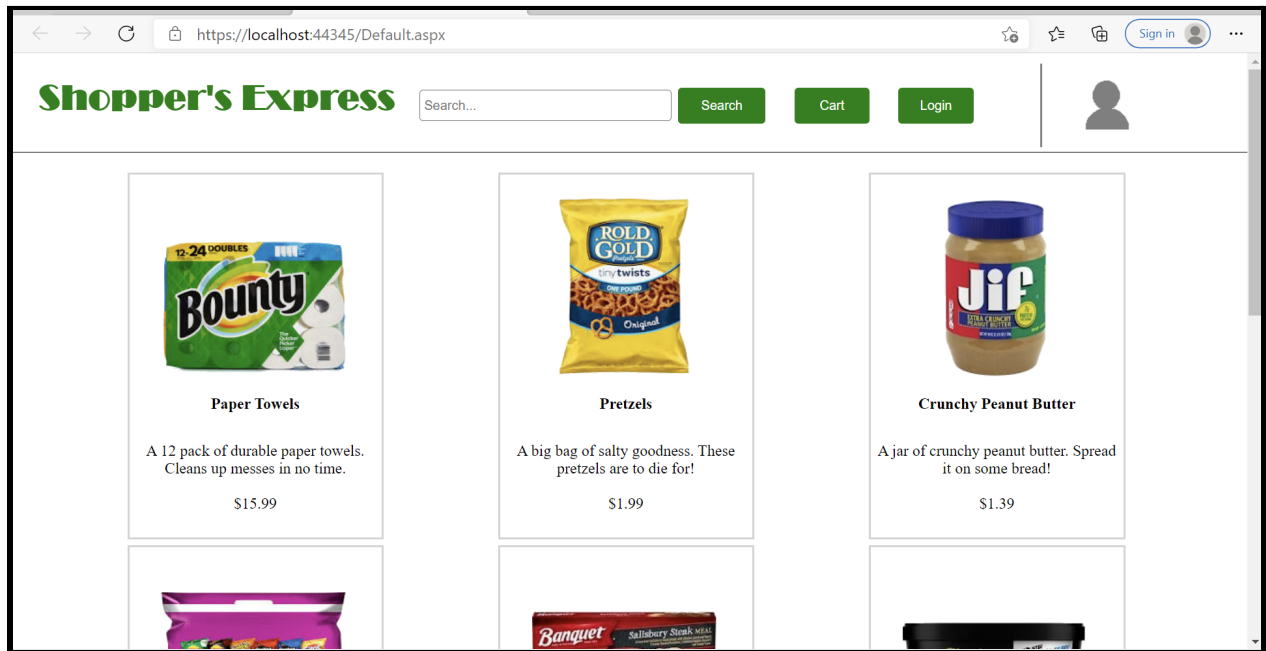


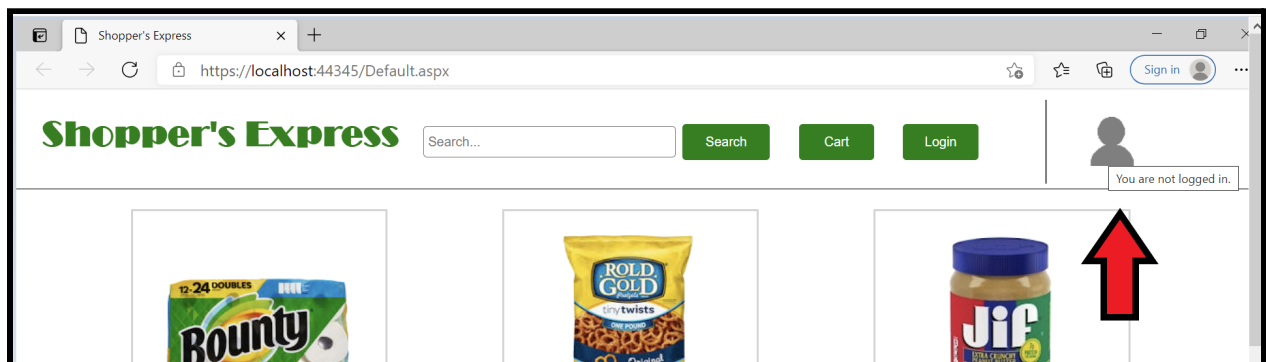
Charles Quigley, Thomas Gonzalez  
COSC 3351  
23 April, 2021

## Shopper's Express

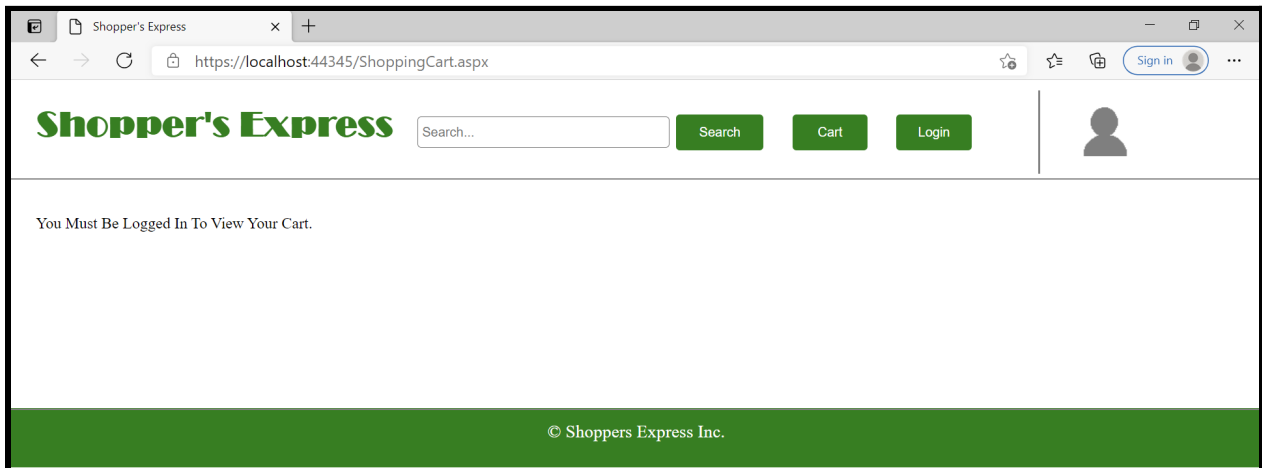


Our website is called Shopper's Express. We are framing it as a website for a wholesale grocery store like Sam's Club or Costco in which people who purchase memberships get a discounted price on goods.

Anybody can view the website to see what's in stock, but in order to add things to their online shopping carts, they must have a membership. For example, when you hover over the face icon in the top-right corner of the page, you will see a tooltip pop up that states you are not logged in.



So, when you try to access your online shopping cart by clicking the “Cart” button, you will see this page.



You must be logged in to view your shopping cart.

Whenever you are on the page Default.aspx, you will see 9 products that the store offers. These products are **not** hard-coded onto this web page. These products are dynamically placed onto the page via SQL queries to our database, which bind database data to objects known as DataList's.

```
0 references
protected void Page_Load(object sender, EventArgs e)
{
    //Citing a helpful source: https://www.youtube.com/watch?v=BnDC8gM6RCT

    //Pulling connection string from our web.config file
    string connStr = ConfigurationManager.ConnectionStrings["StoreConnection"].ConnectionString;

    //Creating a new Sql connection to our database specified by the connection string
    System.Data.SqlClient.SqlConnection connection = new System.Data.SqlClient.SqlConnection(connStr);

    //Opening the connection for database access
    connection.Open();

    //Creating a new sql command
    System.Data.SqlClient.SqlCommand command = connection.CreateCommand();
    command.CommandType = System.Data.CommandType.Text;

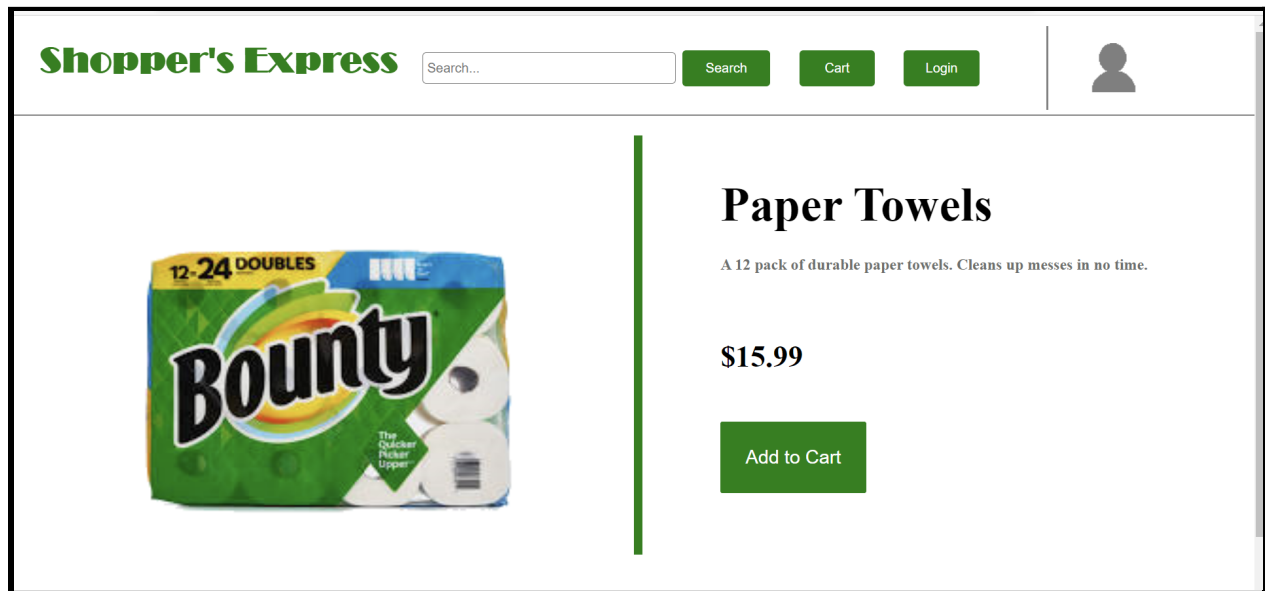
    //Query the database for products whose product Id's are less than 4,
    //that should return 3 rows from our database. We will show these 3 rows as 1 column
    //on our web page.
    command.CommandText = "SELECT * FROM [Product] WHERE [PRODUCT_ID] < 4";

    //Execute this query...might not need this because of DataAdapter...but website works and don't want
    command.ExecuteNonQuery();

    //DataList uses Datatable. Datatable is like the middle man between database table and dataList object
    //The queried rows are placed in the dataTable, which is used to populate our data list.
    System.Data.DataTable table = new System.Data.DataTable();
}
```

Default.aspx Code Behind

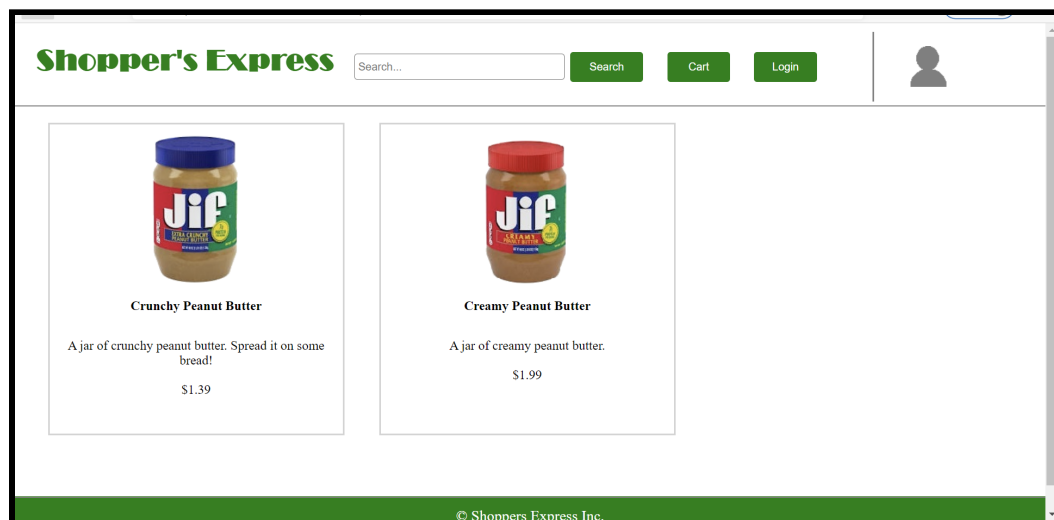
Whenever you click on one of the product images on Default.aspx, you will be taken to this page.



ProductDescriptionPage.aspx

This page is used to display the product descriptions and “add to cart” features for all products that we are selling. This is accomplished by using a Session object that holds the product’s unique ID. The Session object is created when the user clicks on a product’s image in Default.aspx.

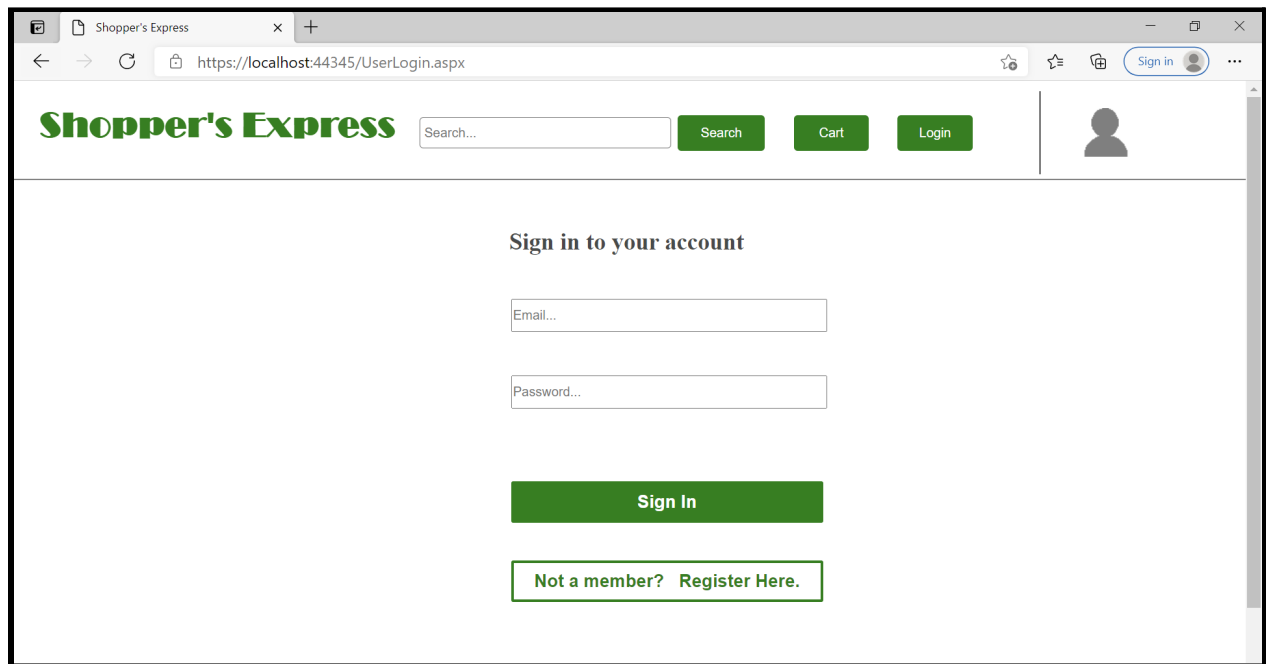
We also have a search bar that allows users to look for products. For example, typing the word “peanut” into the search bar will yield this page:



Search.aspx

Whenever we click the “Search” button, a Session object is created that contains the inputted search string. Within the Page\_Load() function in Search.aspx.cs, we retrieve this search string from the Session object and perform an SQL query to the database. Only the product names are searched for. So, since we have 2 products in our database that have “peanut” in their names, these 2 products are the only ones that are displayed.

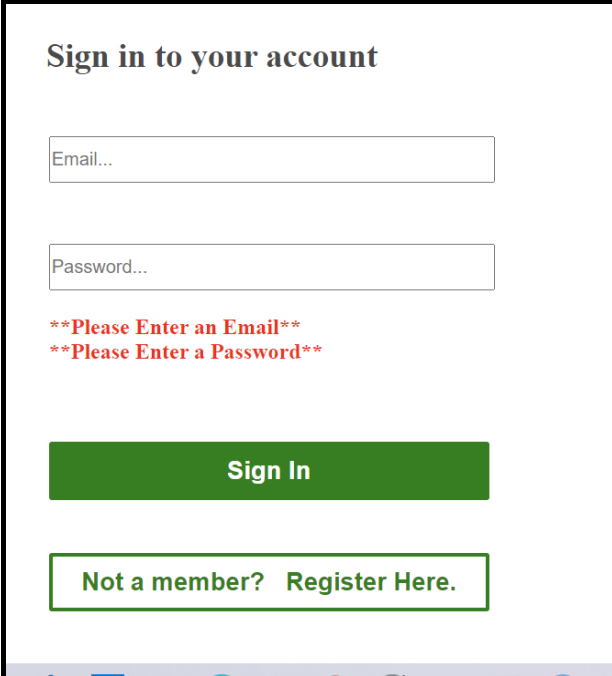
Naturally, logging in also connects to the database. Here is our Login page:



The screenshot shows a web browser window with the title "Shopper's Express" and the URL "https://localhost:44345/UserLogin.aspx". The page features a header with the "Shopper's Express" logo, a search bar, and buttons for "Search", "Cart", and "Login". A user profile icon is also present. The main content area is titled "Sign in to your account" and contains two input fields for "Email..." and "Password...". Below these fields is a green "Sign In" button. At the bottom, there is a link that says "Not a member? Register Here.".

UserLogin.aspx

You can access this page by clicking the “Login” button at the top of the website. Validation checks have been implemented on this page. For example, if we just click the “Sign In” button without entering any information, we get this:



The screenshot shows a login form titled "Sign in to your account". It contains two input fields: "Email..." and "Password...". Below the "Email..." field, there is a red error message: "\*\*Please Enter an Email\*\*". Below the "Password..." field, there is a red error message: "\*\*Please Enter a Password\*\*". At the bottom of the form, there is a green "Sign In" button and a link that says "Not a member? Register Here.".

Regex Expression Validation has also been implemented for the Email textbox. Once the user enters a valid email and password and clicks the “Sign In” button, the database will be queried to see if the inputted email and password exist in the database. If they do not exist, then an error message will be displayed. If they do exist, then the user will be able to log in.

You can log in as either a Shopper’s Express member on this page or an admin. For example, try these two accounts:

**1. Member account**

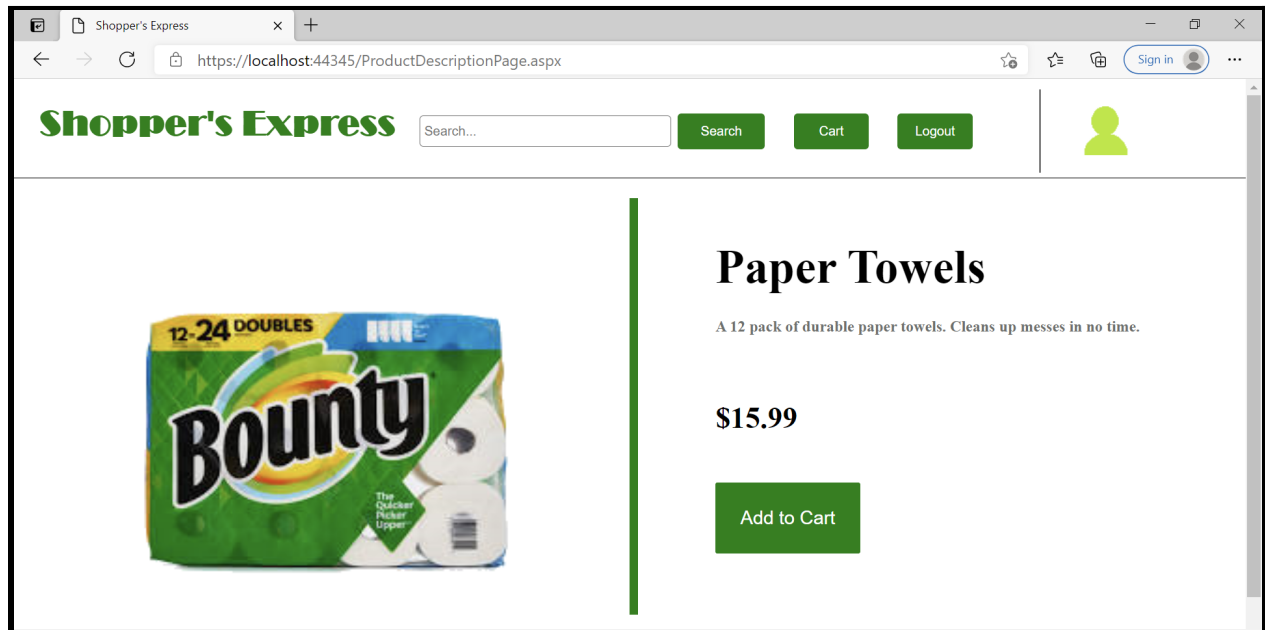
- a. Email: [Jerome123@gmail.com](mailto:Jerome123@gmail.com)
- b. Password: password

**2. Admin account**

- a. Email: [Admin@gmail.com](mailto:Admin@gmail.com)
- b. Password: admin5

**Account information is stored in Cookies that expire in 10 minutes if you do not log out before then.**

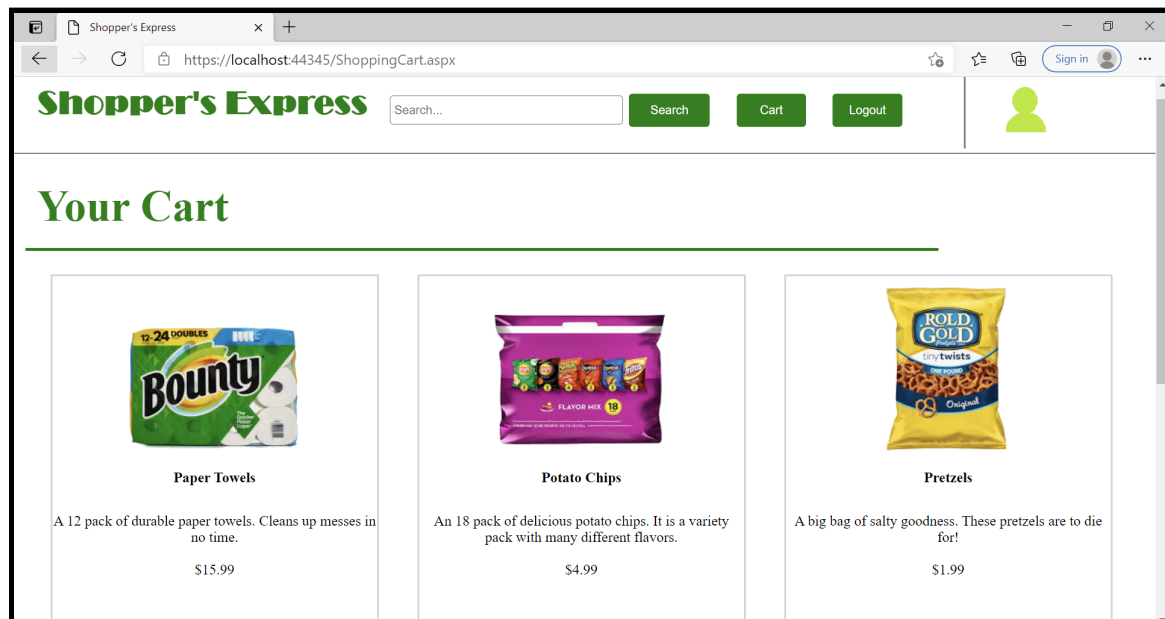
Logging in as a **Member** will allow you to add things to your cart and purchase items.

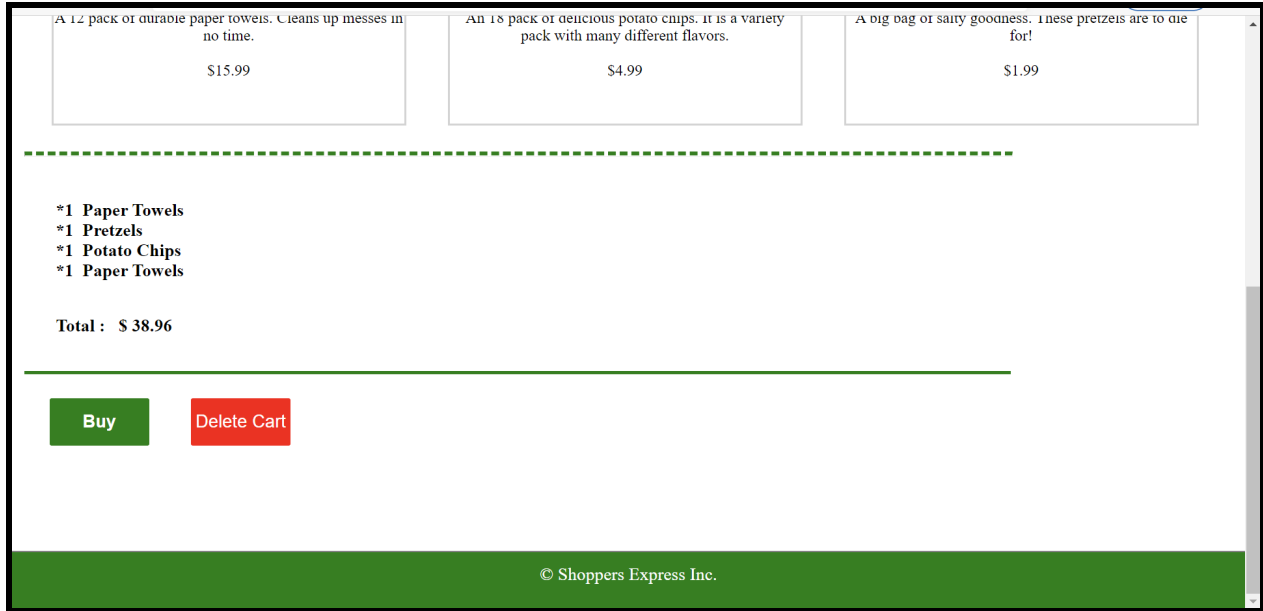


Click the “Add to Cart” button to add to your cart.

Let’s say we add these items to our cart, in this order: Paper Towels, Pretzels, Potato Chips, Paper Towels.

Then, clicking the “Cart” button at the top of the website will bring us to this page:

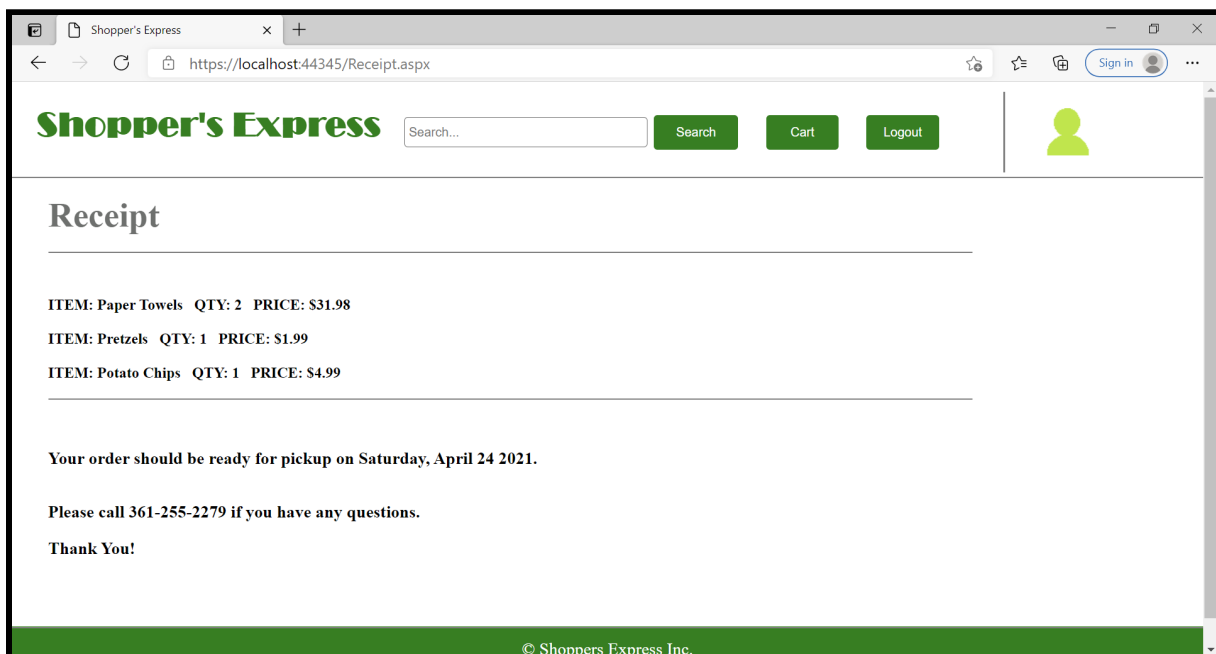




ShoppingCart.aspx

As we can see, our cart is displayed on the page and we can see the total price of our order. **All of this information is stored using Cookies that expire 10 minutes after the last time you added an item to the cart.**

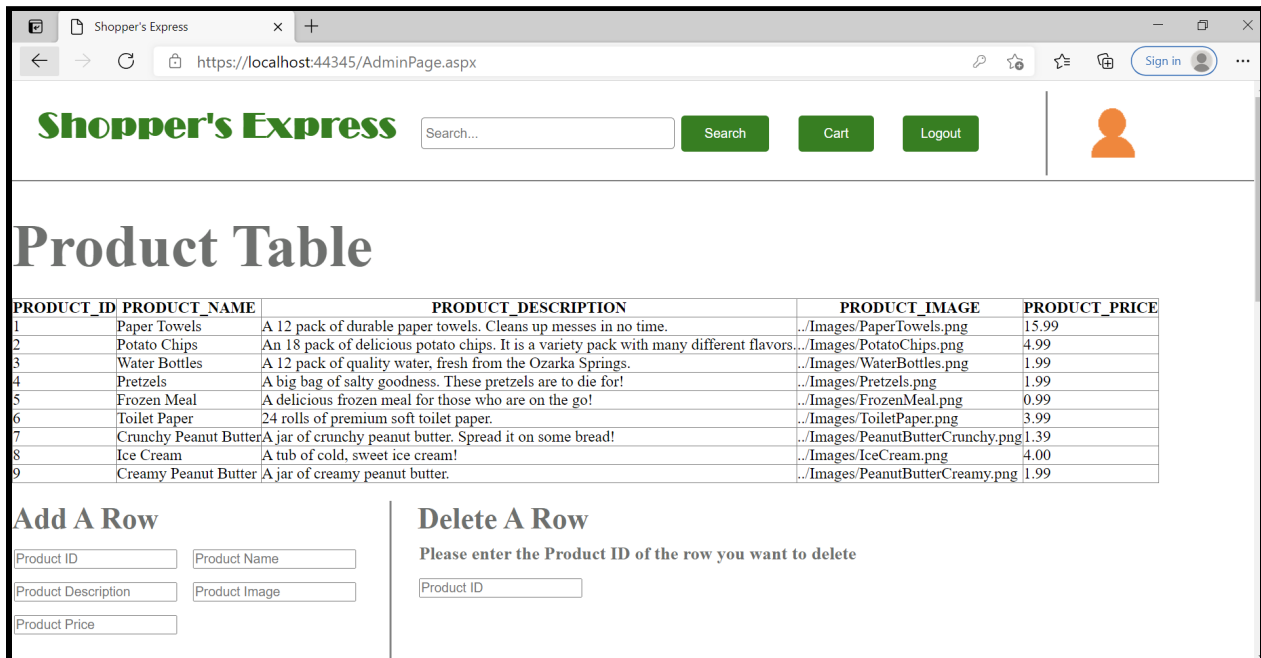
Clicking the “Delete Cart” button will delete the cookies. Clicking the “Buy” button will send you to the Receipt page:



Receipt.aspx

As we can see, we bought a quantity of 2 paper towels, 1 bag of pretzels, and 1 bag of potato chips. We can pick our items up from the store's physical location on Saturday, April 24 2021. This date is **not** hard coded, but rather is displayed using a DateTime object in the code behind.

Logging in as an **Admin** will bring you to AdminPage.aspx



The screenshot shows a web browser window titled "Shopper's Express" with the URL "https://localhost:44345/AdminPage.aspx". The page features a navigation bar with the "Shopper's Express" logo, a search bar, and buttons for "Search", "Cart", and "Logout". A user profile icon is visible in the top right corner. The main content area is titled "Product Table" and displays a table with the following data:

PRODUCT_ID	PRODUCT_NAME	PRODUCT_DESCRIPTION	PRODUCT_IMAGE	PRODUCT_PRICE
1	Paper Towels	A 12 pack of durable paper towels. Cleans up messes in no time.	../Images/PaperTowels.png	15.99
2	Potato Chips	An 18 pack of delicious potato chips. It is a variety pack with many different flavors.	../Images/PotatoChips.png	4.99
3	Water Bottles	A 12 pack of quality water, fresh from the Ozarka Springs.	../Images/WaterBottles.png	1.99
4	Pretzels	A big bag of salty goodness. These pretzels are to die for!	../Images/Pretzels.png	1.99
5	Frozen Meal	A delicious frozen meal for those who are on the go!	../Images/FrozenMeal.png	0.99
6	Toilet Paper	24 rolls of premium soft toilet paper.	../Images/ToiletPaper.png	3.99
7	Crunchy Peanut Butter	A jar of crunchy peanut butter. Spread it on some bread!	../Images/PeanutButterCrunchy.png	1.39
8	Ice Cream	A tub of cold, sweet ice cream!	../Images/IceCream.png	4.00
9	Creamy Peanut Butter	A jar of creamy peanut butter.	../Images/PeanutButterCreamy.png	1.99

Below the table, there are two sections: "Add A Row" and "Delete A Row". The "Add A Row" section contains five input fields for "Product ID", "Product Name", "Product Description", "Product Image", and "Product Price". The "Delete A Row" section contains a single input field for "Product ID" and a prompt: "Please enter the Product ID of the row you want to delete".

AdminPage.aspx

On this page, we use GridView objects to display 2 tables in our database: The Product table and the User table. The User table holds all of our members' information. You can add and delete rows from our database tables on this page. Validation checks have been implemented for the text boxes.



Finally, on our Login page, you can register to become a member:

Sign in to your account

Email...

Password...

Sign In

Not a member? [Register Here.](#)

© Shoppers Express Inc.

Clicking this button will bring you to this page:

Shopper's Express

Search...

Search

Cart

Login

Create an account

Membership costs \$50 per year.

Email

Card Expiration Date

Password

16 Digit Card Number

Card Security Code

Confirm Password

Sign Up

© Shoppers Express Inc.

SignUp.aspx

Membership costs \$50 and lasts for 1 year. Validation checks have been put in place for the textboxes.

- Email must be in a valid email format (example: [name@gmail.com](#))
- Card Number must be a 16-digit card number.

- Expiration Date must be in the form MM/YY (example: 11/22).
- Security Code must be a 3 digit number (example: 777).
- Password and Confirm Password must match.

Once you create a Member account, you must log into that account on UserLogin.aspx.

**These are the Internet Programming concepts we used for our project:**

1. HTML, CSS, and inline Javascript.
2. ASP.NET
3. Validation Controls
4. HTML5 footer
5. CSS3 border-radius and vh and vw units.
6. SQL Database consisting of 3 tables.
7. Master Page
8. GridViews and DataLists
9. Session Objects and Cookies

**Here are the sources for all of our Product Images:**

1. [Frozen Meal](#)
2. [Ice Cream](#)
3. [Paper Towels](#)
4. [Creamy Peanut Butter](#)
5. [Crunchy Peanut Butter](#)
6. [Potato Chips](#)
7. [Pretzels](#)
8. [Soda](#)
9. [Toilet Paper](#)
10. [Water Bottles](#)

**We hope you have fun with our website! Thank you!**