The background features three vertical stripes on the left: a wide pink stripe, a medium blue stripe, and a narrow light beige stripe. The right side of the image is a light beige background with two rectangular areas of small, light pink dots. One area is in the top right corner, and the other is in the bottom right corner.

VISUAL PROGRAMING

Zero Project Shopping Cart System

Air University | 2024

GROUP MEMBERS

1- Khuzaim Adnan Qureshi (233587)

2- Muhammad Arsal Ajmal (233503)

3- Maham Kamran Mirza (233798)

OVERVIEW

The shopping cart application allows users to manage products in their cart. Users can add and remove items, view the cart, manage item quantities, calculate total costs including discounts and taxes, receive product recommendations, and go through a checkout process. The application uses collections to manage the products and the cart effectively. This application is helpful for users to shop online.

FEATURES

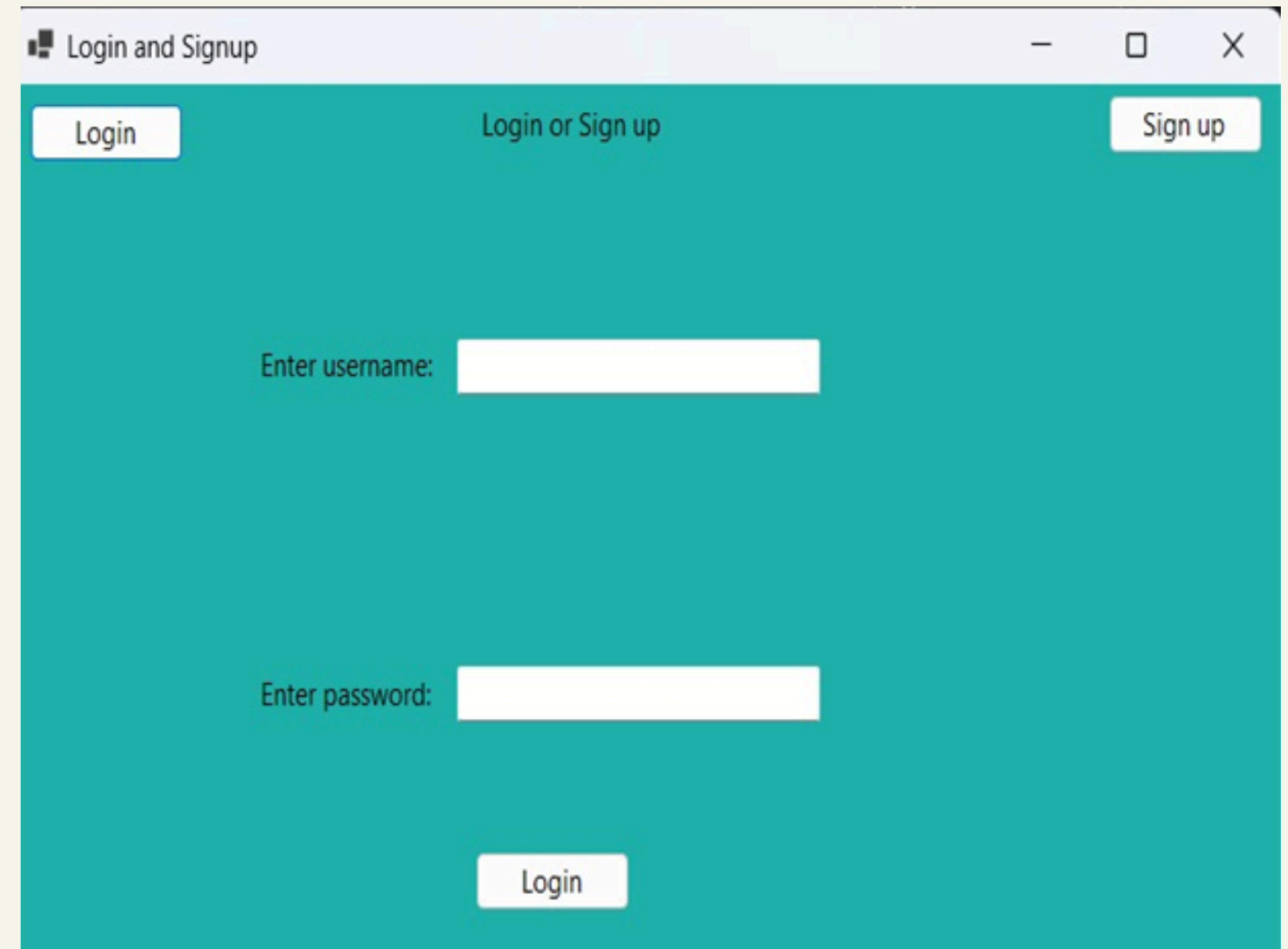
The Application contains the following features:

- Sign-up and Log-in
- Add and remove products from the cart
- View Cart
- Item Quantity Management
- Total Cost Calculations
- Apply discounts and sales tax
- Product Recommendation
- Cart Expiry
- Checkout Process



LOG-IN/SIGN-UP

As the application starts an interface of log-in and sign-up pops on the screen giving two options of log-in and sign-up.



The screenshot shows a web application window titled "Login and Signup". The interface has a teal background. At the top, there are three buttons: "Login", "Login or Sign up", and "Sign up". Below these, there are two input fields: "Enter username:" and "Enter password:". At the bottom, there is a "Login" button.

SIGN-UP

The user will first have to create an account by entering a username and password. The user will then have to re enter the password in order to confirm the account creation.



A sign-up form with a teal background. It contains three input fields with white text labels to their left: 'Enter username:', 'Enter password:', and 'Confirm Password:'. Each label is followed by a white rectangular input field. Below the input fields is a white rectangular button with the text 'Sign up'.

Enter username:

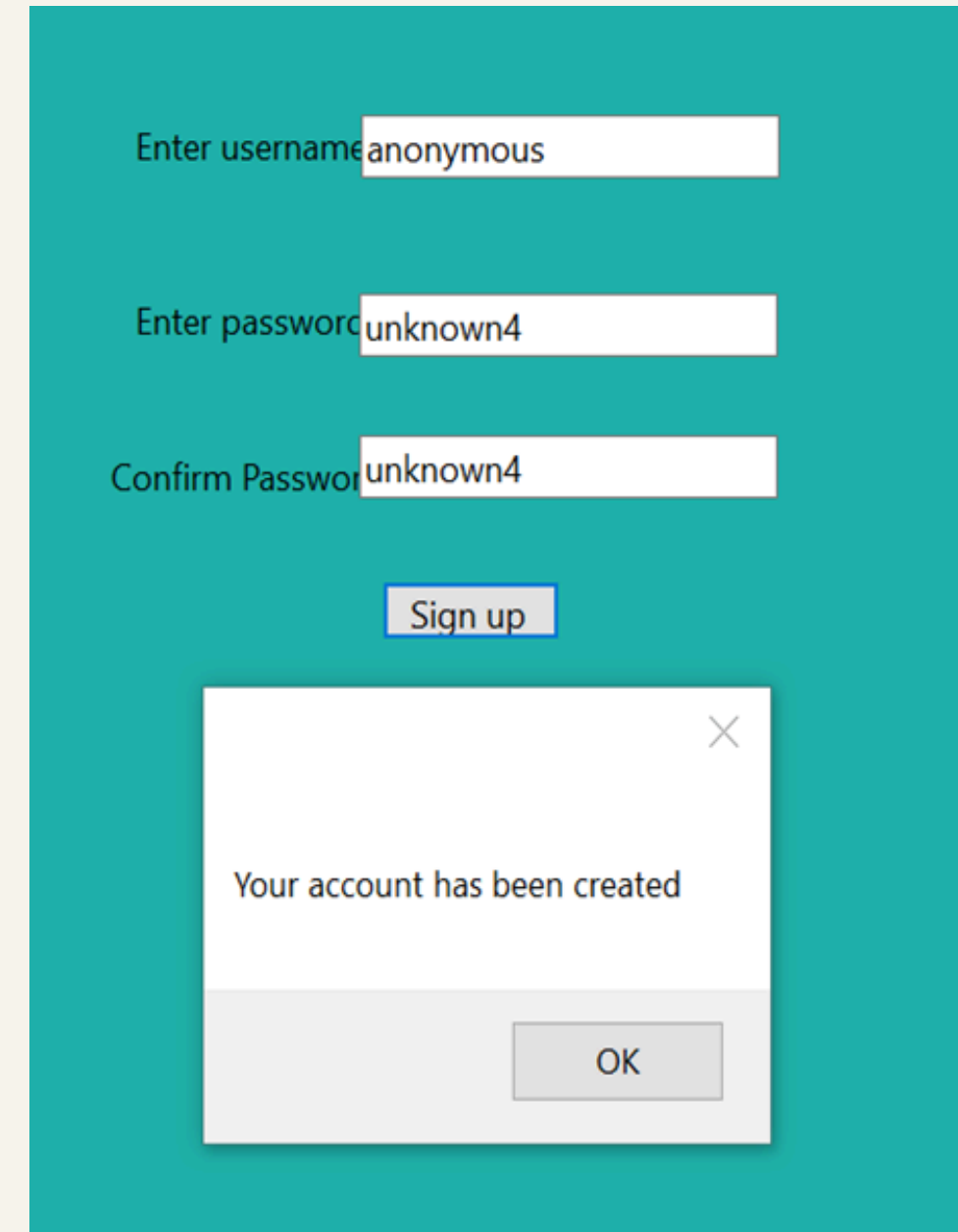
Enter password:

Confirm Password:

SIGN-UP

After entering the same password an account created confirmation message box will be displayed on screen.

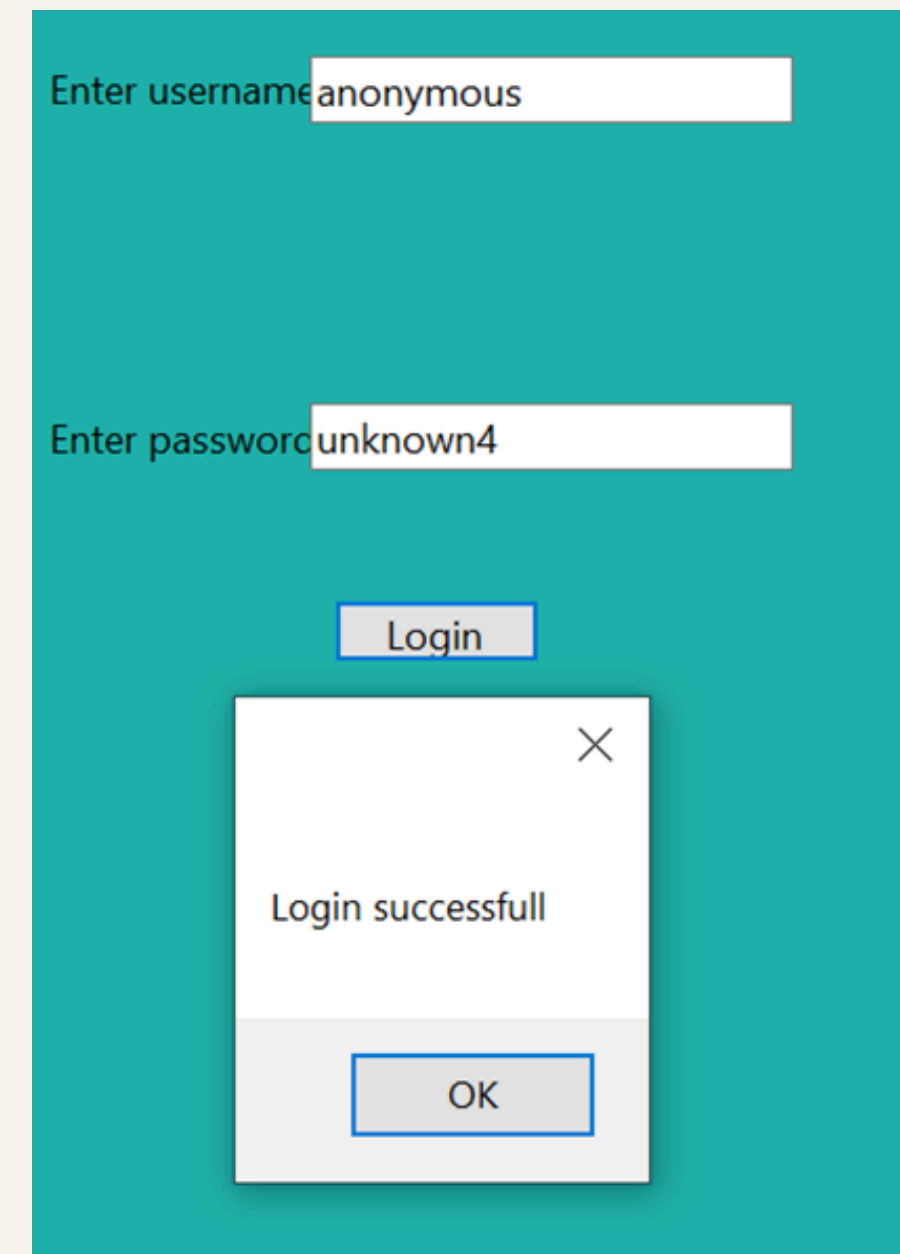
There will be a trouble to create an account if the user enters in correct password in confirmation box. The entry of valid and accurate information will lead to a successful account creation.



The image shows a sign-up form on a teal background. It contains three input fields: 'Enter username' with the value 'anonymous', 'Enter password' with the value 'unknown4', and 'Confirm Password' with the value 'unknown4'. Below these fields is a 'Sign up' button. A white confirmation message box is displayed in the foreground, stating 'Your account has been created' with an 'OK' button at the bottom right. The message box has a close button (X) in the top right corner.

LOG-IN

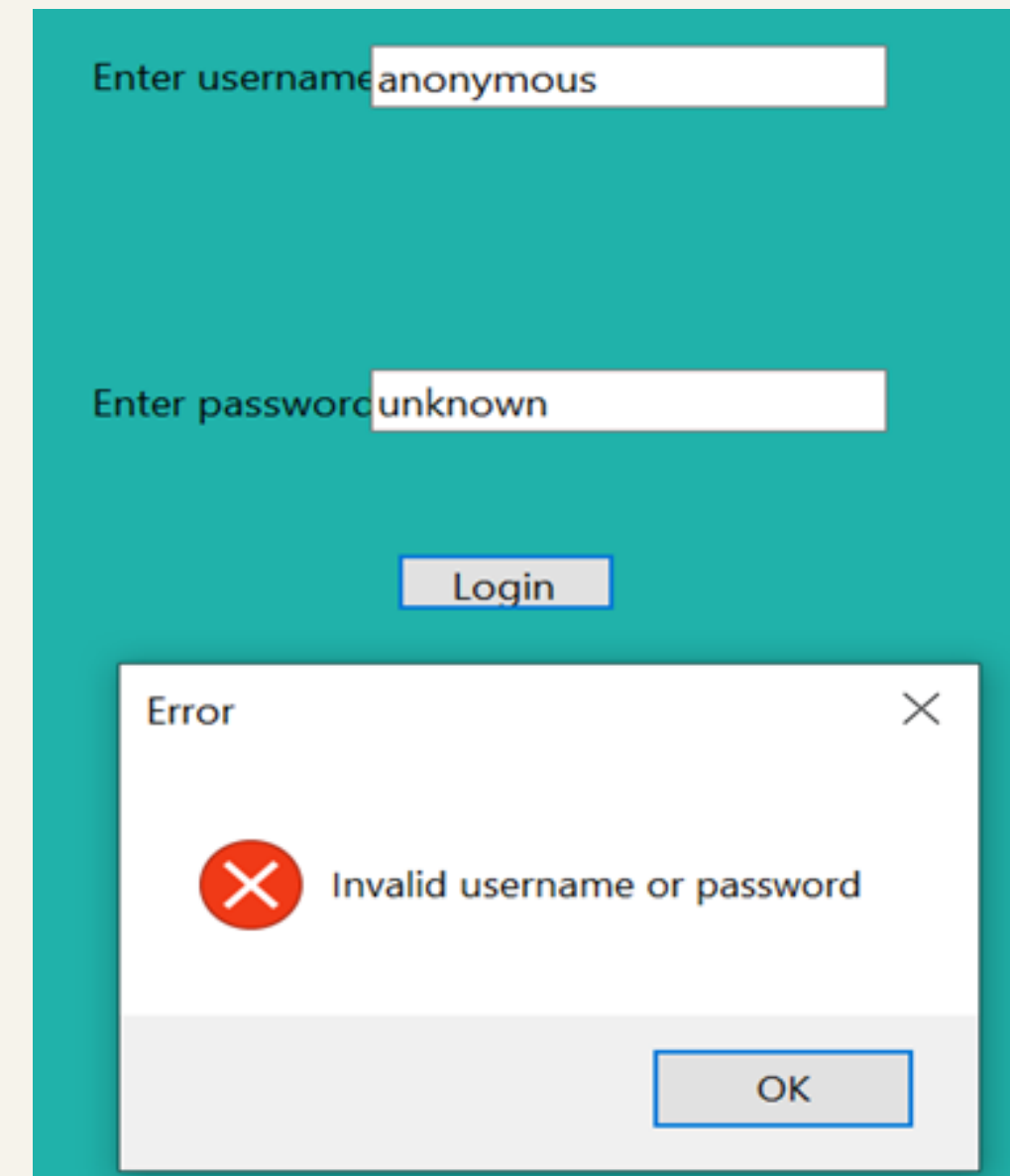
Then appears the log-in interface, this demands the user to enter the log-in credentials that are the username and password that the user has entered to create account. After entering the accurate information a prompt of log-in successful is displayed on the screen. After logging in the user will be able to purchase any item.



The screenshot shows a login form on a teal background. It has two input fields: 'Enter username' with the value 'anonymous' and 'Enter password' with the value 'unknown4'. Below these is a 'Login' button. A modal dialog box is open in the foreground, displaying the message 'Login successfull' (note the typo) and an 'OK' button. The dialog box has a close button (X) in the top right corner.

VALIDATION

There is a validation of entering the accurate password otherwise a prompt of invalid username and password will be displayed.



The screenshot shows a login interface with a teal background. It features two input fields: "Enter username" containing the text "anonymous" and "Enter password" containing the text "unknown". Below these fields is a "Login" button. An error dialog box is overlaid on the bottom right, titled "Error" with a close button (X). The dialog contains a red circle with a white "X" icon and the text "Invalid username or password". An "OK" button is located at the bottom right of the dialog.

MAIN MENU

back to main menu		Display	Check out	Total Price:	
Products	Price				Recoomeded Items:
Pencil:	90	Add to			
Rubber:	100	Add to			
Pen:	150	Add to			
Clip Board:	800	Add to			
Ink:	200	Add to			
Shapner:	40	Add to			
Remover:	50	Add to			
XYZ:	90	Add to			
		Shapner - Price: 40 XYZ - Price: 90 Pencil - Price: 90			

After successful login-in into the account, a main-menu is displayed on the screen

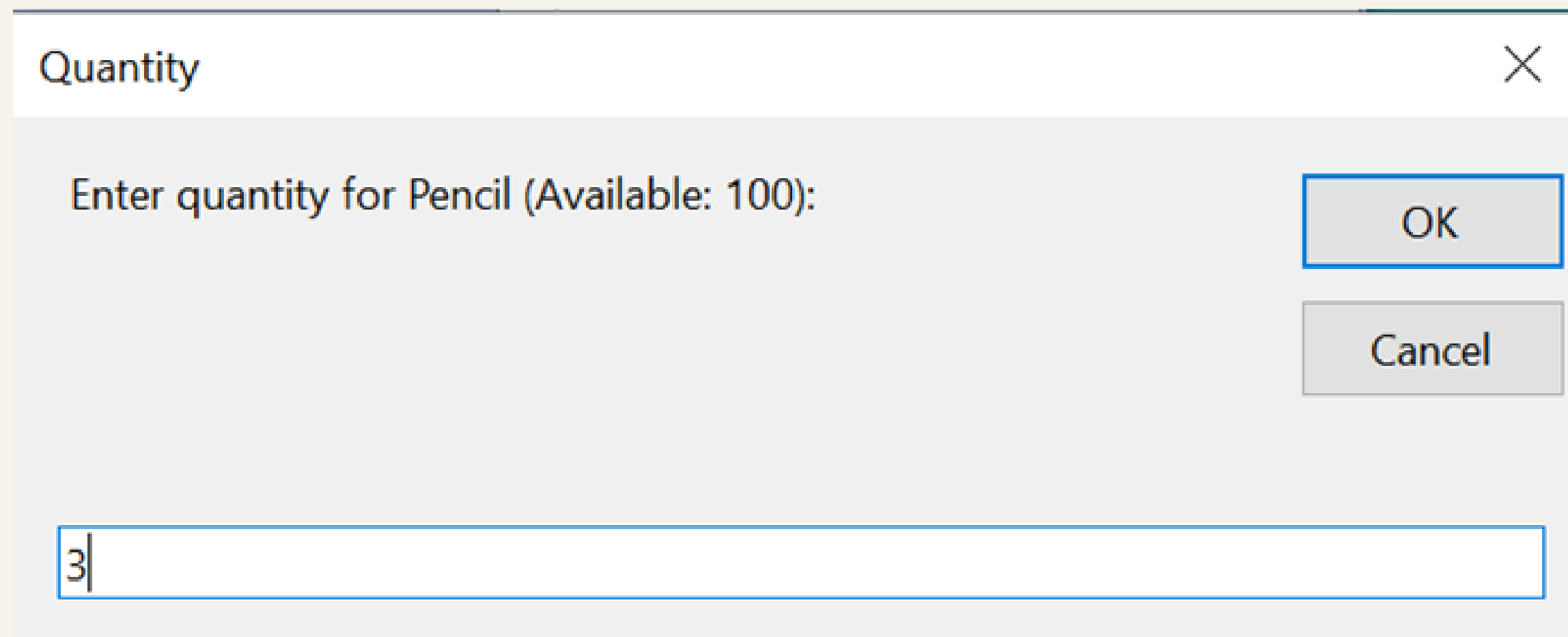
ADD PRODUCTS

Now, the user can add items of their own will that they want to purchase. The user can add an item into the cart by clicking on the Add to button.

Products	Price	
Pencil:	90	Add to
Rubber:	100	Add to
Pen:	150	Add to
Clip Board:	800	Add to
Ink:	200	Add to
Shapner:	40	Add to
Remover:	50	Add to
XYZ:	90	Add to

QUANTITY

After selecting a product, a screen displays that asks for the quantity the user wants of the product. The users enters his desired quantity.



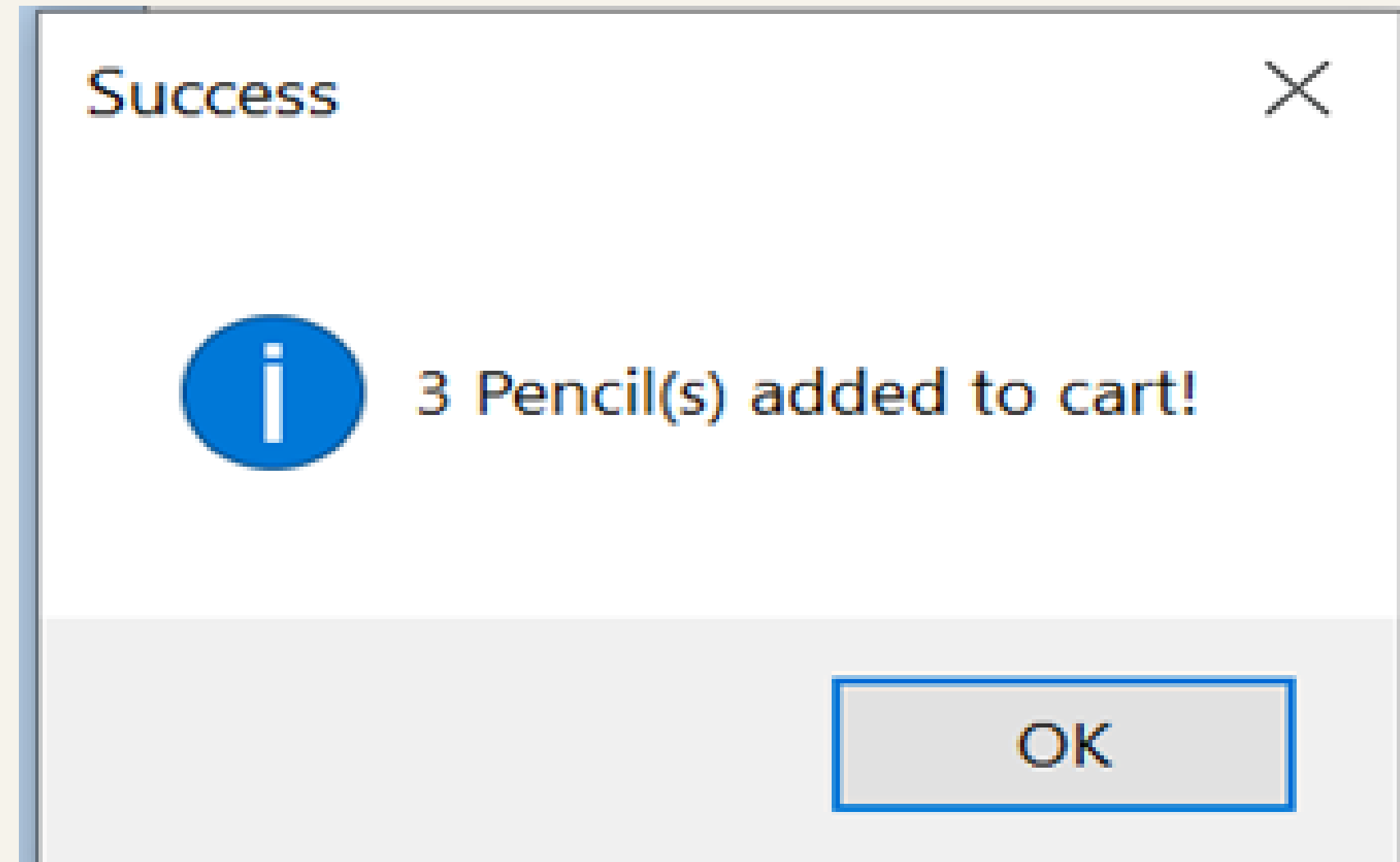
Quantity

Enter quantity for Pencil (Available: 100):

3

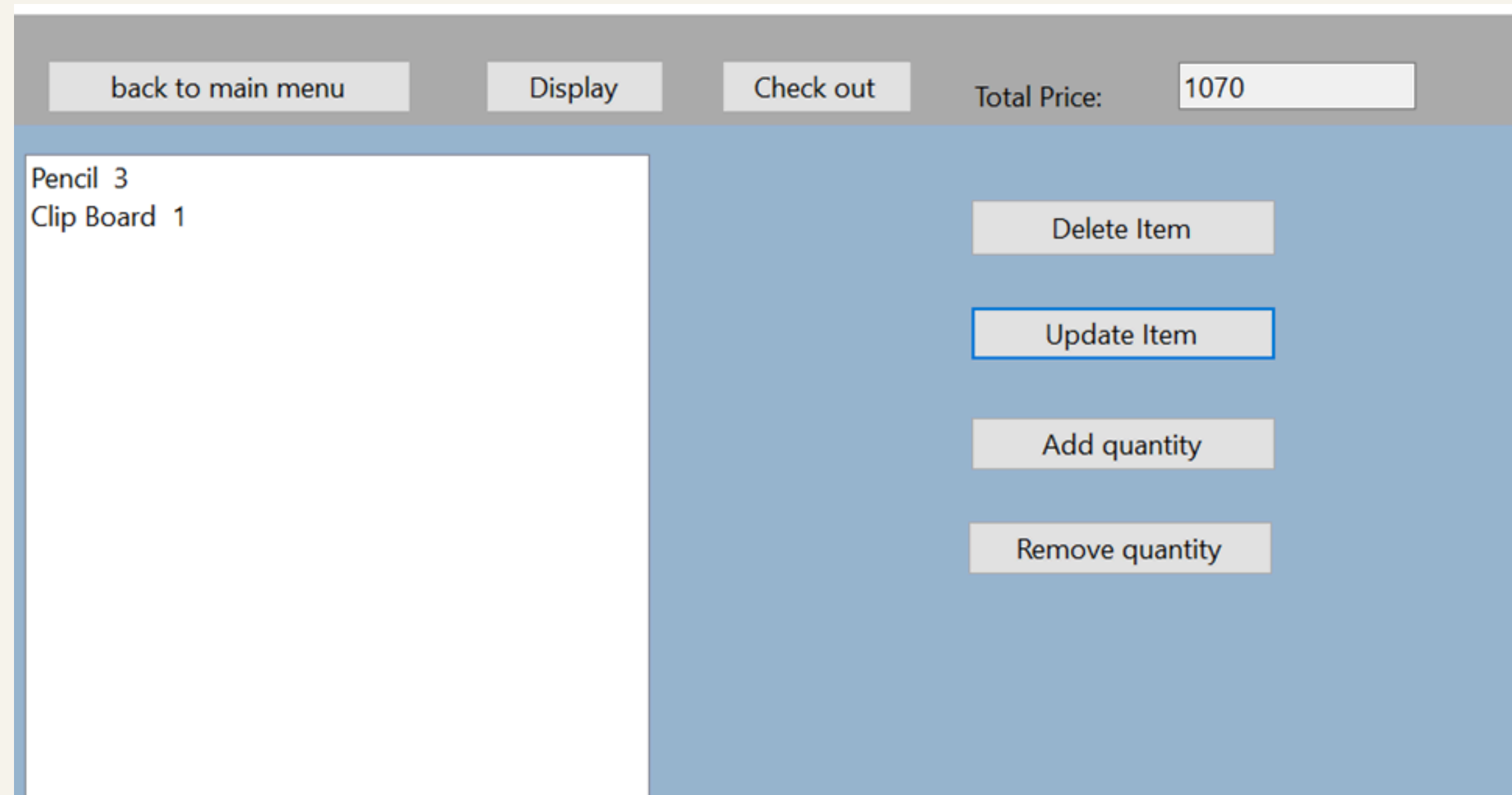
OK

Cancel



After clicking, the items are added in the cart. A success message box is displayed on the screen.

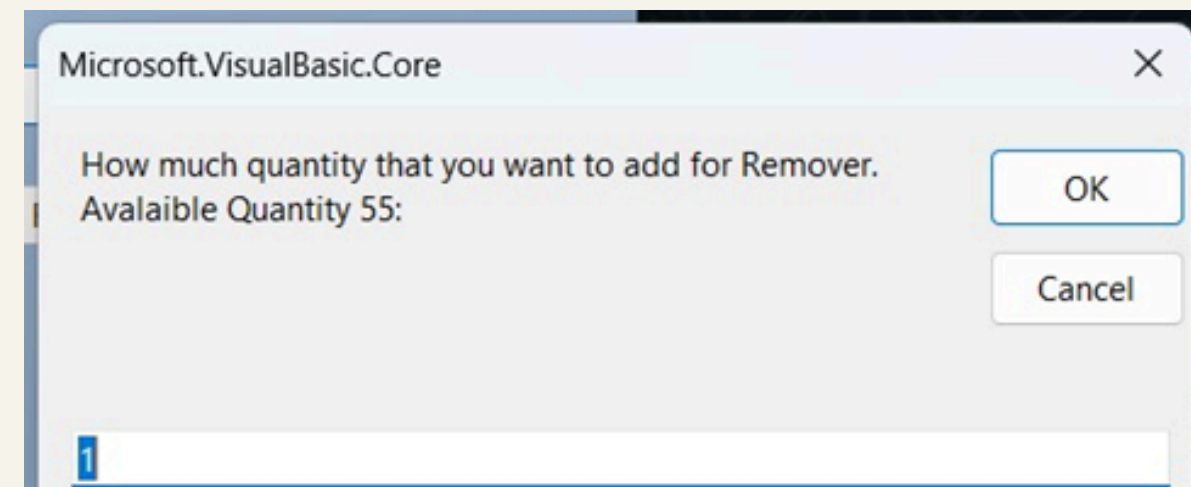
UPDATE



The user can also update the added items list. The update menu contains options to update the list by adding and removing quantity of the items and to delete an item from the list.

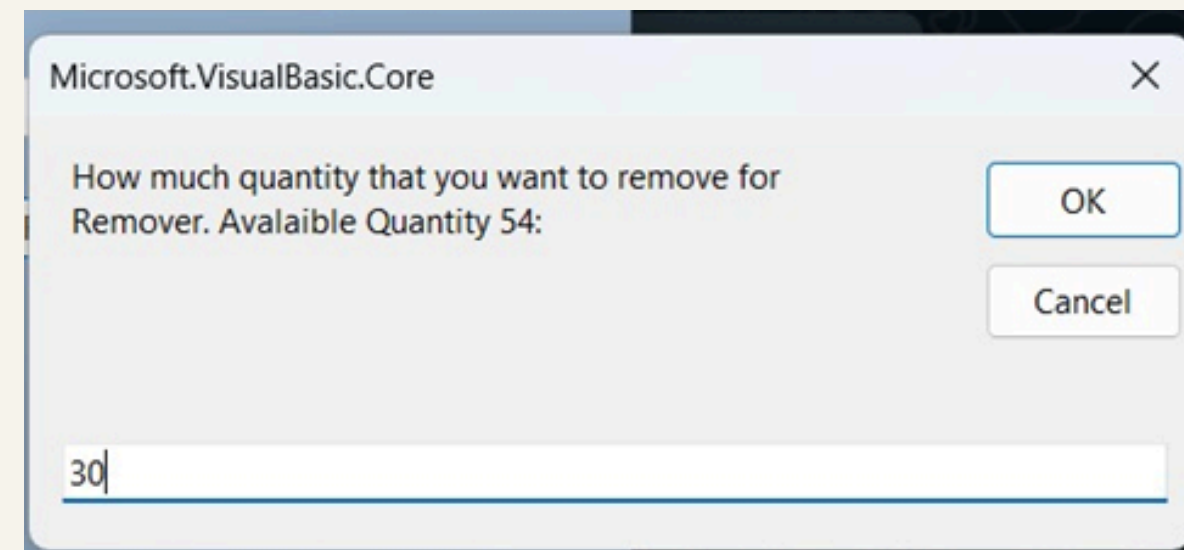
UPDATE QUANTITY

A display appears if a user want to update the quantity. The user choses weather he want to add more quantity or remove the quantity .The screen displaying Add Quantity appears while asking about the amount to add.

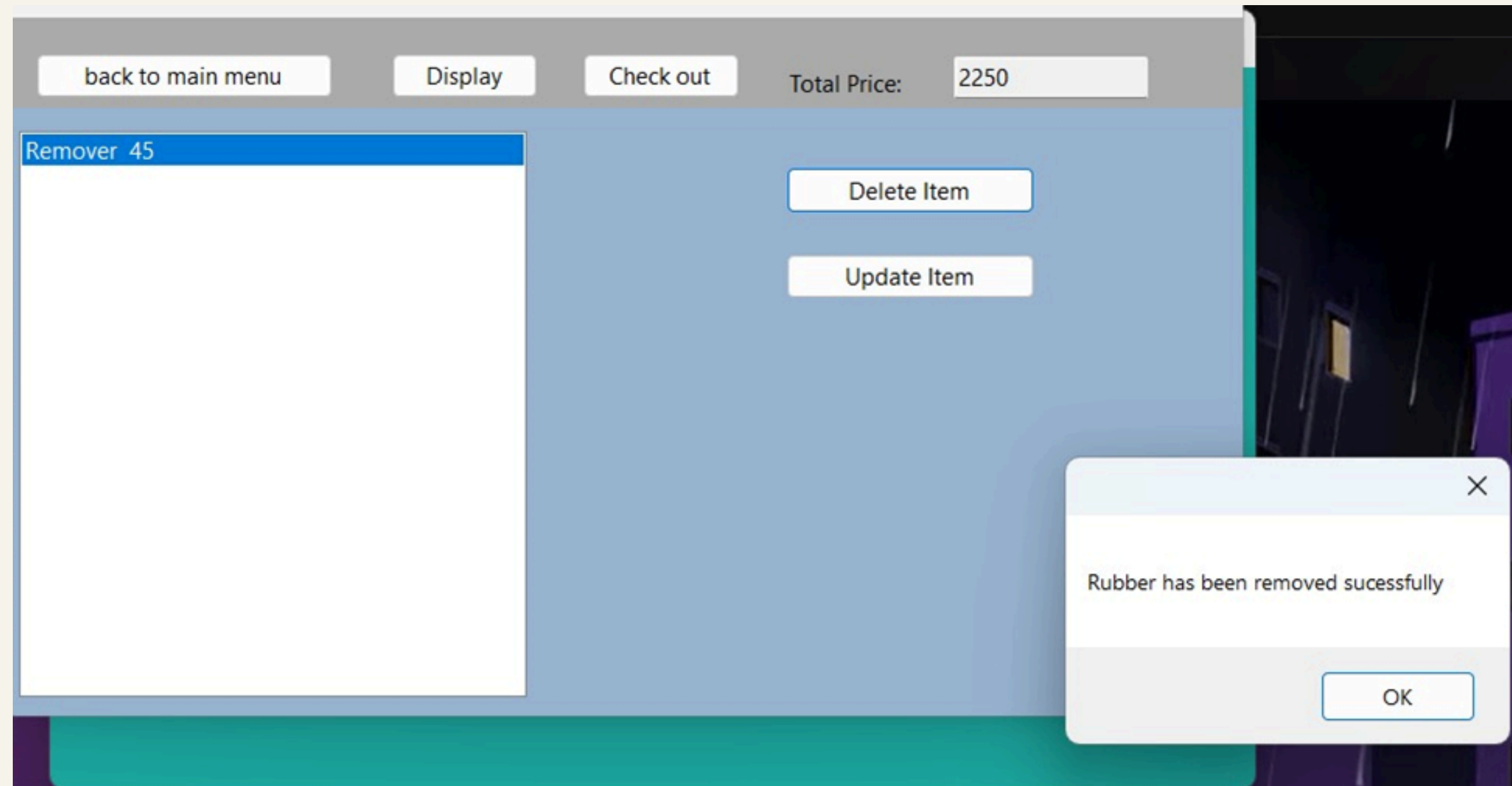


REMOVE QUANTITY

If the user wants to remove the quantity, a following screen displays that asks about the number of quantity to remove.



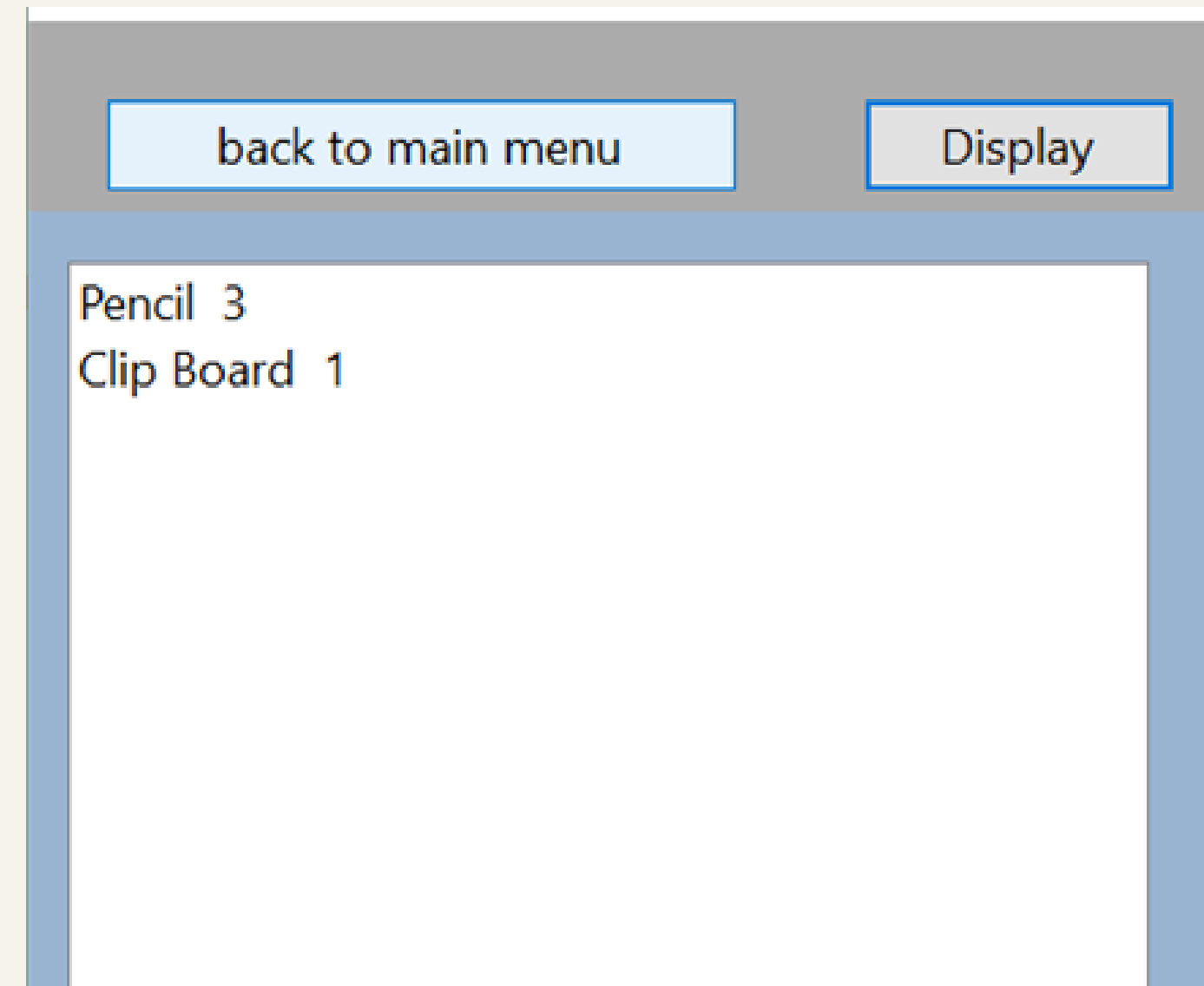
DELETE ITEM



The updation functionality also provides with the option to delete an item from the list if not desired anymore.

DISPLAY

The User can view the final list by clicking on the display button. The display shows the shopping cart of the user with all the products they are willing to buy with the total price.



CHECKOUT

After viewing the list, if the user is satisfied with the products quantity and amount then it proceeds to checkout. The user is first ask to pay the bill. There are two options down there to pay by cash or card.

The screenshot shows a web application window titled "listform". At the top, there is a navigation bar with buttons: "back to main menu", "Display", and "Check out". To the right of these buttons, it says "Total Price: 15960". Below the navigation bar, there are two large buttons: "Through Cash" and "Through Card". At the bottom of the form, there are input fields for "Discount: 50" and "Sales Tax: 7.5". Below these, it says "Total price after discount and Sales Tax: 8578.5000". To the right of this total, there is a "Check out" button.

PAYMENT BY CASH

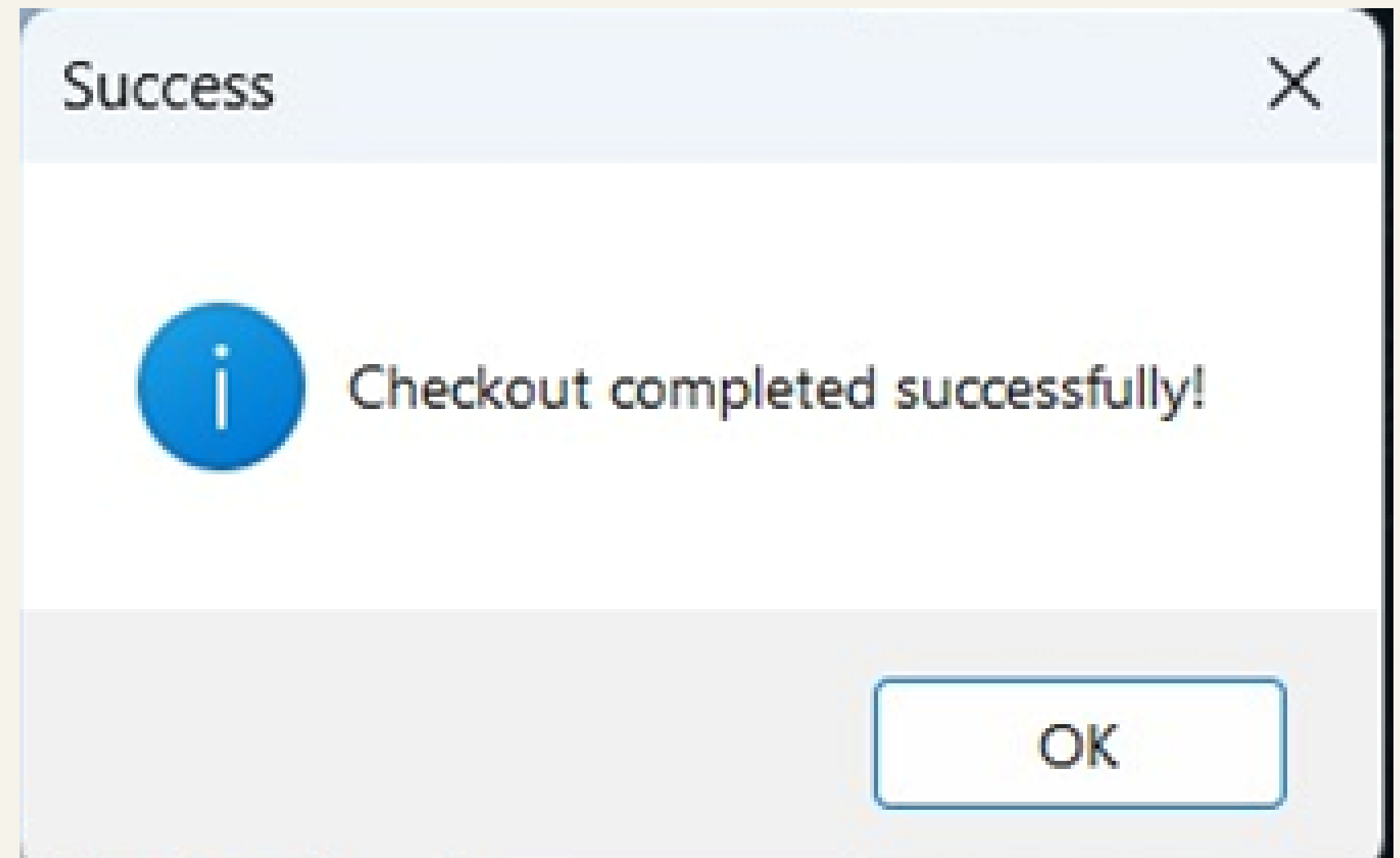
If the user is willing to pay by cash, then a following screen will be displayed.

The screenshot shows a payment interface with a light blue background. At the top, there is a grey header bar containing four elements: a button labeled 'back to main menu', a button labeled 'Display', a button labeled 'Check out', and a text label 'Total Price:' followed by a white input field containing the value '1070'. Below the header, the main area is light blue. On the left side, there are two buttons: 'Through Cash' (highlighted with a blue border) and 'Through Card'. At the bottom, there are two input fields: 'Discount:' with the value '25' and 'Sales Tax:' with the value '7.5'. Below these, there is a text label 'Total price after discount and Sales Tax:' followed by a white input field containing the value '862.68750'. To the right of this input field is a button labeled 'Check out'.

Field	Value
back to main menu	back to main menu
Display	Display
Check out	Check out
Total Price:	1070
Through Cash	Through Cash
Through Card	Through Card
Discount:	25
Sales Tax:	7.5
Total price after discount and Sales Tax:	862.68750
Check out	Check out

SUCCESSFUL CHECKOUT

After paying the bills, the user proceeds to check-out. Check-out confirms the user order and dispatches it further. A successful checkout message box appears on the screen



DISCOUNTS AND SALES TAX

Discount Criteria:

On Cash

Total price ≥ 800 : 10%

Total price > 1000 : 25%

Total price > 5000 : 35%

Total price > 15000 : 50%

On card

Total price ≥ 800 : 15%

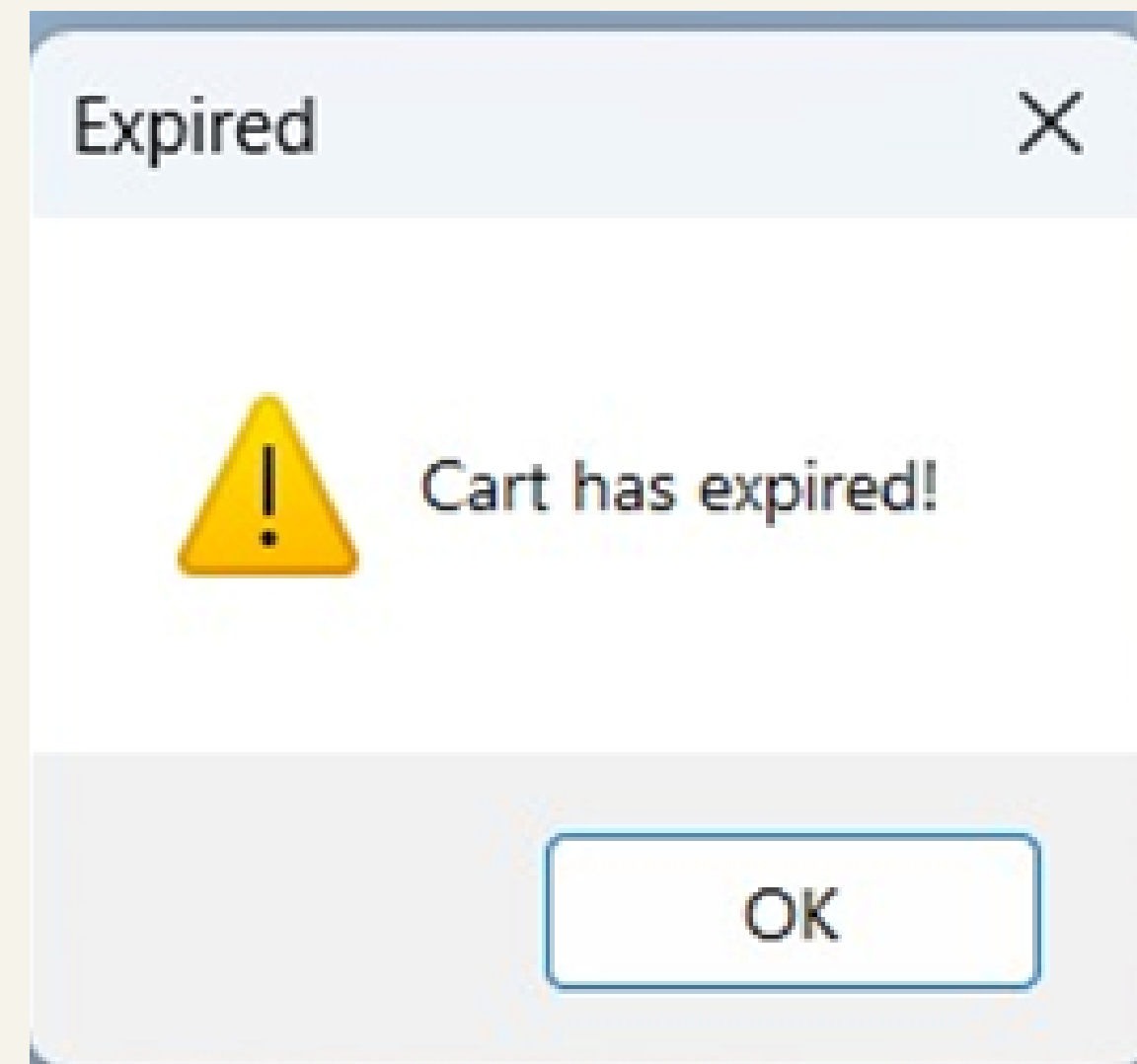
Total price > 1000 : 30%

Total price > 5000 : 40%

Total price > 15000 : 50%

CART EXPIRATION

This is the functionality of cart validation. The cart has a timer of fifteen seconds. The user has to confirm his order in fifteen minutes to proceed successful checkout. Other wise the other scenario appears that leads the cart to be expired. This displays a message box on the screen that prompts a message of cart expiry.



PRODUCT RECOMENDATION

This gives the user some extra recommendations on the basis of the items they have purchased or added to cart. This makes the user's shopping experience more fun and easy. Like if the user has added a rubber to their cart, so a recommendation of pencil and sharpener appears.

Recoomeded Items:

Shapner - Price: 40

XYZ - Price: 90

Pencil - Price: 90

SALES TAX

Discount:	<input type="text" value="25"/>	Sales Tax:	<input type="text" value="7.5"/>
Total price after discount and Sales Tax:		<input type="text" value="862.68750"/>	<input type="button" value="Check out"/>

The background features three vertical stripes on the left: a wide pink stripe, a medium blue stripe, and a narrow beige stripe. The right side of the image is a light beige background with two rectangular areas of small, light pink dots in the top right and bottom right corners.

THANK YOU