



Project Report

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Submitted to:

Niaz Ashraf Khan, Lecturer

Department of Computer Science & Engineering

University of Liberal Arts Bangladesh

Submitted by:

Samiul Islam Ramim, ID: 213014020

Fahim Sadik, ID: 213014027

Minhaz Hossen, ID: 213014024

Table Of Contents

Context	Page NO.
1. Project Name	3
2. Abstract	3
3. Introduction	3
4. Literature Review	3
5. Project Design	4
6. Project Description	5
7. Project Snippets	6
8. Future Scope	14
9. Technologies Used	14
10.Extent of Stakeholders	14
11.Conclusion	14

Project Name

“ Boltu ”

Abstract

The "Boltu Shop" project is an online shopping platform that has been developed using C++ programming language. The platform allows for three distinct types of users to interact with it, namely, customers, sellers, and administrators. It provides users with a user-friendly interface and ensures the security of their personal information and product data by providing separate login menus for each type of user. Customers can sign up, log in, buy products, remove items from their cart, and view their shopping cart. Sellers can add new products, modify product information, remove products from their listings, and view the list of existing products. Administrators can view user information, remove user accounts, and remove products from the store.

Introduction

The Boltu Shop project is an online shopping platform that has been developed to provide users with a convenient and secure shopping experience. Online shopping has become increasingly popular over the years, and many people are now choosing to shop online due to its convenience and ease of use. However, there are still concerns about the security of personal information and the reliability of online stores. This project aims to address these concerns by providing a secure and user-friendly platform for online shopping.

The Boltu Shop platform has been designed using C++ programming language, which is a powerful and widely used language in software development. It provides a robust and stable platform that can handle a large number of users and transactions. The platform provides three distinct login menus for customers, sellers, and administrators. This ensures that each type of user has access only to the functionalities that are relevant to their needs.

The customer login menu provides customers with the ability to sign up, log in, buy products, remove items from their cart, and view their shopping cart. The seller login menu provides sellers with the ability to add new products, modify product information, remove products from their listings, and view the list of existing products. The administrator login menu provides administrators with the ability to view user information, remove user accounts, and remove products from the store.

In conclusion, the Boltu Shop project provides a robust and secure platform for online shopping. It provides users with a user-friendly interface and ensures the security of their personal information and product data. The project has been designed to handle a large number of users and transactions and can be further enhanced to provide additional functionalities in the future.

Literature Review

Online shopping has become increasingly popular over the years, and numerous e-commerce platforms have emerged to meet the growing demand for online shopping. In this section, we

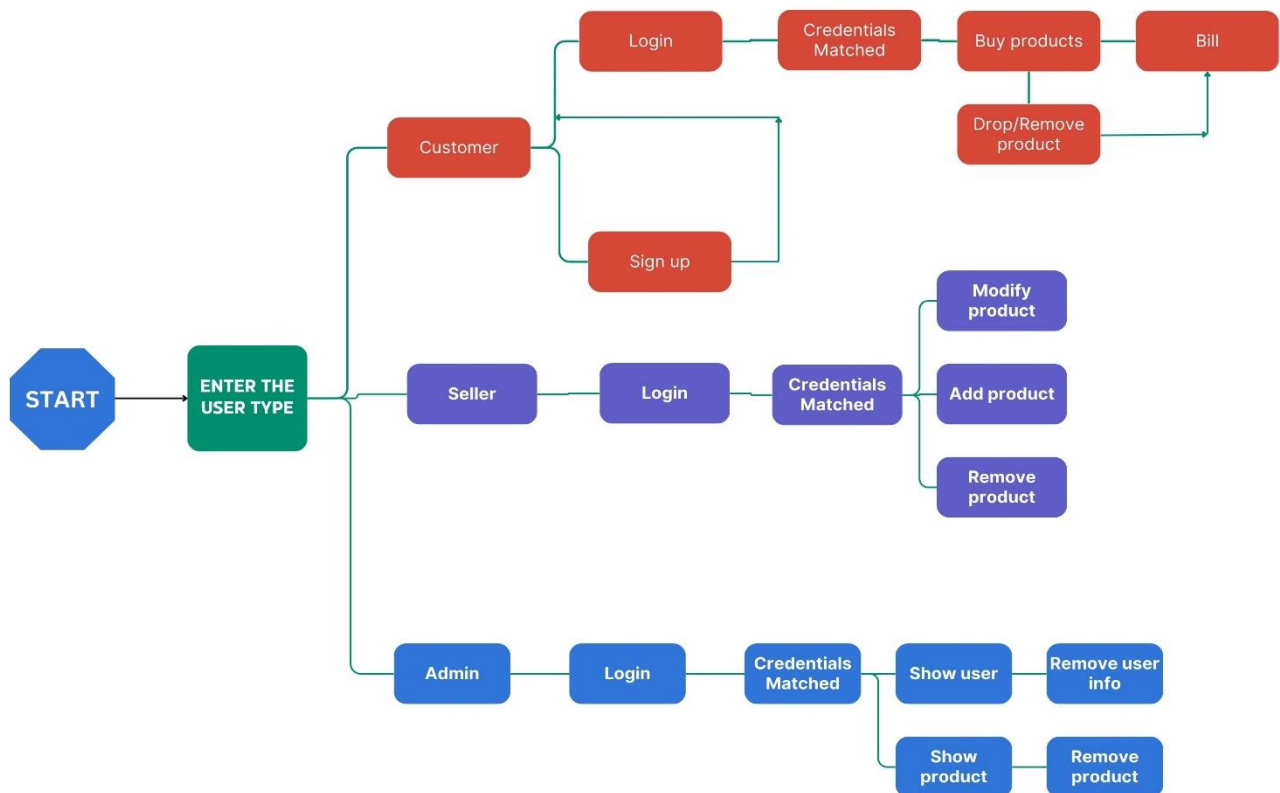
will compare our project with two popular e-commerce platforms, Daraz.com and Pickaboo.com, to understand the similarities and differences between them.

“Daraz.com” is one of the largest e-commerce platforms in Asia, with a presence in several countries. It provides users with a wide range of products, including electronics, fashion, beauty, and more. Like our project, Daraz.com has separate login menus for users, sellers, and administrators. However, while our project allows users to choose between login and sign-up options, Daraz.com only has a login page for users. Additionally, both platforms have a products collection, similar cart systems, and billing systems.

“Pickaboo.com” is another popular e-commerce platform in Bangladesh that offers a variety of products, including electronics, home appliances, fashion, and more. Like our project and Daraz.com, Pickaboo.com also provides users with separate login menus for users, sellers, and administrators. Additionally, it has a product showcase and a similar cart and billing system to our project.

Overall, our project shares many similarities with Daraz.com and Pickaboo.com, including separate login menus for different types of users, showing products for the customer, and similar cart and billing systems. However, our project also provides users with the option to sign up, whereas Daraz.com only allows users to log in. Additionally, our project has an admin panel that allows administrators to view and manage user information, which is not present in the other two platforms.

Project Design:



Project Description

Certainly! Here's a description of the code functionality for each interface:

❖ User Interface:

1. void title (): Displays a welcome message and prompts the user to select their role (customer, seller, or admin). Customer Flow:
2. User chooses to sign up:
 - check_username_exists(): Prompts the user to enter a username and checks if it already exists.
 - If the username is available, the user is prompted to enter a password.
 - usersignup(): Creates a new user account with the provided username and password, and saves the details in the "user.txt" file.
3. User chooses to log in:
 - userlogin(): Prompts the user to enter their username and password for authentication.
 - If the credentials match, the user is given the option to make a purchase.
4. Purchase process:
 - display(): Retrieves product information from the "product.txt" file and displays it to the user. b. User enters the desired product name.
 - If the user wants to continue shopping, the product display is shown again.
 - If the user doesn't want to continue shopping, they are prompted to drop any products from their purchase.
5. void dropProductQuantity(): Handles adjustments to the product quantity in the user's purchase.
 - User enters the product name to be dropped.
 - The function checks the "sale" vector where purchased products are stored.
 - If the product is found, the user is prompted to enter the quantity to be dropped.
 - If the quantity is less than the purchased quantity, it is reduced.
 - If the quantity is equal to the purchased quantity, the product is removed.
 - If the quantity is greater, an error is thrown.
 - The function updates the quantity in the "products.txt" file.
6. Displaying the bill:
 - The current time is displayed using the time function.
 - The user's name is displayed.
 - The contents of the "sale" vector, including product quantity and price, are displayed to show the bill.

❖ Seller Interface:

1. seller_login(): Prompts the seller to enter their username and password for authentication.
2. Seller options:
 - Add product: The seller can add a new product using the ProductManager class.

- Modify products: The seller can modify existing product details using the ProductManager class.
- View products: The seller can view all products using the ProductManager class.

❖ Admin Interface:

1. Admin_login(): Prompts the admin to enter their username and password for authentication.
2. Admin options:
 - Show users: Displays the user details from the "user.txt" file.
 - Show products: Displays the product details from the "products.txt" file.
3. Removing users and products:
 - UserSales: Accesses the "user.txt" and "sales.txt" files to find each line with a specific username and deletes the entire line, removing user details.
 - product_remover: Accesses the "products.txt" file and removes the product, its price, and quantity.

The described code provides a functioning shop project with separate interfaces for users, sellers, and admins, allowing for user registration, login, product browsing, purchasing, and seller and admin management functionalities.

Project Snippets

After running the code get access as a customer.

```

H:\ramim\my project\lastfini
*****
*                               *
*           Welcome to boltu    *
*                               *
*****

Enter as a Customer : Enter 1
Enter as a Seller   : Enter 2
Enter as an Admin   : Enter 3
To exit the application : Enter 0
-----
Enter your choice : 1|
  
```

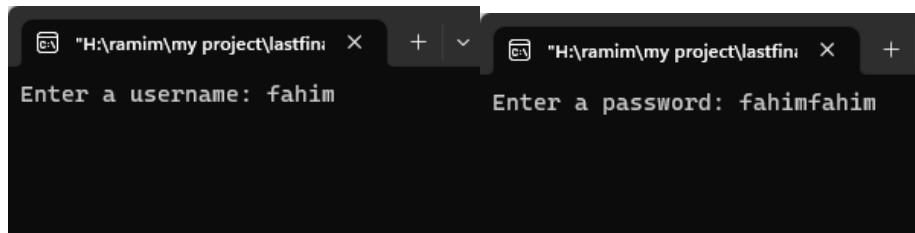
Choosing 2 for signup.

```

H:\ramim\my project\lastfini
*****
*           Thank you for choosing us          *
*                                           *
*****

for login [1]
for sign up [2]
for goto main menu [0]
Please choose an option: 2
  
```

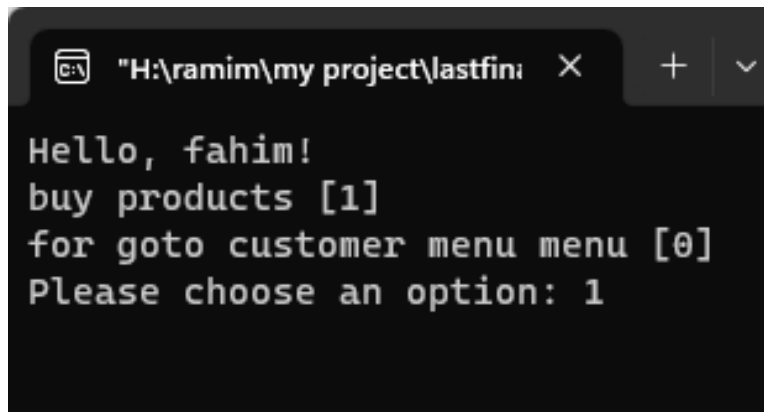
Setting up username and password.



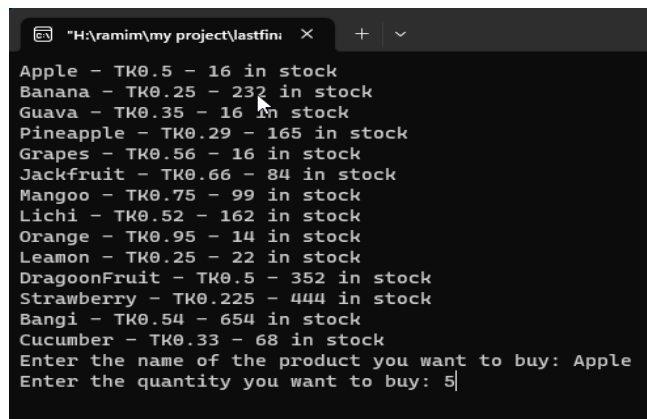
Then it will show the customer login page again to login with the created account. For that enter 1 and the username of that account and the password.



After matching the password and the username it will give us the access of the customer portal there are options for buying products and go back to the main menu. Now we will go to the option 1



Here choose 1 for buying products and 0 for going to the main menu. We choose 1,



Here we can see some products and we buy five apples first we type the product name and then the quantity then we press enter

```
"H:\ramim\my project\lastfini" X + v
You bought 5 Apple for $2.5. Thank you for your purchase!
Do you want to buy more products? (y/n): y|
```

Harriet asks us if you want to buy again we press Y and it takes us back to the product menu

```
"H:\ramim\my project\lastfini" X + v
Apple - TK0.5 - 11 in stock
Banana - TK0.25 - 232 in stock
Guava - TK0.35 - 16 in stock
Pineapple - TK0.29 - 165 in stock
Grapes - TK0.56 - 16 in stock
Jackfruit - TK0.66 - 84 in stock
Mangoo - TK0.75 - 99 in stock
Lichi - TK0.52 - 162 in stock
Orange - TK0.95 - 14 in stock
Leamon - TK0.25 - 22 in stock
DragoonFruit - TK0.5 - 352 in stock
Strawberry - TK0.225 - 444 in stock
Bangi - TK0.54 - 654 in stock
Cucumber - TK0.33 - 68 in stock
Enter the name of the product you want to buy: Apple
Enter the quantity you want to buy: 2
```

Hey can we buy two apples

```
"H:\ramim\my project\lastfini" X + v
Apple - TK0.5 - 11 in stock
Banana - TK0.25 - 232 in stock
Guava - TK0.35 - 16 in stock
Pineapple - TK0.29 - 165 in stock
Grapes - TK0.56 - 16 in stock
Jackfruit - TK0.66 - 84 in stock
Mangoo - TK0.75 - 99 in stock
Lichi - TK0.52 - 162 in stock
Orange - TK0.95 - 14 in stock
Leamon - TK0.25 - 22 in stock
DragoonFruit - TK0.5 - 352 in stock
Strawberry - TK0.225 - 444 in stock
Bangi - TK0.54 - 654 in stock
Cucumber - TK0.33 - 68 in stock
Enter the name of the product you want to buy: Banana
Enter the quantity you want to buy: 1|
```

again we buy some product and now this time we type banana and we set the quantity to one and press enter

```
"H:\ramim\my project\lastfini" X + v
You bought 1 Banana for $0.25. Thank you for your purchase!
Do you want to buy more products? (y/n): n|
```

again it's asked if you want to who you want to buy more and we press N

```
"H:\ramim\my project\lastfini" X + v
if you want to drop any product press [1] or press [0] to customer menu...
after that you wont be able to drop any productsenter your choice1|
```


after pressing N it takes us to the panel where it asks us if we want to drop any products so we can press one or zero

```
"H:\ramim\my project\lastfini: X + v
if you want to drop any product press [1] or press [0] to customer menu...
after that you wont be able to drop any productsenter your choice1
Enter product name: Apple
Enter quantity to drop: 4
```

we press one and choose the product name by typing apple and we drop 4 apples and press enter

```
"H:\ramim\my project\lastfini: X + v
printing bill
-----
WELCOME TO MY STORE
-----
Username: fahim
Date: 07:16:17 PM, Wednesday, May 10, 2023
-----
Product Name | Quantity | Price | Total
-----
Apple        3          0.50    1.50
Banana       1          0.25    0.25
-----
Total amount: $1.75
-----
Process returned 0 (0x0)   execution time : 77.637 s
Press any key to continue.
```

after pressing enter it shows us the bill and we can see that we bought three apples and one banana

```
"H:\ramim\my project\lastfini: X + v
*****
*                               *
*           Welcome to boltu    *
*                               *
*****

Enter as a Customer : Enter 1
Enter as a Seller   : Enter 2
Enter as an Admin  : Enter 3
To exit the application : Enter 0
-----
Enter your choice : 2
```

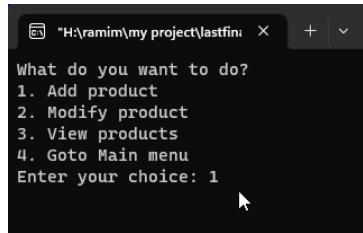
now we just two for accessing the seller account

```
"H:\ramim\my project\lastfini: X + v
login [1]
for goto main menu [0]
Please choose an option: 1
```

We log in as a seller

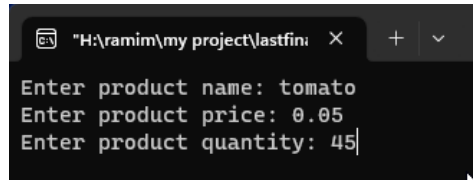
```
"H:\ramim\my project\lastfini: X + v
Enter user name: deloar
enter pass: seller
```

after entering the username and password we press enter



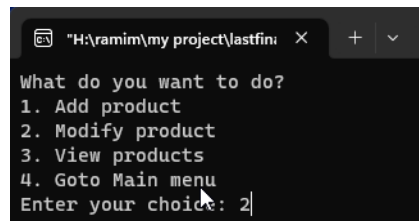
```
"H:\ramim\my project\lastfini" X + v
What do you want to do?
1. Add product
2. Modify product
3. View products
4. Goto Main menu
Enter your choice: 1
```

it takes us to the seller panel



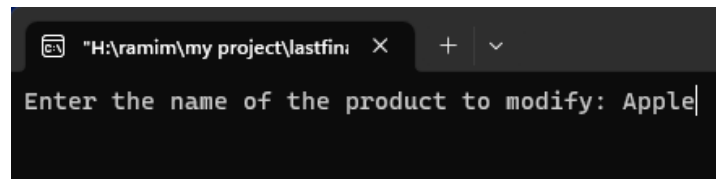
```
"H:\ramim\my project\lastfini" X + v
Enter product name: tomato
Enter product price: 0.05
Enter product quantity: 45
```

Here press one for adding product and it takes us to the panel where we have to enter the product name product price and product quantity



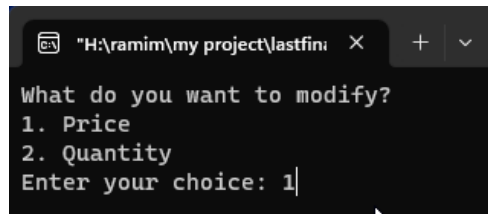
```
"H:\ramim\my project\lastfini" X + v
What do you want to do?
1. Add product
2. Modify product
3. View products
4. Goto Main menu
Enter your choice: 2
```

after that we press enter and it takes us back to the seller panel and this time we press 2 for modifying some product



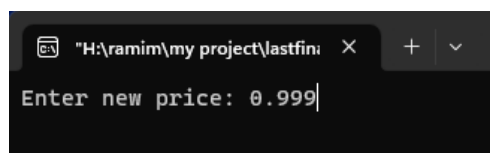
```
"H:\ramim\my project\lastfini" X + v
Enter the name of the product to modify: Apple
```

Here type the name of the product apple



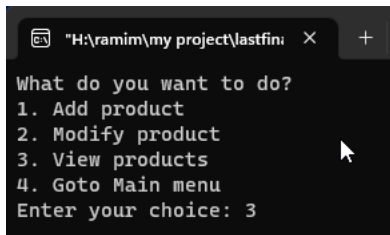
```
"H:\ramim\my project\lastfini" X + v
What do you want to modify?
1. Price
2. Quantity
Enter your choice: 1
```

and it asks us what we want to modify and we press one for modifying the price



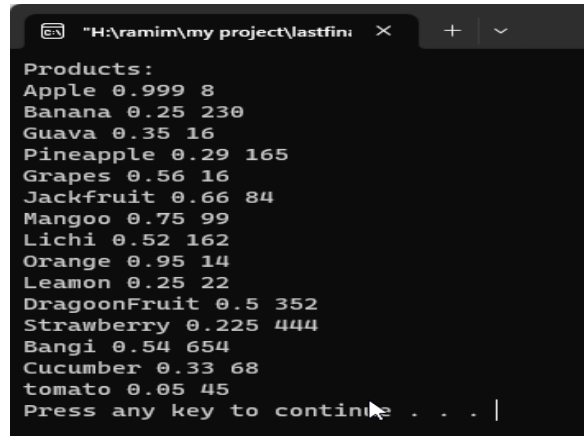
```
"H:\ramim\my project\lastfini" X + v
Enter new price: 0.999
```

we changed the price of the product apple and we enter a new value



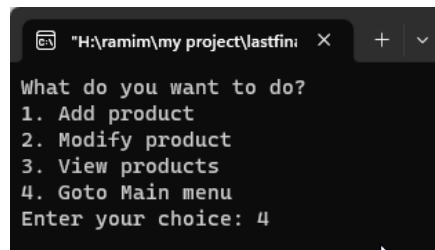
```
"H:\ramim\my project\lastfini" X +
What do you want to do?
1. Add product
2. Modify product
3. View products
4. Goto Main menu
Enter your choice: 3
```

And after pressing enter it takes us back to the seller menu and we press 3 to see the products list



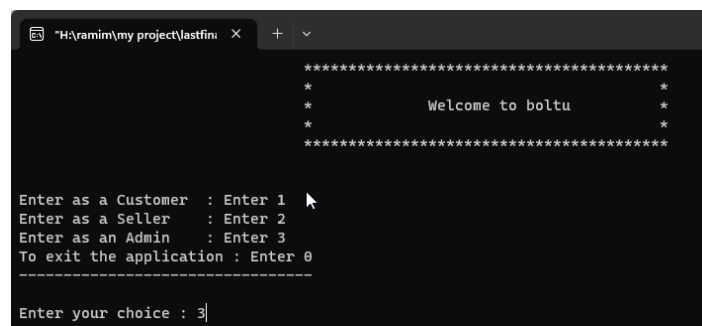
```
"H:\ramim\my project\lastfini" X + v
Products:
Apple 0.999 8
Banana 0.25 230
Guava 0.35 16
Pineapple 0.29 165
Grapes 0.56 16
Jackfruit 0.66 84
Mango 0.75 99
Lichi 0.52 162
Orange 0.95 14
Leamon 0.25 22
DragoonFruit 0.5 352
Strawberry 0.225 444
Bangi 0.54 654
Cucumber 0.33 68
tomato 0.05 45
Press any key to continue . . . |
```

Here it shows us the product list



```
"H:\ramim\my project\lastfini" X + v
What do you want to do?
1. Add product
2. Modify product
3. View products
4. Goto Main menu
Enter your choice: 4
```

we press enter to continue and it takes us back to the solar panel and this time we choose the option 4 to go to the main menu



```
"H:\ramim\my project\lastfini" X + v
*****
*                               *
*           Welcome to boltu    *
*                               *
*****

Enter as a Customer : Enter 1
Enter as a Seller   : Enter 2
Enter as an Admin   : Enter 3
To exit the application : Enter 0
-----
Enter your choice : 3|
```

this time we choose 3 to enter the admin panel

```
"H:\ramim\my project\lastfini X + v
login [1]
for goto main menu [0]
Please choose an option: 1
```

in the admin panel it ask us for the log in or go to main menu option we press one for log in

```
"H:\ramim\my project\lastfini X + v
Enter user name: ADMIN
enter pass: admin@123
```

We entered the username and password for admin

```
"H:\ramim\my project\lastfini X +
hello admin!!
1. Show users
2. Show Products
0. Main Menu
Enter you choice :1|
```

this time it takes us to the admin panel

```
"H:\ramim\my project\lastfini X + v
Username: samiramipuchut Password: 227892s@miul
Username: minhas Password: minhas
Username: fahim Password: fahimfahim
want to delete any user
1. Yes 2. No
enter your choice: 1|
```

we choose the option one for showing users and it shows the the user names and passwords

```
"H:\ramim\my project\lastfini X + v
Username: samiramipuchut Password: 227892s@miul
Username: minhas Password: minhas
Username: fahim Password: fahimfahim
want to delete any user
1. Yes 2. No
enter your choice: 1
Enter username to delete (or 'q' to quit): samiramipuchut
```

we choose an account to delete so we press one for choosing account and then we entered the name of the account and it deleted the

```
"H:\ramim\my project\lastfini X + v
Deleted user samiramipuchut from user_file and sales_file
Enter username to delete (or 'q' to quit): q
```

then it shows us the confirmation of the deleting of the username

```
"H:\ramim\my project\lastfini" X + v
Deleted user samiramipuchut from user_file and sales_file
Enter username to delete (or 'q' to quit): q
1. Show users
2. Show Products
0. Main Menu
Enter you choice :2
```

and takes us back to the admin panel and we choose two for showing products

```
"H:\ramim\my project\lastfini" X + v
Apple - TK0.999 - 8 in stock
Banana - TK0.25 - 230 in stock
Guava - TK0.35 - 16 in stock
Pineapple - TK0.29 - 165 in stock
Grapes - TK0.56 - 16 in stock
Jackfruit - TK0.66 - 84 in stock
Mangoo - TK0.75 - 99 in stock
Lichi - TK0.52 - 162 in stock
Orange - TK0.95 - 14 in stock
Leamon - TK0.25 - 22 in stock
DragoonFruit - TK0.5 - 352 in stock
Strawberry - TK0.225 - 444 in stock
Bangi - TK0.54 - 654 in stock
Cucumber - TK0.33 - 68 in stock
tomato - TK0.05 - 45 in stock
want to remove any product
1. Yes 2. No
enter your choice: 1|
```

no tax us if we want to remove any product and we chose one for yes

```
"H:\ramim\my project\lastfini" X + v
Apple - TK0.999 - 8 in stock
Banana - TK0.25 - 230 in stock
Guava - TK0.35 - 16 in stock
Pineapple - TK0.29 - 165 in stock
Grapes - TK0.56 - 16 in stock
Jackfruit - TK0.66 - 84 in stock
Mangoo - TK0.75 - 99 in stock
Lichi - TK0.52 - 162 in stock
Orange - TK0.95 - 14 in stock
Leamon - TK0.25 - 22 in stock
DragoonFruit - TK0.5 - 352 in stock
Strawberry - TK0.225 - 444 in stock
Bangi - TK0.54 - 654 in stock
Cucumber - TK0.33 - 68 in stock
tomato - TK0.05 - 45 in stock
want to remove any product
1. Yes 2. No
enter your choice: 1
Enter product name to remove (or 'q' to quit): Mango|
```

then it asks us the name of the product we want to remove and we enter mango

```
"H:\ramim\my project\lastfini" X
1. Show users
2. Show Products
0. Main Menu
Enter you choice :0
```

it removes the product and Texas back to the admin panel and this time we press 0 to go to the main menu

after pressing 0 it takes us to the main menu where we started and we press 0 to exit the program and it shows us that the program has existed successfully

Future Scope

1. Can implement QT as user interface.
2. For password recovery we can use captcha.
3. We can separate the products category wise.
4. Can use database instead of file.
5. Can use multiple API's.

Technology Used

1. Codeblocks (IDE)
2. C++ (Programming language)

Extent of Stockholders

The only three human beings in our project are the admin, customer and the customer. If the system is upgraded in the future, more entities will be available, including central admin, shop manager, general staff, and many others. If we decide to update, we can manage their viewpoints based on their function.

Conclusion

After completing the project "Boltu Shop," it is clear that it provides a user-friendly and comprehensive e-commerce platform that meets the needs of buyers and sellers. The project

offers three separate login menus for users, sellers, and administrators, making it easy for each user type to access the relevant features of the platform.

Similar to other popular e-commerce platforms such as Daraz.com and Pickaboo.com, Boltu Shop offers a product showcase, as well as a similar cart and billing system. However, Boltu Shop also has some unique features, such as an admin panel that allows administrators to manage user information.

Throughout the project development process, it was important to prioritize user experience and functionality. This was achieved through a user-friendly interface, easy navigation, and clear instructions for users. Additionally, the project was developed using C++ programming language, ensuring a high level of security and robustness.

Overall, the Boltu Shop project has successfully achieved its goal of creating a comprehensive e-commerce platform that meets the needs of all users. The project has the potential for future expansion and improvement, and it is hoped that it will continue to be a valuable resource for buyers and sellers alike.

---THE END---