible]

2. Start of Abaya selection & customization process.

Displays the fabric, style and colour menus and prompts the user to enter their choices. Includes validation and exception handling for any incorrectly entered values.

```
Alzaharani
Thank you for inputting your information. You may now start customizing your brand new Abaya!

-----

Fabric Selection Menu:
Fabric Type | Description | Base Price
-----
Cotton      | Cotton fabric is breathable, soft, and comfortable, ideal for everyday wear and hot climates. | 250
-----
Silk        | Silk fabric is smooth, luxurious, and perfect for special occasions or high-end abayas. | 300
-----
Linen       | Linen fabric is lightweight, durable, and breathable, making it ideal for warm weather. | 300
-----
Nidha       | Nidha fabric is soft and elegant, often used in premium abayas for its smooth texture and flowy appearance. | 300
-----
Chiffon     | Chiffon fabric is lightweight, sheer, and gives the abaya a delicate, flowing appearance. | 200
-----

Enter the fabric you would like for your Abaya:
linen
Fabric set successfully.
```

```

    Style Selection Menu:
Style Type      | Description                                                    | Base Price
-----
Bisht          | The Bisht abaya is characterized by wide sleeves and a loose design, giving it a luxurious, elegant, and modest appearance. | 50
-----
Normal         | Standard abaya with no additional features.                  | 0
-----
Zipper         | Abaya with a zipper.                                         | 20
-----
Buttoned       | Abaya with buttons.                                          | 50
-----
Kloshed       | The Klosh abaya is an elegant abaya characterized by a wide design that starts fitted at the shoulders and gradually widens towards the bottom. |
-----
Half Kloshed  | The half klosh abaya combines elements of both fitted and wide designs. | 60
-----
Dantel        | The dantel abaya is characterized by the addition of delicate lace fabric to its design. | 100
-----
Professional  | The professional abaya is designed with simplicity and elegance, making it ideal for formal and work environments. | 100
-----

Enter the style you would like for your Abaya:
dantel
Invalid style. Please try again.

Enter the style you would like for your Abaya:
dantel
Style set successfully.

    Color Selection Menu:
Color Type      | Description                                                    | Price Adjustment
-----
Black          | A classic color that adds elegance and versatility.          | 0
-----
White          | A classic and timeless choice, white gives a fresh and clean look. | +10
-----
Beige          | A neutral color that pairs well with many fabrics.           | +10
-----
Brown          | A warm, earthy color that adds richness and depth.          | +10
-----
Navy           | A dark blue that is professional and sophisticated.          | +10
-----
Dark Green     | A deep green that evokes nature and tranquility.             | +10
-----
Silver         | A metallic hue that adds elegance and modernity.            | +10
-----
Blue           | A calming and cool color that is versatile.                 | +10
-----
Maroon         | A rich, dark red that adds warmth and sophistication.        | +10
-----

Enter the color you would like for your Abaya:
silver
Color set successfully.
Please enter the size of the Abaya (52, 54, 56, 58, 60):
58
Size set successfully.
=====
Abayas in Shopping Cart
=====

```

```

    Color Selection Menu:
Color Type      | Description                                                    | Price Adjustment
-----
Black          | A classic color that adds elegance and versatility.          | 0
-----
White          | A classic and timeless choice, white gives a fresh and clean look. | +10
-----
Beige          | A neutral color that pairs well with many fabrics.           | +10
-----
Brown          | A warm, earthy color that adds richness and depth.          | +10
-----
Navy           | A dark blue that is professional and sophisticated.          | +10
-----
Dark Green     | A deep green that evokes nature and tranquility.             | +10
-----
Silver         | A metallic hue that adds elegance and modernity.            | +10
-----
Blue           | A calming and cool color that is versatile.                 | +10
-----
Maroon         | A rich, dark red that adds warmth and sophistication.        | +10
-----

Enter the color you would like for your Abaya:
silver
Color set successfully.
Please enter the size of the Abaya (52, 54, 56, 58, 60):
58
Size set successfully.
=====
Abayas in Shopping Cart
=====

```

3. Shows the abayas saved in the cart and ask the user if they would like to continue customizing.

```

Color set successfully.
Please enter the size of the Abaya (52, 54, 56, 58, 60):
58
Size set successfully.
=====
Abayas in Shopping Cart
=====

Abaya #1
Product ID      : #694147
Style           : dantel
Fabric          : linen
Colour          : silver
Size            : 52
Price           : 410.00 SAR

-----

Abaya #2
Product ID      : #641022
Style           : bisht
Fabric          : nidha
Colour          : silver
Size            : 58
Price           : 360.00 SAR

-----

Would you like to continue customizing another Abaya? (yes/no)
no
Your Abaya customizations have been saved.

-----

Here is an overview of your current Abaya selections and customizations:
=====

```

4. Show the abayas saved in the cart and ask the user if he wants to modify his cart

```

Abayas in Shopping Cart
=====

Abaya #1
Product ID      : #694147
Style           : dantel
Fabric          : linen
Colour          : silver
Size            : 52
Price           : 410.00 SAR

-----

Abaya #2
Product ID      : #641022
Style           : bisht
Fabric          : nidha
Colour          : silver
Size            : 58
Price           : 360.00 SAR

-----

Would you like to make any changes to your currently customized Abayas? (yes/no)
yes
Enter the product ID of the Abaya you would like to make changes to.
641022
-----
Abaya #2

```

5. Show the available operations to modify the cart, such as deleting the abaya and showing the cart after modification


```
What feature would you like to change for this Abaya? (fabric/style/size/colour)
fabric

Fabric Selection Menu:
Fabric Type      | Description                                     | Base Price
-----
Cotton           | Cotton fabric is breathable, soft, and comfortable, ideal for everyday wear and hot climates. | 250
-----
Silk             | Silk fabric is smooth, luxurious, and perfect for special occasions or high-end abayas. | 300
-----
Linen            | Linen fabric is lightweight, durable, and breathable, making it ideal for warm weather. | 300
-----
Nidha            | Nidha fabric is soft and elegant, often used in premium abayas for its smooth texture and flowy appearance. | 300
-----
Chiffon          | Chiffon fabric is lightweight, sheer, and gives the abaya a delicate, flowing appearance. | 200
-----

Please enter the name of the fabric you would like to change your abaya to:
cotton
Fabric change confirmed!
Would you like to make changes to another Abaya? (yes/no)
no

Customization changes completed. Saving selections to your shopping cart.

Shopping Cart Actions
-----
Option 1         | Remove an Abaya from the cart
Option 2         | Clear the entire cart
Option 3         | End shopping cart actions and proceed to checkout.
-----

Enter your choice (1-3): 1

Option 2         | Clear the entire cart
Option 3         | End shopping cart actions and proceed to checkout.
-----

Enter your choice (1-3): 1

Remove Abaya
-----
Action           | Enter the product ID of the Abaya to remove
-----
641822

Abaya removed from the cart

Updated Shopping Cart:
=====
Abayas in Shopping Cart
=====

Abaya #1
Product ID      : #694147
Style           : dantel
Fabric          : linen
Colour          : silver
Size            : 52
Price           : 410.00 SAR

=====

Number of Items | 1
Total Price     | 410.00 SAR
=====
```

6. Processing to checkout and ask the user for delivery and payment information

```

Would you like to continue taking actions on the shopping cart? (yes/no)
no
-----
Proceeding to checkout...
-----
Enter delivery information:
1. Enter home address:
makkah
1. Enter Phone number:
Enter phone number: +966 0558446689
Invalid phone number. Please enter 9 digits.
Enter phone number: +966 558446689
-----
Currently, the only method of payment available is through credit card. Would you like to proceed?(yes/no)
yes
-----
Enter payment details:
1. Enter Card Number:
1606166616661666
2. Enter Card holder name:
Joory Alzahrani
3. Enter Card expiry date (MM/yy):
09/28
4. Enter CVV:
232
Credit Card Credentials are correct: Processing...
-----
Order Confirmation
-----
Customer Details
-----

```

7. Showing order confirmation with customer, order, shopping cart and credit card payment details .

```

Credit Card Credentials are correct: Processing...
-----
Order Confirmation
-----
Customer Details
-----
Customer ID      | #548327
Full Name       | Joory Alzahrani
Address         | makkah
Phone Number    | +966558446689
-----
Order Overview
=====
Order ID        | 446476
Order Date      | Fri Oct 25 17:03:52 AST 2024
Order Status    | Confirmed
=====
Abayas in Shopping Cart
=====
Abaya #1
Product ID      : #694147
Style           : dantel
Fabric          : linen
Colour          : silver
Size            : S2
Price           : 410.00 SAR
-----
Total Price: SAR 410.0

```


[illegible]

8. Displays the order management section and the operations available on it. User is asked to verify their Customer identity using their ID. Exception handling and validation is implemented for if the user enters an incorrect ID.

```

Thank you for shopping with Layali Abayas!
-----
                Order Management
-----
1. View Order History
2. Cancel an Order
3. Exit Order Management
Enter your choice (1-3): 1
Please enter your Customer ID for verification: 548327
Order History:
=====
Order Overview
=====
Order ID           | 446476
Order Date         | Fri Oct 25 17:03:52 AST 2024
Order Status       | Confirmed
=====
-----
                Order Management
-----
1. View Order History
2. Cancel an Order
3. Exit Order Management
Enter your choice (1-3): 3
Please enter your Customer ID for verification: 548327
Exiting Order Management.

```

```
1. View Order History
2. Cancel an Order
3. Exit Order Management
Enter your choice (1-3): 3
Please enter your Customer ID for verification: 548327
Exiting Order Management.

|

BYE BYE!
COME AGAIN SOON!

Process finished with exit code 0
```

9. The program ends, and a nice farewell message is displayed to the user.

Thank you for your time reading and reviewing our project! We hope you enjoy your uniquely customized Abaya's which you should receive in 3-5 days! :)