

# **USER MANUAL**

*CSE 412 : Database Management*

**Group 27**

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# USER MANUAL

## TABLE OF CONTENTS

<b>GENERAL INFORMATION</b>	<b>2</b>
1.1 Application Overview	2
1.2 Application Infrastructure	2
1.3 Application Developers	3
<b>APPLICATION FEATURES</b>	<b>4</b>
2.1 Login	4
2.1.1 Creating a new account	4
2.1.2 Common Errors	5
Figure 1: Missing Account Name	5
Figure 2: Missing Address Information	5
Figure 3: Missing Email Address	6
2.1.3 Signing into an account	6
2.2 Product Catalog	6
Figure 1.1: Signing into Betty Grove Account	7
Figure 1.2: Logged into Betty Grove Account	7
Figure 1.3: Adding an Item to Cart	8
2.3 Shopping Cart	8
Figure 1.1: Click the Shopping Cart button	9
Figure 1.2: Check the Item has been added in the Shopping Cart Screen	9
Figure 1.3: Click the Purchase button	10
2.4 Admin Privileges	10
2.5 Updating Catalog	11
2.5.2 Common Errors	12
Figure 1: Missing Product Name	12
Figure 2: Missing Product Supply or invalid input (Less than or equal to 0)	12
Figure 3: Missing Product Brand	13
Figure 4: Missing Product Price or invalid input (Less than or equal to 0)	13

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# GENERAL INFORMATION

## *1.1 Application Overview*

The team has created an application that allows users to select available products from an extensive catalog and purchase them by adding those products into their respective shopping cart. Replicating the core fundamentals of an online retail system such as Amazon. The application features synthetically generated data containing valuable product information such as the product name, the product's supplier, the price of the product and the quantity available for purchase. In order for any purchase to be made on the application, the buyer must either create an account or sign in to their preexisting account which contains their basic information of their name, address, phone number and email address in order to complete the orders. Furthermore, the application is also able to display critical information about the order such as its current status and whether it was canceled by the user.

## *1.2 Application Infrastructure*

For the application, the team primarily utilized Node.js to manage the JavaScript libraries and maintain the connection to the PostgreSQL database. This was accomplished through the use of postgres npm package that also granted the convenience to host the database locally and start the application on the teams' local machines whenever desired. This allowed a smooth interaction between the web application and the manipulation of data on the PostgreSQL database. Furthermore, the team utilized GitHub for version control, monitoring any code changes that were made for the application and any changes of the database in PostgreSQL. The team purposely kept the project stack as lightweight as possible focusing primarily on the vital parts needed to deliver the core functionality of the application.

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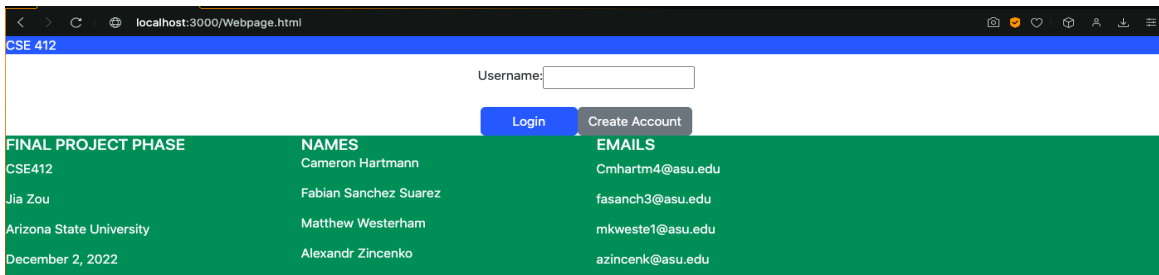
### *1.3 Application Developers*

The application was created by Group 27 which consisted of Cameron Hartmann, Fabian Sanchez Suarez, Matthew Westerham and Alexandr Zincenko.

# APPLICATION FEATURES

## 2.1 Login

When launching the application, the user is greeted with a Login Screen that has two options to either create a new account or login into their existing account within the application.



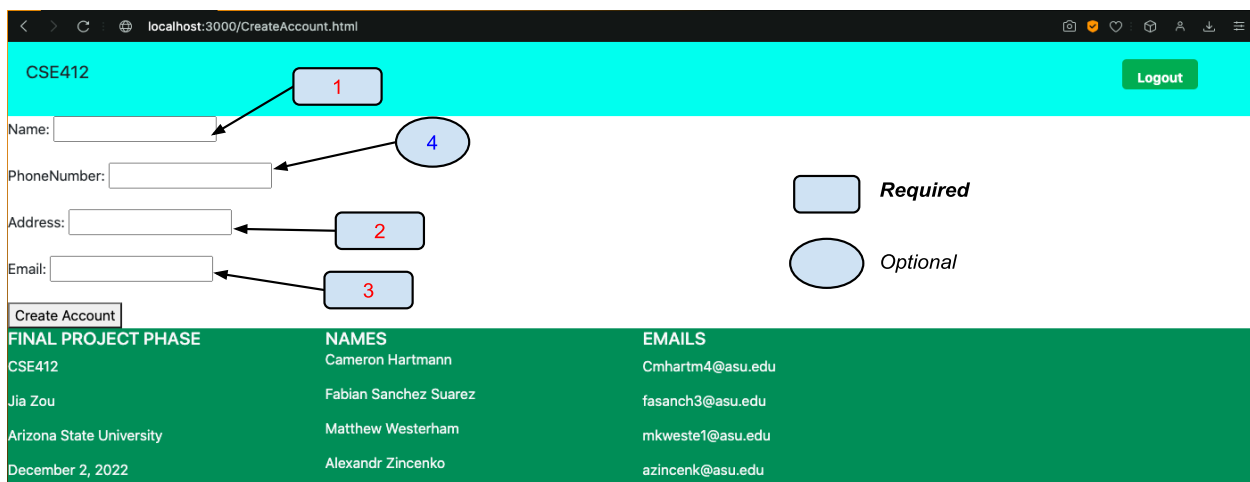
The screenshot shows a web browser window with the URL `localhost:3000/Webpage.html`. The page has a blue header with "CSE 412" on the left. In the center, there is a "Username:" label followed by a text input field. Below the input field are two buttons: "Login" (blue) and "Create Account" (grey). At the bottom of the page, there is a green table with three columns: "FINAL PROJECT PHASE", "NAMES", and "EMAILS".

FINAL PROJECT PHASE	NAMES	EMAILS
CSE412	Cameron Hartmann	Cmhartm4@asu.edu
Jia Zou	Fabian Sanchez Suarez	fasanch3@asu.edu
Arizona State University	Matthew Westerham	mkweste1@asu.edu
December 2, 2022	Alexandr Zinenko	azincenk@asu.edu

### 2.1.1 Creating a new account

Should the user select the Create Account option, they will be redirected to a separate page where they can create their new account by filling out all the necessary information required:

- 1) Write the name of the account
- 2) Write their residential address
- 3) Write their active email address
- 4) [Optional] Write their active phone number
- 5) Click the Create Account button



The screenshot shows a web browser window with the URL `localhost:3000/CreateAccount.html`. The page has a cyan header with "CSE412" on the left and a "Logout" button on the right. Below the header, there are four input fields: "Name:", "PhoneNumber:", "Address:", and "Email:". To the right of these fields is a legend: a blue rectangle labeled "Required" and a blue oval labeled "Optional". Arrows point from the legend to the input fields: "1" (Required) points to "Name:", "4" (Optional) points to "PhoneNumber:", "2" (Required) points to "Address:", and "3" (Required) points to "Email:". Below the input fields is a "Create Account" button. At the bottom of the page, there is a green table with three columns: "FINAL PROJECT PHASE", "NAMES", and "EMAILS".

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CSE412	Cameron Hartmann	Cmhartm4@asu.edu
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If the user inputs all the required information, then the application successfully creates the account and displays the following message.

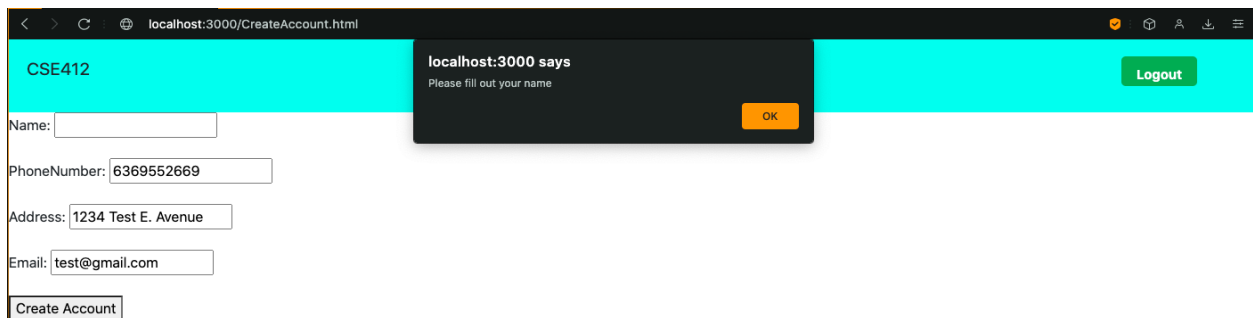


A screenshot of a web browser at localhost:3000/CreateAccount.html. The page has a cyan header with 'CSE412' on the left and a 'Logout' button on the right. Below the header, there are input fields for 'Name' (containing 'Foo Bar'), 'PhoneNumber', 'Address' (containing '1234 Test E. Avenue'), and 'Email' (containing 'test@gmail.com'). At the bottom left is a 'Create Account' button. A red-bordered message box at the bottom left displays the text 'Account has been Created!'.

### 2.1.2 Common Errors

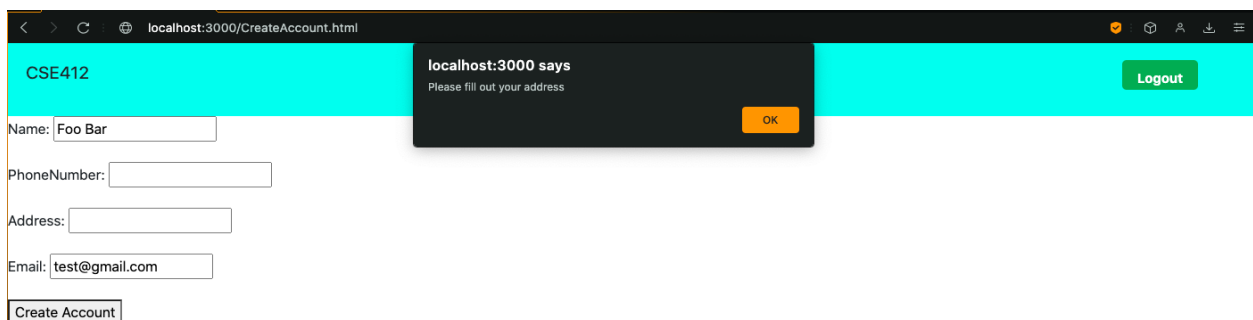
*If the user doesn't fill out all of the required information, then the application will not be able to create the account and instead will notify the user of the error encountered.*

Figure 1: Missing Account Name



A screenshot of the same web browser showing an error. The 'Name' input field is empty. A dark grey modal dialog box is centered on the screen with the title 'localhost:3000 says' and the message 'Please fill out your name'. It has an 'OK' button. The 'Create Account' button is visible at the bottom left.

Figure 2: Missing Address Information



A screenshot of the same web browser showing another error. The 'Address' input field is empty. A dark grey modal dialog box is centered on the screen with the title 'localhost:3000 says' and the message 'Please fill out your address'. It has an 'OK' button. The 'Create Account' button is visible at the bottom left.

Figure 3: Missing Email Address

The screenshot shows a web browser at localhost:3000/CreateAccount.html. The page has a cyan header with 'CSE412' on the left and 'localhost:3000 says Please fill out your email' in the center, with an orange 'OK' button. On the right of the header is a green 'Logout' button. The form contains the following fields: Name (filled with 'Foo Bar'), PhoneNumber (empty), Address (filled with '1234 Test E. Avenue'), and Email (empty). A green 'Create Account' button is at the bottom left.

### 2.1.3 Signing into an account

If a user has already registered an account within the application, they have to simply input their name/username within the Login Screen.

- 1) Enter the name of the account
- 2) Click the login button

The screenshot shows a web browser at localhost:3000/Webpage.html. The page has a blue header with 'CSE 412' on the left. The main content area has a 'Username:' label, an input field, and a 'Required' error message. Below the input field are 'Login' and 'Create Account' buttons. A red box with the number '1' is placed over the input field, with an arrow pointing to it. The footer is a green table with three columns: 'FINAL PROJECT PHASE', 'NAMES', and 'EMAILS'. The table contains the following data:

FINAL PROJECT PHASE	NAMES	EMAILS
CSE412	Cameron Hartmann	Cmhartm4@asu.edu
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## 2.2 Product Catalog

*Proceed from 2.1 Login Section*

In order to access the extensive catalog of the application, it is vital that the user is already logged into their existing or newly created account. This will grant the user access to browse through the application's catalog and be able to add any product that they wish to purchase into their shopping cart.

- 1) Click Add to Cart on any product you wish to purchase

For demonstration purposes, the account “Betty Grove” will be utilized to illustrate the process of how to add a product from the catalog into Betty Grove’s shopping cart.

Figure 1.1: Signing into Betty Grove Account

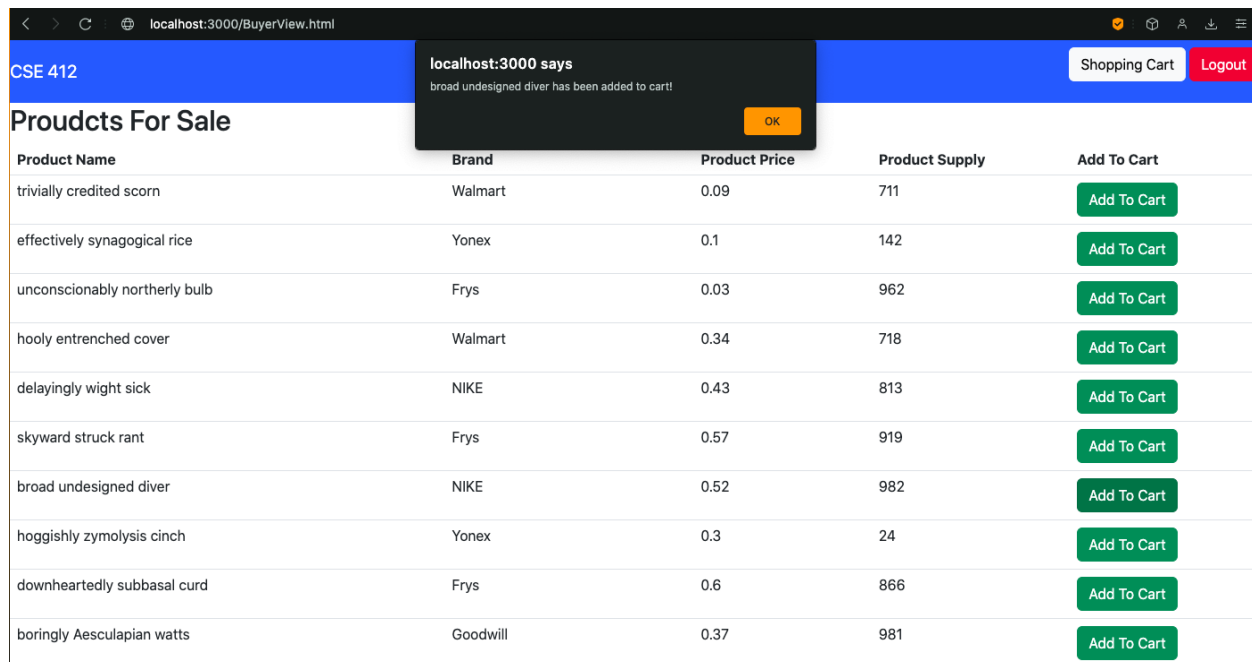
FINAL PROJECT PHASE	NAMES	EMAILS
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Figure 1.2: Logged into Betty Grove Account

Product Name	Brand	Product Price	Product Supply	Add To Cart
trivially credited scorn	Walmart	0.09	711	Add To Cart
effectively synagogical rice	Yonex	0.1	142	Add To Cart
unconscionably northerly bulb	Frys	0.03	962	Add To Cart
hooly entrenched cover	Walmart	0.34	718	Add To Cart
delayingly wight sick	NIKE	0.43	813	Add To Cart
skyward struck rant	Frys	0.57	919	Add To Cart
broad undesigned diver	NIKE	0.52	982	Add To Cart
hoggishly zymolysis cinch	Yonex	0.3	24	Add To Cart
downheartedly subbasal curd	Frys	0.6	866	Add To Cart
boringly Aesculapian watts	Goodwill	0.37	981	Add To Cart



Figure 1.3: Adding an Item to Cart



## 2.3 Shopping Cart

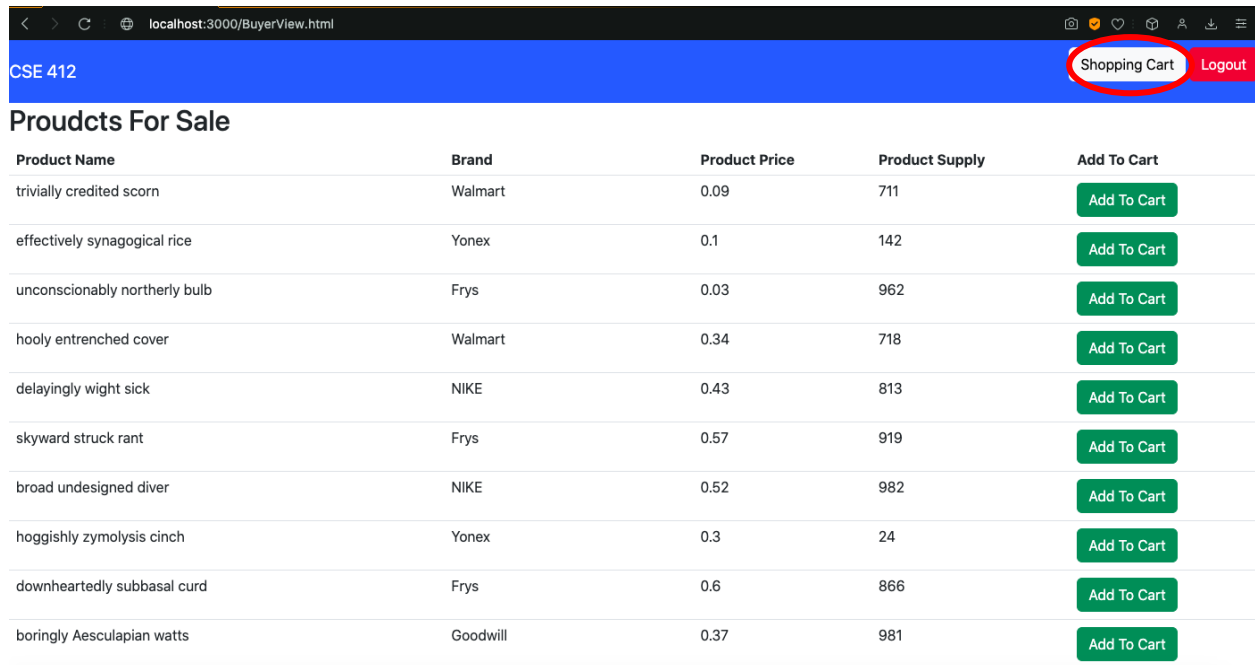
### *Proceed from 2.2 Product Catalog Section*

After the user has selected and added the product into their cart, they will be brought into another screen which will contain important information regarding the status of their current/previous orders made within the application. If the user is ready to purchase, their current order, they have to do the following:

- 1) Click the Shopping Cart button
- 2) Click the Purchase button

*For continuity purposes, the account “Betty Grove” will be utilized to illustrate how to purchase the newly added item from the previous section (2.2) which is now located inside the shopping cart.*

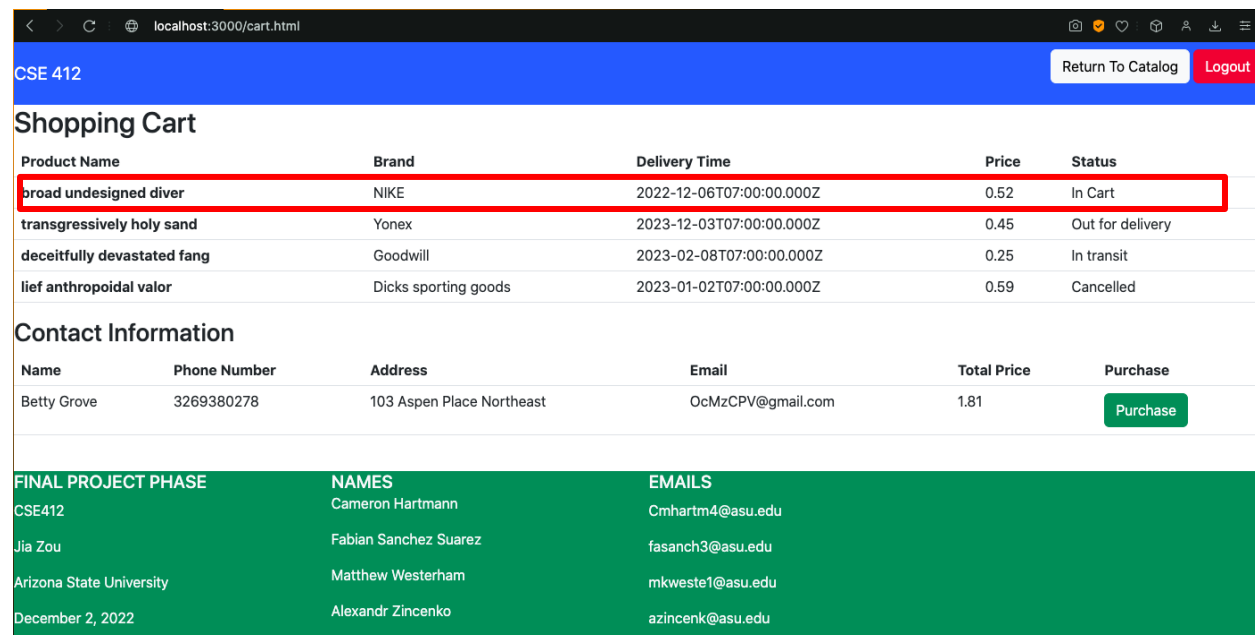
Figure 1.1: Click the Shopping Cart button



The screenshot shows a web browser window with the URL `localhost:3000/BuyerView.html`. The page has a blue header with "CSE 412" on the left and "Shopping Cart" and "Logout" buttons on the right. The "Shopping Cart" button is circled in red. Below the header is a section titled "Proudcts For Sale" (note the typo). It contains a table with 5 columns: Product Name, Brand, Product Price, Product Supply, and Add To Cart. There are 10 rows of product data.

Product Name	Brand	Product Price	Product Supply	Add To Cart
trivially credited scorn	Walmart	0.09	711	Add To Cart
effectively synagogical rice	Yonex	0.1	142	Add To Cart
unconscionably northerly bulb	Frys	0.03	962	Add To Cart
hooly entrenched cover	Walmart	0.34	718	Add To Cart
delayingly wight sick	NIKE	0.43	813	Add To Cart
skyward struck rant	Frys	0.57	919	Add To Cart
broad undesigned diver	NIKE	0.52	982	Add To Cart
hoggishly zymolysis cinch	Yonex	0.3	24	Add To Cart
downheartedly subbasal curd	Frys	0.6	866	Add To Cart
boringly Aesculapian watts	Goodwill	0.37	981	Add To Cart

Figure 1.2: Check the Item has been added in the Shopping Cart Screen



The screenshot shows a web browser window with the URL `localhost:3000/cart.html`. The page has a blue header with "CSE 412" on the left and "Return To Catalog" and "Logout" buttons on the right. Below the header is a section titled "Shopping Cart". It contains a table with 5 columns: Product Name, Brand, Delivery Time, Price, and Status. The first row, "broad undesigned diver", is highlighted with a red box. Below the shopping cart table is a section titled "Contact Information" with a table containing 6 columns: Name, Phone Number, Address, Email, Total Price, and Purchase. At the bottom of the page is a green footer section with 3 columns: FINAL PROJECT PHASE, NAMES, and EMAILS.

Product Name	Brand	Delivery Time	Price	Status
broad undesigned diver	NIKE	2022-12-06T07:00:00.000Z	0.52	In Cart
transgressively holy sand	Yonex	2023-12-03T07:00:00.000Z	0.45	Out for delivery
deceitfully devastated fang	Goodwill	2023-02-08T07:00:00.000Z	0.25	In transit
lief anthropoidal valor	Dicks sporting goods	2023-01-02T07:00:00.000Z	0.59	Cancelled

Name	Phone Number	Address	Email	Total Price	Purchase
Betty Grove	3269380278	103 Aspen Place Northeast	OcMzCPV@gmail.com	1.81	Purchase

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**\*\* Please note that the Total Price includes the Sales Tax \*\***

Figure 1.3: Click the Purchase button

localhost:3000/cart.html

CSE 412

localhost:3000 says  
Your Items have been purchased

Return To Catalog Logout

### Shopping Cart

Product Name	Brand	Delivery Time	Price	Status
broad undesigned diver	NIKE	2022-12-06T07:00:00.000Z	0.52	In Cart
transgressively holy sand	Yonex	2023-12-03T07:00:00.000Z	0.45	Out for delivery
deceitfully devastated fang	Goodwill	2023-02-08T07:00:00.000Z	0.25	In transit
lief anthropoidal valor	Dicks sporting goods	2023-01-02T07:00:00.000Z	0.59	Cancelled

### Contact Information

Name	Phone Number	Address	Email	Total Price	Purchase
Betty Grove	3269380278	103 Aspen Place Northeast	OcMzCPV@gmail.com	1.81	<button>Purchase</button>

**FINAL PROJECT PHASE**

	NAMES	EMAILS
CSE412	Cameron Hartmann	Cmhartm4@asu.edu
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## 2.4 Admin Privileges

The administrator role is only reserved for sellers which allows them to add new products into the Product Catalog for users to select from. In order to access the administrator role, the seller must perform the following actions:

- 1) Enter “admin” into the username
- 2) Click the Login button

localhost:3000/Webpage.html

CSE 412

Username: admin

Login Create Account

**FINAL PROJECT PHASE**

	NAMES	EMAILS
CSE412	Cameron Hartmann	Cmhartm4@asu.edu
Jia Zou	Fabian Sanchez Suarez	fasanch3@asu.edu
Arizona State University	Matthew Westerham	mkweste1@asu.edu
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**Required**

## 2.5 Updating Catalog

*Proceed from 2.4 Admin Privileges Section*

In order for sellers to be able to add products into the Product catalog, it is vital that they are logged in as administrators otherwise they will not be granted access to the add a product page. To add a new product, the administrator has to do the following actions:

- 1) Enter the Product Name
- 2) Enter the Product Quantity [*Has to be greater than 0*]
- 3) Enter the Product Brand
- 4) Enter the Product Price [*Has to be greater than 0*]
- 5) Click the Add Item button

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CSE412	Cameron Hartmann	Cmhartm4@asu.edu
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*If the administrator inputs all the required information in order to add the new product the application will successfully add and display the following message.*

FINAL PROJECT PHASE	NAMES	EMAILS
CSE412	Cameron Hartmann	Cmhartm4@asu.edu
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Arizona State University	Matthew Westerham	mkweste1@asu.edu
December 2, 2022	Alexandr Zincenko	azincenk@asu.edu

## 2.5.2 Common Errors

*If the administrator does not fill out all of the required information (or enters a value of less than or equal to 0) then the application will not be able to add the new product and instead will notify the administrator of the error encountered.*

Figure 1: Missing Product Name

The screenshot shows a web browser at localhost:3000/AddProduct.html. The page has a blue header with 'CSE 412' and a 'Logout' button. A black error modal is displayed in the center, stating 'localhost:3000 says Please fill out the Product Name' with an 'OK' button. The form contains four input fields: 'ProductName:', 'ProductSupply:', 'ProductBrand:', and 'ProductPrice:'. The 'Add Item' button is visible below the form. At the bottom, there is a green table with project information.

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Figure 2: Missing Product Supply or invalid input (Less than or equal to 0)

The screenshot shows the same web browser at localhost:3000/AddProduct.html. The 'ProductName:' field is now filled with 'Test'. The black error modal is updated to state 'localhost:3000 says Please input a digit greater than 0 for Product Supply' with an 'OK' button. The other form fields and the bottom table remain the same as in Figure 1.

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CSE412	Cameron Hartmann	Cmhartm4@asu.edu
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Figure 3: Missing Product Brand

The screenshot shows a web browser at localhost:3000/AddProduct.html. The page has a blue header with 'CSE 412' and a red 'Logout' button. A black modal box in the center says 'localhost:3000 says Please fill out the Product Brand' with an 'OK' button. The form contains: ProductName: 'Test', ProductSupply: '123', ProductBrand: (empty), and ProductPrice: (empty). Below the form is an 'Add Item' button and a green table.

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Figure 4: Missing Product Price or invalid input (Less than or equal to 0)

The screenshot shows the same web browser at localhost:3000/AddProduct.html. The modal box now says 'localhost:3000 says Please input a digit greater than 0 for Product Price' with an 'OK' button. The form contains: ProductName: 'Test', ProductSupply: '123', ProductBrand: 'Test Store', and ProductPrice: (empty). The 'Add Item' button and green table are also present.

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