Clothes Shopping Web Application  
Team 4 - Project Report

# Table Of Content

[I. Introduction 3](#_Toc77337806)

[II. Features 3](#_Toc77337807)

[III. Technologies and Techniques 4](#_Toc77337808)

[IV. Design 5](#_Toc77337809)

[1. Use Case Diagram 5](#_Toc77337810)

[2. Class Diagram 6](#_Toc77337811)

[3. User Interface 23](#_Toc77337812)

# Introduction

* The Clothes Shopping Web App is a platform built as an online store for clothes.
* The app is intended to provide the web user an easy way to view the products as well as make an order. The admin of the store can manage the registered user, all the products and orders within the system.

# Features

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Role | Feature (Level 1) | Feature (Level 2) | Person In Charge |
| 1 | **Common** | Sign Up | Normal Sign Up | PhongNT |
| 2 |  | Sign Up with Google | PhongNT |
| 3 | Login | Normal Login | PhongNT |
| 4 |  | Login with Google | PhongNT |
| 5 |  | Forgot Password | PhongNT |
| 6 | Logout |  | PhongNT |
| 7 | **Guest** | View / Search Products for Shopping |  | PhucVVT |
| 8 | Add Products to Cart |  | PhucVVT |
| 9 | View Cart |  | PhucVVT |
| 10 | Remove from Cart |  | PhucVVT |
| 11 | **Logged-in User** | Update Profile |  | PhongNT |
| 12 | Check out |  | LongTT |
| 13 | View Orders history | View summary about all orders | LongTT |
| 14 |  | View a specific order in detail | LongTT |
| 15 | **Admin** | Search Account | View search result | KhoiLH |
| 16 |  | View account’s information | KhoiLH |
| 17 | Update Admin’s Profile |  | PhongNT |
| 18 | Search Products | View search result | KhoiLH |
| 19 |  | View / Update product’s information | KhoiLH |
| 20 | Create Products |  | KhoiLH |
| 21 | View Categories |  | KhoiLH |
| 22 | Create Categories |  | KhoiLH |
| 23 | View all Order’s Statistics | View summary about all Orders | KhoiLH |
| 24 |  | View a specific Order in detail | KhoiLH |

# Technologies and Techniques

|  |  |  |
| --- | --- | --- |
| No | Technologies/Techniques | Description |
| 1 | ASP.NET MVC Core 5 | The main technology to build the web app based on MVC structure and ASP.NET Core 5 |
| 2 | Entity Framework Core | The framework used to connect and manipulate with database |
| 3 | Azure Database for MySQL server | Remote MySQL database server |
| 4 | Firebase Storage | The storage where the images of products and avatars of users are stored |
| 5 | Google OAuth | User can login or sign up through their Google account |
| 6 | JavaScript/jQuery | jQuery is used for uploading images to Firebase and client search |
| 7 | Bootstrap | CSS Framework for Front-end |
| 8 | GitHub | A service to manage the code |
| 9 | Azure App service | Service for the web app to be deployed |

# Design

## Use Case Diagram

Diagram

Description automatically generated

Figure 1 [Use Case Diagram](https://firebasestorage.googleapis.com/v0/b/clothes-shopping-318709.appspot.com/o/ClothesShopping_UseCase.jpg?alt=media&token=1c1b86d0-0fbf-42d9-8258-51b057fe3a7b)

## Class Diagram

### Login

Diagram

Description automatically generated

Figure 2 Class Diagram – Login

### Login with Google

Diagram

Description automatically generated

Figure 3 Class Diagram – Login with Google

### Forgot Password

Diagram

Description automatically generated

Figure 4 Forgot Password

### Logout

Diagram

Description automatically generated with low confidence

Figure 5 Logout

### Sign up

Diagram

Description automatically generated

Figure 6 Sign up

### Sign up with Google

Diagram

Description automatically generated

Figure 7 Sign up with Google

### View Products – Guest

Diagram

Description automatically generated

Figure 8 View Products - Guest

### Search Products – Guest

Diagram

Description automatically generated

Figure 9 Search Products – Guest

### Filter Products by Category

Diagram

Description automatically generated

Figure 10 Filter Products by Category

### Add Products to Cart

Diagram

Description automatically generated

Figure 11 Add Products to Cart

### View Cart

Diagram

Description automatically generated

Figure 12 View Cart

### Remove from Cart

Table

Description automatically generated with low confidence

Figure 13 Remove from Cart

### Update User Profile

Diagram

Description automatically generated

Figure 14 Update User Profile

### Check out order

Diagram

Description automatically generated

Figure 15 Check out order

### View Order history

![Diagram

Description automatically generated](data:image/jpeg;base64,

Figure 16 View Order history

### View / Search accounts

Diagram

Description automatically generated

Figure 17 View / Search accounts

### View account’s information

Diagram

Description automatically generated

Figure 18 View account’s information

### Update Admin Profile

Diagram

Description automatically generated

Figure 19 Update Admin Profile

### View / Search Products – Admin

Diagram

Description automatically generated

### Create new Product

Diagram

Description automatically generated

Figure 20 Create new Product

### View Categories

Diagram

Description automatically generated

Figure 21 View Categories

### Create new Category

Diagram

Description automatically generated

Figure 22 Create new Category

### View all orders in summary

Diagram

Description automatically generated

Figure 23 View all orders in summary

### View an order in detail

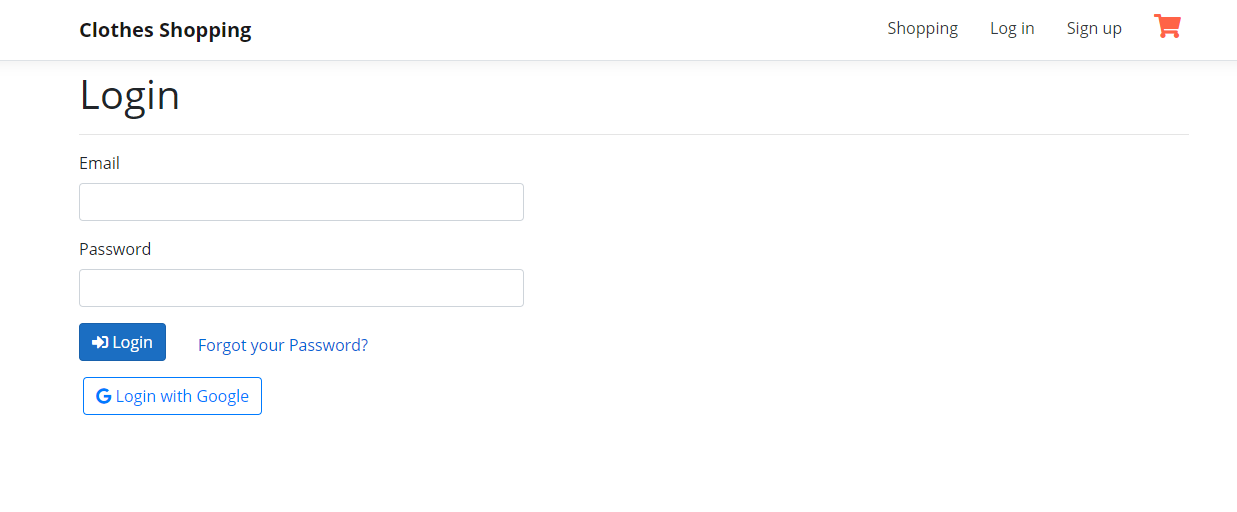
Diagram

Description automatically generated

Figure 24 View an order in detail

## User Interface

### Login Screen



#### Description

Login screen allows registered user to login the system as a normal user or an admin to manage. This page also provides user the capability to reset their password by sending a new one to their email if they forgot.

#### Navigation

Navigate to this screen by clicking on **‘Log in’** item on the top navigation bar if the user has not logged in.

#### Elements

‘Email’

**Type:** Email-type input field.

**Behavior:** The field for user to enter their email.

‘Password’

**Type:** Password-type input field.

**Behavior:** The field for user to enter their password.

‘Login’

**Type:** Submit button.

**Behavior:** By clicking this button after entering email and password, the user will be checked for authentication. If the login information is correct, the ‘**Home’** page corresponding to the user will display. If the login information is not correct, an error message will display to the user.

‘Login with Google’

**Type:** Button.

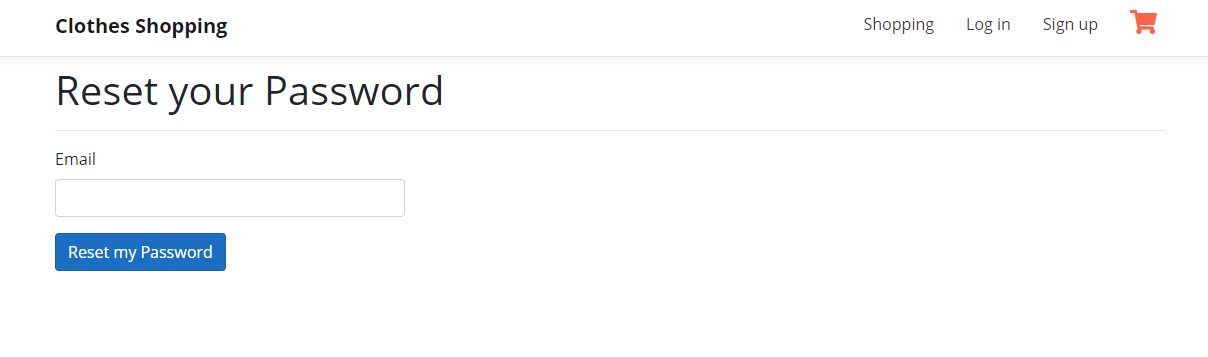
**Behavior:** By clicking this button, the user will be redirected to Google login website. After their Google account is authenticated successfully and the email is existed in the system, the ‘**Home’** page corresponding to the user will display. If the email does not exist, the **‘Sign up’** screen will display to the user.

‘Forgot your Password?’

**Type:** Text link.

**Behavior:** The **‘Reset your Password’** screen will display when the user clicks on this link.

### Reset your Password Screen



#### Description

This screen allows the user to reset their password through their email. A new password will be automatically generated and send to their email.

#### Navigation

The user can navigate to this screen by clicking on **‘Forgot your Password?’** text link on **‘Login’** screen.

#### Elements

‘Email’

**Type:** Email-type input field.

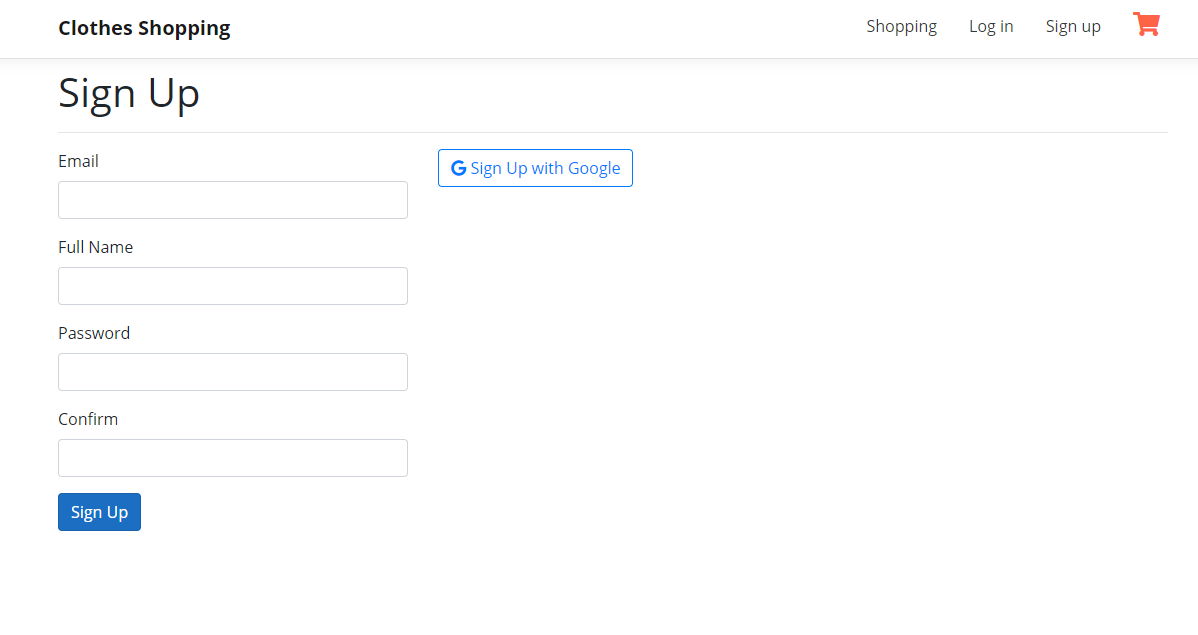
**Behavior:** The field for user to enter their email.

‘Reset my Password’

**Type:** Submit button

**Behavior:** Clicking this button after enter email, a message with the new password will be sent to the entered email if it exists in the system.

### Sign up Screen



#### Description

**‘Sign up’** screen enables the web user to register an account to the web app as a normal user.

#### Navigation

Navigate to this screen by clicking on the **‘Sign up’** item on the top navigation bar if the user has not logged in.

#### Elements

‘Email’

**Type:** Email-type input field.

**Behavior:** The field for user to enter their email.

‘Full Name’

**Type:** Text-type input field.

**Behavior:** The field for user to enter their full name.

‘Password’

**Type:** Password-type input field.

**Behavior:** The field for user to enter their password.

‘Confirm’

**Type:** Password-type input field.

**Behavior:** The field for user to enter their password again to confirm.

‘Sign up’

**Type:** Submit button

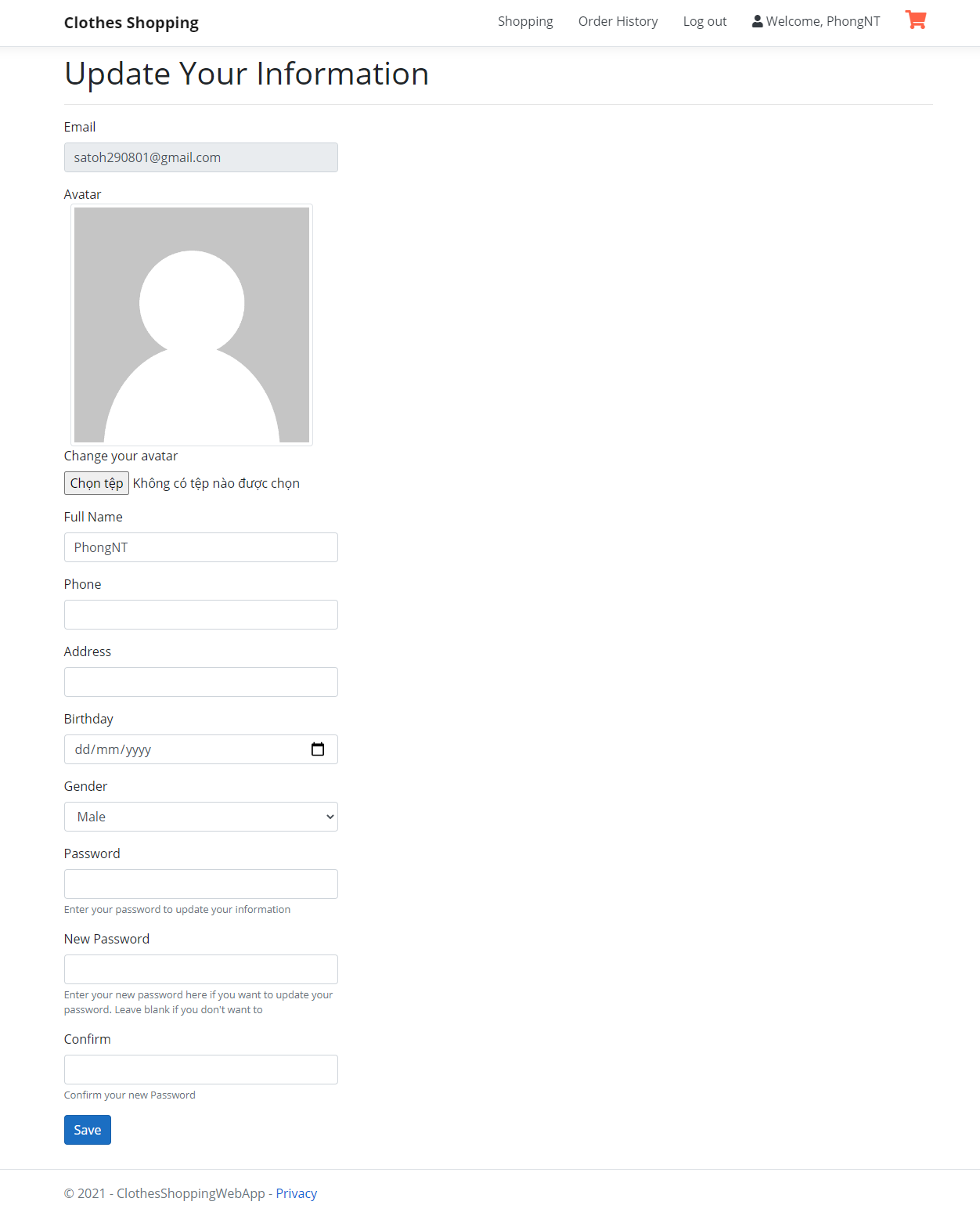
**Behavior:** Clicking this button after entering all the fields will trigger the system to create a new account for the user. If the email is existed or confirm and password are not matched, an error message will display. Otherwise, if the account is created successfully, the user will be navigated to the **‘Login’** screen.

‘Sign up with Google’

**Type:** Button

**Behavior:** By clicking this button, the user will be redirected to Google login website. After their Google account is authenticated successfully and the email is not existed in the system, the ‘**Sign up** page with the name and email corresponding to the Google account will display. The user must enter their password. If the email is existed, they will be automatically logged into the system. The ‘**Home’** page corresponding to the user will display.

### Update Your Information Screen



#### Description

This screen allows both registered user and admin to edit their information but not email.

#### Navigation

Logged in user can navigate to this page by clicking on the **‘Welcome…’** item on the top navigation bar.

#### Elements

‘Email’

**Type:** Email-type input field.

**Behavior:** This is a read-only input as the user is not allowed to change their email address.

‘Avatar’

**Type:** Image.

**Behavior:** Display the user avatar.

‘Change your avatar’

**Type:** File-type input field.

**Behavior:** The user can change their avatar by uploading a image with this element. Not required.

‘Full Name’

**Type:** Text-type input field.

**Behavior:** The field for user to enter their Full Name. Required.

‘Phone’

**Type:** Tel-type input field.

**Behavior:** The field for user to enter their Phone. Not required.

‘Address’

**Type:** Text-type input field.

**Behavior:** The field for user to enter their Address. Not required.

‘Birthday’

**Type:** Date-type input field.

**Behavior:** The field for user to enter their Birthday. Not required.

‘Gender’

**Type:** Dropdown list.

**Behavior:** Dropdown list for user to select their gender. Male is default.

‘Password’

**Type:** Password-type input field.

**Behavior:** The field for user to enter their current Password in order to update profile. Required.

‘New Password’

**Type:** Password-type input field.

**Behavior:** The field for user to enter their new Password if they want to update their password. Not required.

‘Confirm’

**Type:** Password-type input field.

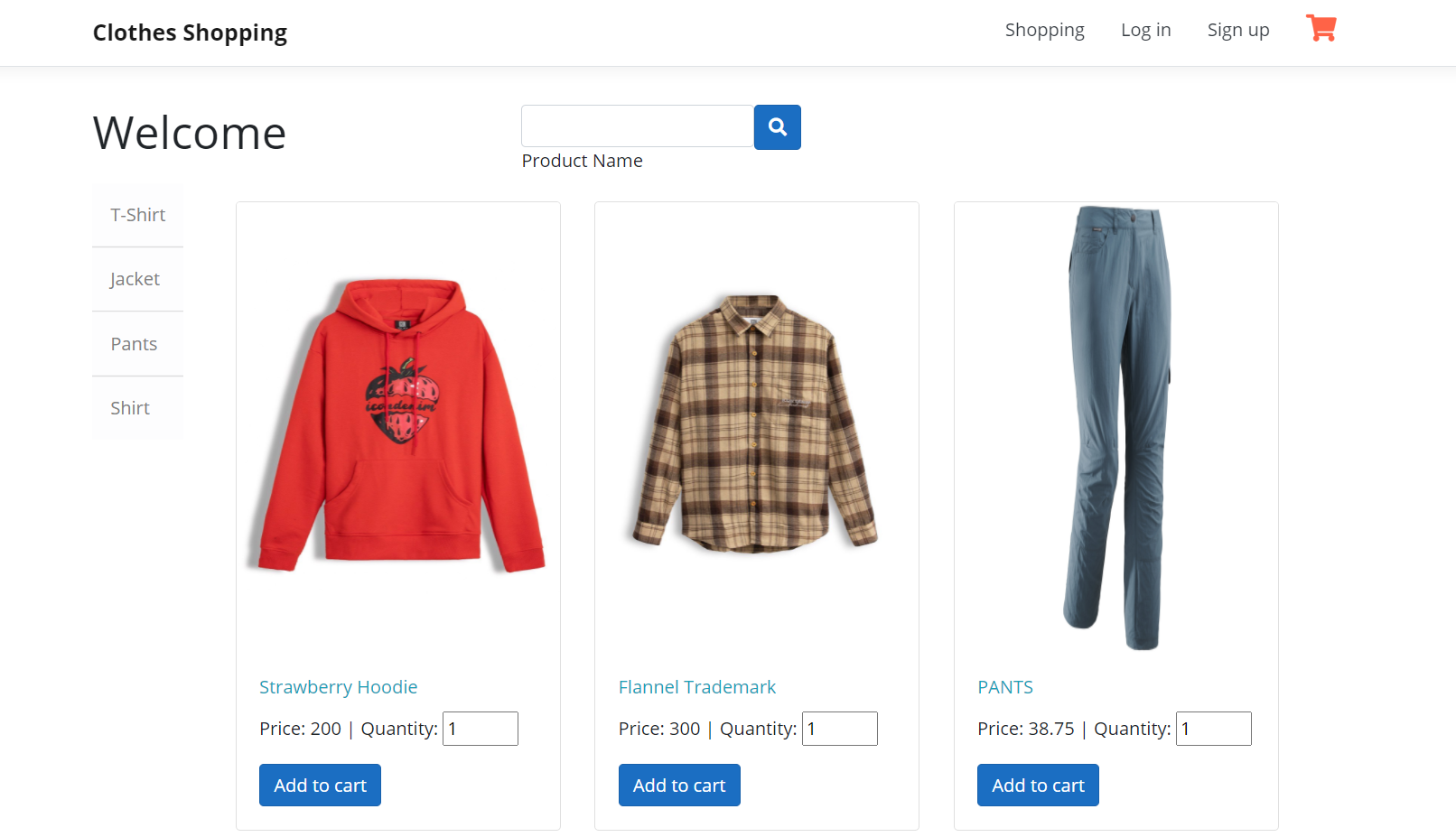
**Behavior:** The field for user to enter their new Password again. Required when the user wants to update their password.

‘Save’

**Type:** Submit button.

**Behavior:** After fill out all the required fields with correct format and constraints, the user clicks this button and their profile will be updated. If there is an error, an error message will display to the user, otherwise a success message will display instead.

### Shopping Screen



#### Description

The Shopping Page (default page) enables Guests to View all Clothes, Filter Clothes by Category, Search Clothes by their Name (keyword) and Add Clothes to Shopping Cart.

#### Navigation

The default page when visiting our website.

#### Elements

‘Category’

**Type:** Text link

**Behavior:** By clicking these text links, only Clothes of those Categories will be displayed as Cards.

‘Product’

**Type:** Card

**Behavior:** Display Cloth Image, Name, Price.

‘Search Product’

**Type:** Input field + button

**Behavior:** By entering the keyword of Cloth’s Name then press Enter or Click the Search button, the Clothes which contain that name will be displayed as Cards.

‘Quantity’

**Type:** Input field

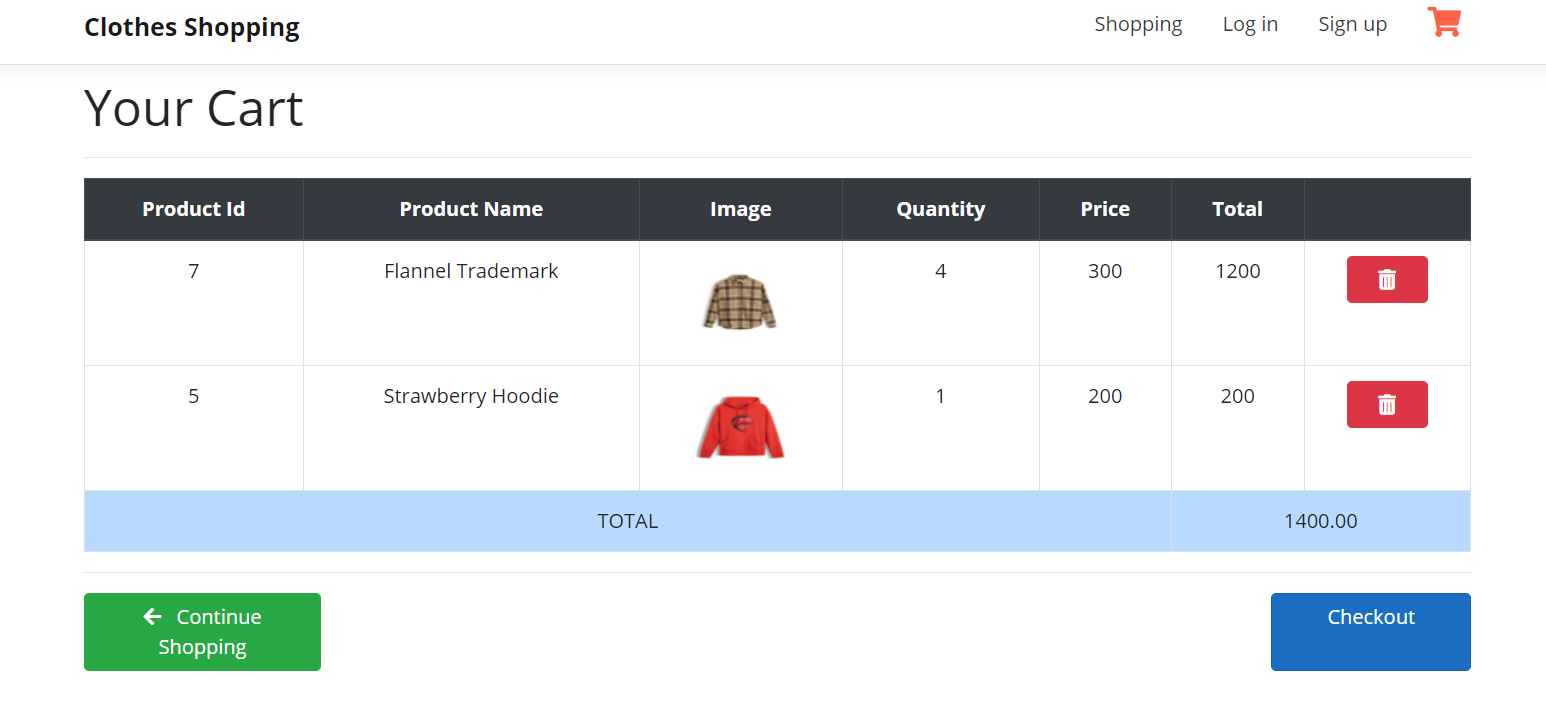
**Behavior:** By entering or clicking increase/decrease, the Quantity of Cloth will be changed before Adding to cart (default: 1).

‘Add to cart’

**Type:** Button

**Behavior:** By clicking this button, the Cloth with Quantity will be added to the Shopping Cart.

### Cart Screen:



#### Description

The Cart Page enables users to view the Clothes list that they have already added to their shopping cart. Users can also remove Cloth from Cart or Continue Shopping or Checkout.

#### Navigation

Navigation to this screen by clicking on the “Cart” icon at the top-right corner of the page.

#### Elements

‘Clothes List’

**Type:** List of Clothes

**Behavior:** Display all Clothes that the user already added to the Shopping Cart.

‘Trash Icon’

**Type:** Button

**Behavior:** By clicking on the trash icon of any Cloth, that Cloth will be removed from the Shopping Cart list.

‘Continue Shopping’

**Type:** Button

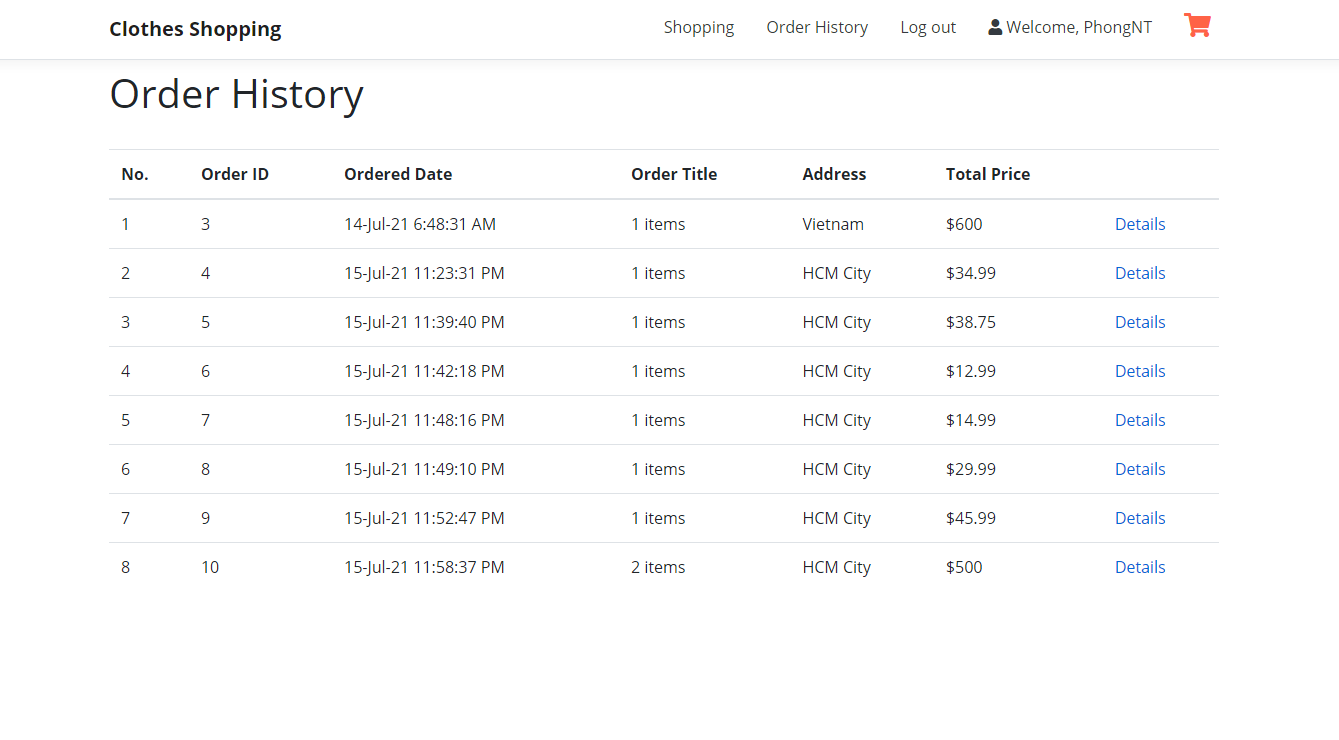
**Behavior:** By clicking on the “Continue Shopping” button, the user will be redirected to the Shopping page to continue shopping.

‘Checkout’

**Type:** Button

**Behavior:** By clicking on the “Checkout” button, the user will be redirected to the checkout page if they have already logged in. Otherwise, they will be redirected to the login page before doing the checkout.

### Placed order list screen – Normal User:



#### Description

The Order list Page for customers to view all of his/her previously placed orders.

#### Navigation

Click “Order History” on the navbar.

#### Elements

‘Order table’

**Type:** Table

**Behavior:**  Display table for all previously placed orders.

‘Menu Navbar’

**Type:** Navbar

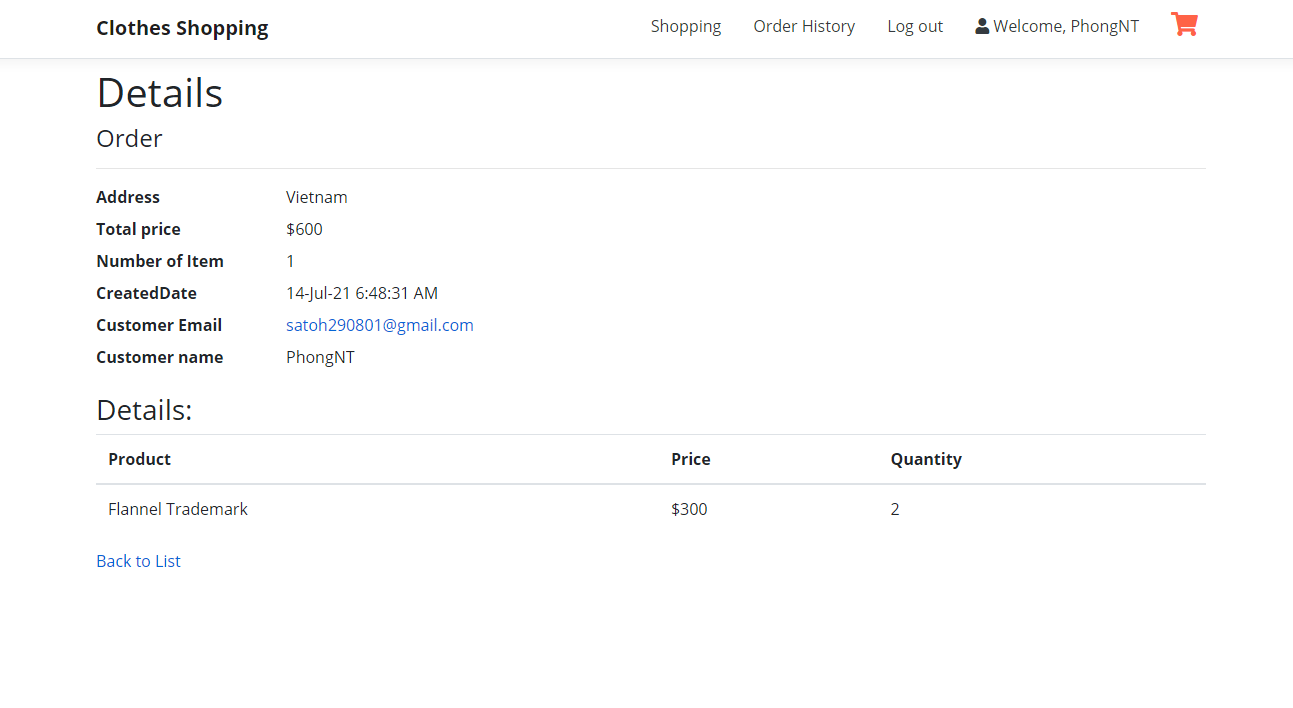
**Behavior:**  Navigation between sections.

‘Details’ link

**Type:** Link

**Behavior:**  By clicking this link, the page will redirect to the “Order history details” page of a specific order.

### Order history detail screen:



#### Description

The Detail Order Page for customers to view information of a specific previously placed order.

#### Navigation

Click the “Details” link of a specific order on the table at the Order History List Page.

#### Elements

‘Order information text’

**Type:** Text

**Behaviour:**  Display all information about the order.

**Product purchased table**

**Type:** Table

**Behaviour:**  Display products that have been purchased in the order.

‘Back to list link’

**Type:** Link

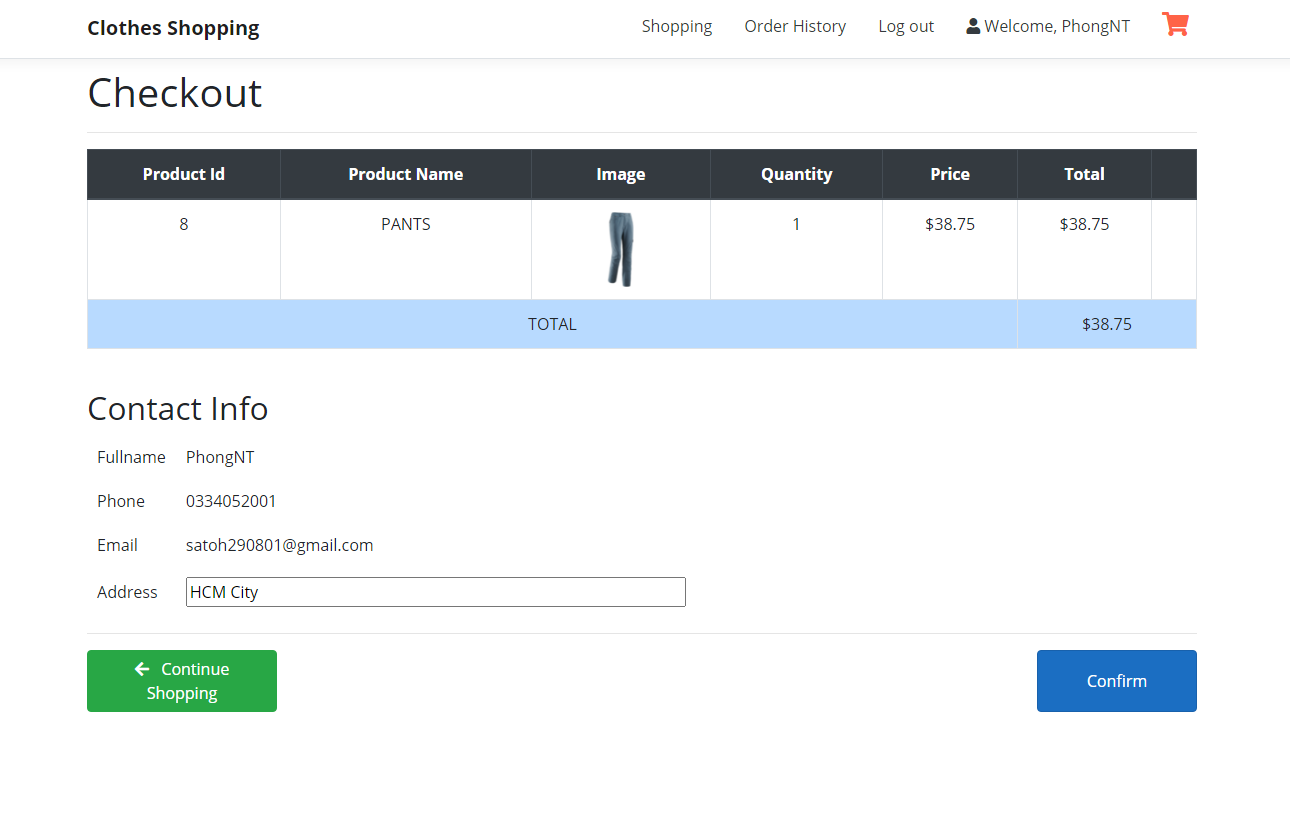
**Behaviour:**  By clicking this link, the page will redirect to the “Order history list” page.

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

### Checkout Screen:



#### Description

The Confirm Page enables users to review the Clothes list that they have already added to their shopping cart. Users can also change their shipping address if necessary or confirm for checkout.

#### Navigation

Click the “Checkout” button at the Cart Page when logged in.

#### Elements

‘Clothes List’

**Type:** List of Clothes

**Behaviour:**  Display all Clothes that the user already added to the Shopping Cart and ready to checkout (Cannot remove chosen product).

‘Contact info’

**Type:** Text and input

**Behaviour:**  Display your contact information and an input field for changing your shipping address.

‘Continue Shopping’

**Type:** Button

**Behaviour:**  By clicking on the “Continue Shopping” button, the user will be redirected to the Shopping page to continue shopping.

‘Confirm’

**Type:** Button

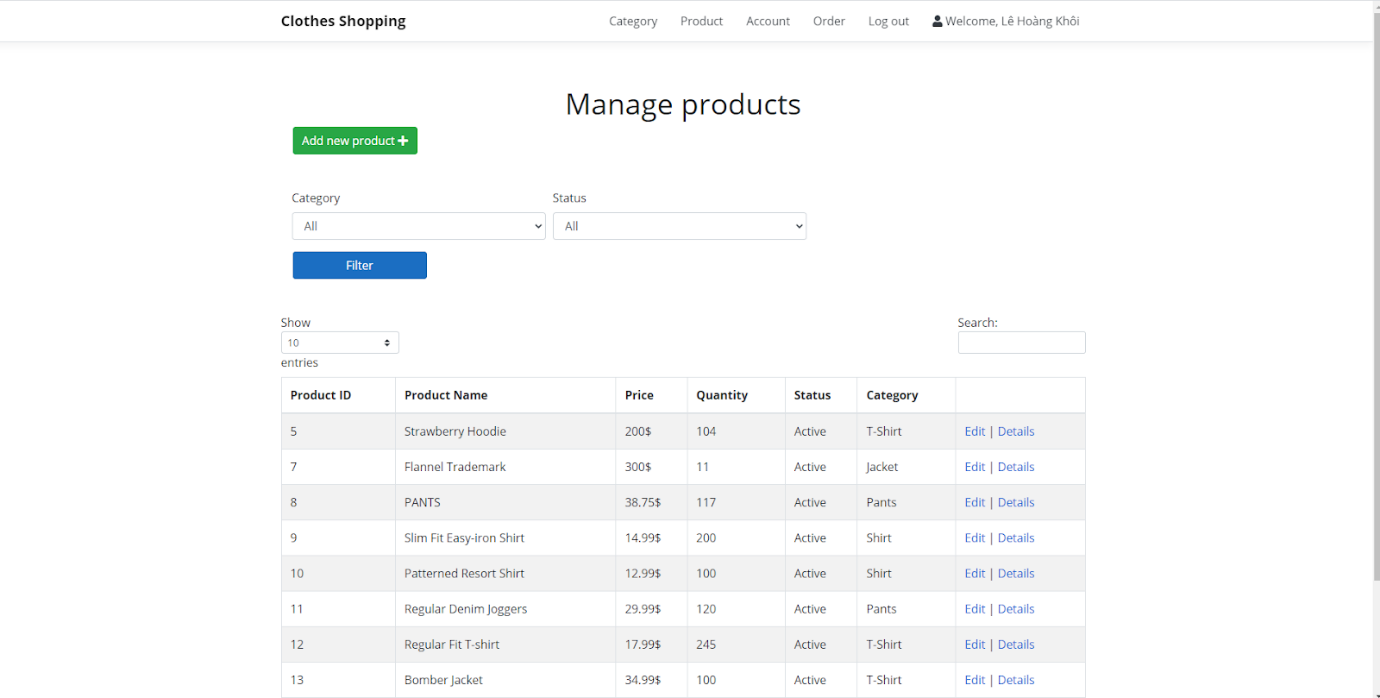
**Behaviour:**  By clicking on the “Confirm” button, the user will be redirected to the homepage and a popup will show up to confirm if they have successfully placed an order. Otherwise, a popup will show up to inform you that your order has not been placed.

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

### Product list screen



#### Description

The Product Page (default page) for admin to view all the products, filter, search products and a button to create a new product for shop.

#### Navigation

The default page when logged in as an admin.

#### Elements

‘Create button’

**Type:** button

**Behaviour:**  By clicking this button, the page will redirect to the “Create product” page.

‘Dropdown list for category and status’

**Type:** Dropdown list

**Behaviour:**  Choose category and status for filter

‘Filter button’

**Type:** button

**Behaviour:**  Clicking this button to process filters by category or status.

‘Product table’

Type: Table

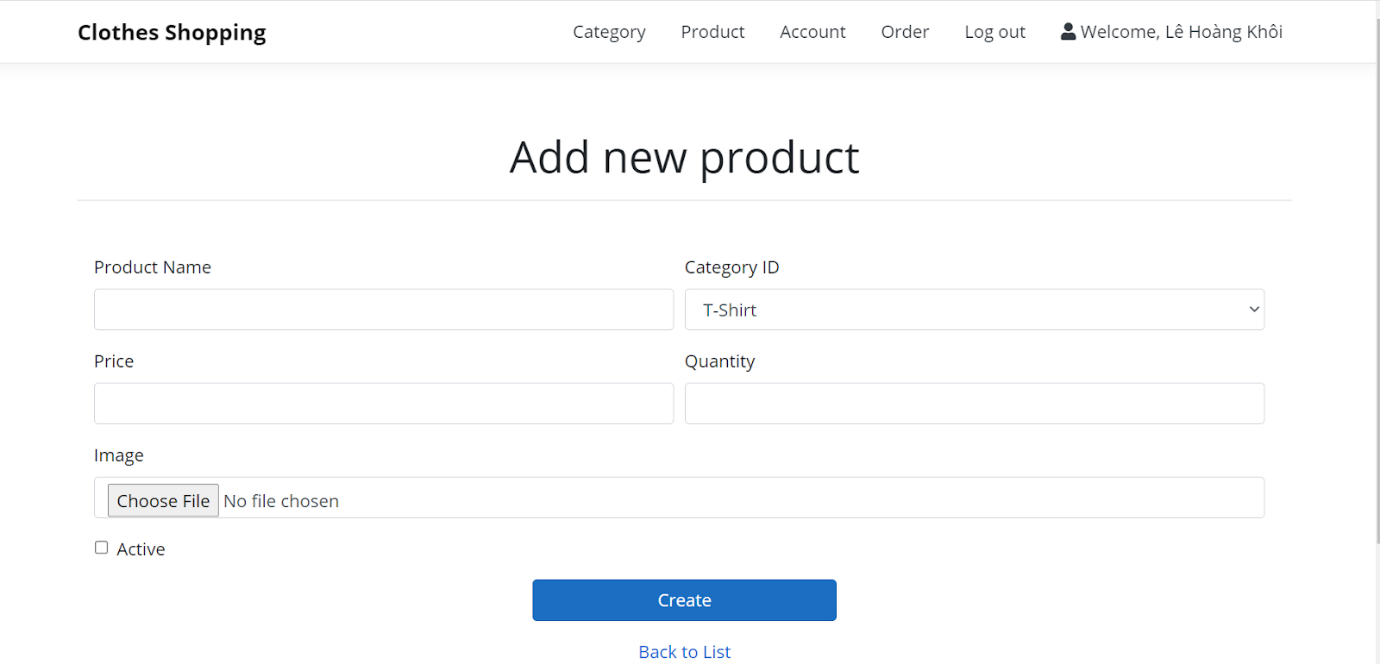
Behaviour:  Display table for all products.

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

### Create product screen:

****

#### Description

This page is used for admin creating a new product for the shop.

#### Navigation

Navigation to this screen by clicking on the “Add new product” button at the “Product list” page.

#### Elements

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

‘Input fields for product’

**Type:** Input fields

**Behaviour:**  Enter information about the product.

‘Create button’

**Type:** Button

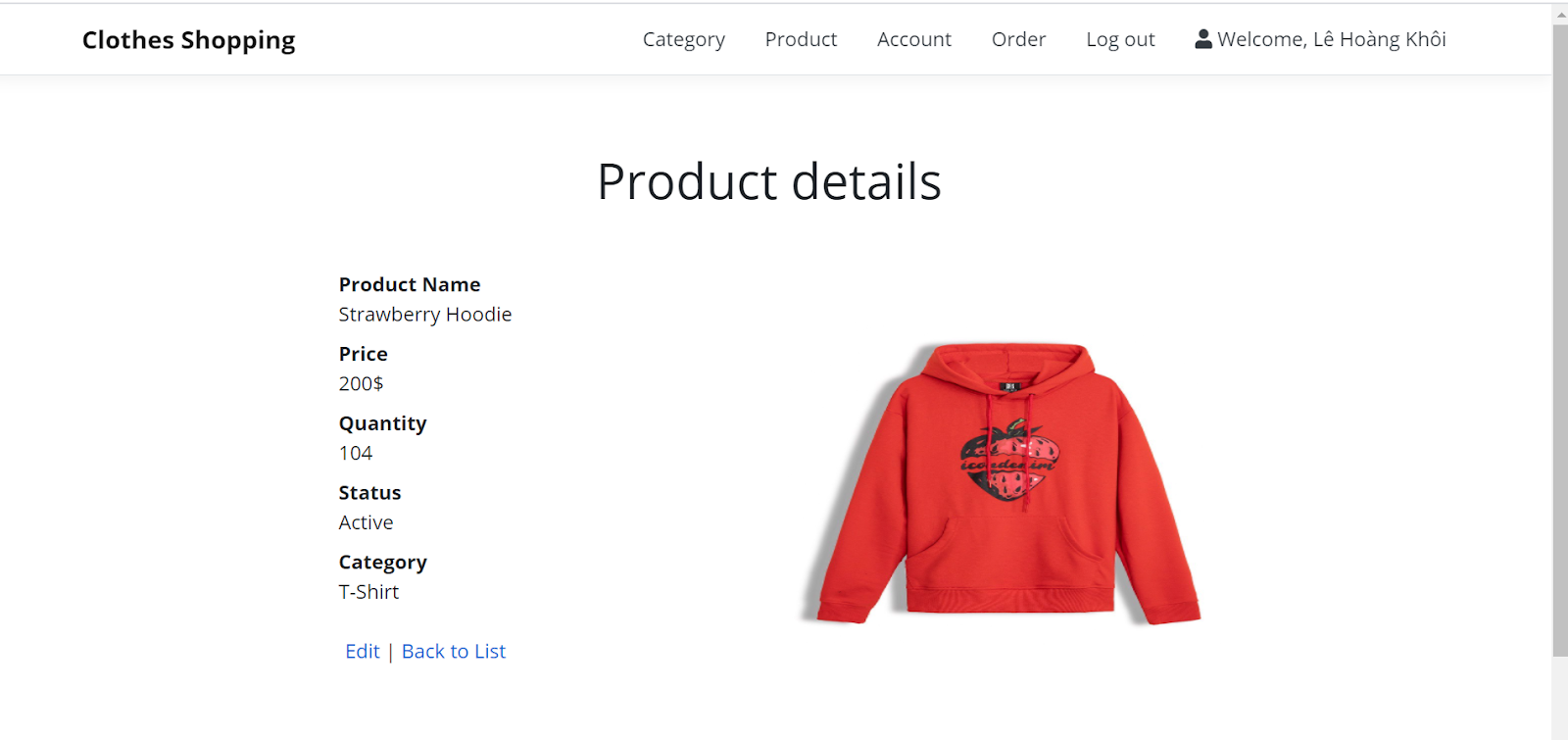
**Behaviour:**  By clicking this button, the product will be created with filled information.

‘Back to list link’

**Type:** Link

**Behaviour:**  By clicking this link, the page will redirect to the “Product list” page.

### Product detail page:

****

#### Description

This page is used for admin view information of a specific product.

#### Navigation

Navigation to this screen by clicking on the “Details” link at the row in the product table.

#### Elements

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

‘Text field and image’

**Type:** Text + image

**Behaviour:**  Display the information of the product.

‘Edit link

**Type:** link

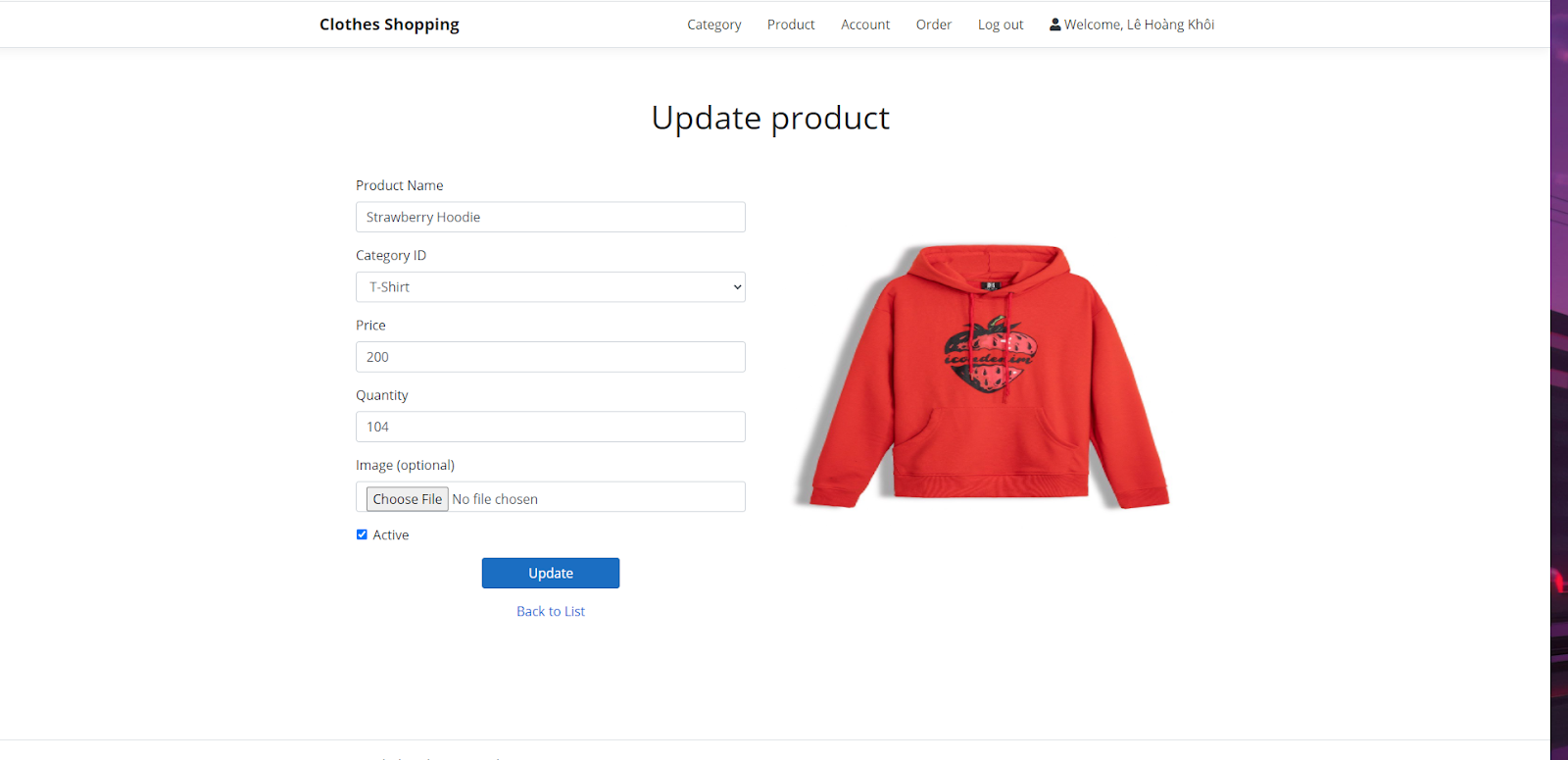
**Behaviour:**  By clicking this link, the page will redirect to the “Edit product” page.

‘Back to list link’

**Type:** Link

**Behaviour:**  By clicking this link, the page will redirect to the “Product list” page.

### Edit product screen:

****

#### Description

This page is used for admin update information of a specific product.

#### Navigation

Navigation to this screen by clicking on the “Edit” link at the row in the product table.

#### Elements

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

Input field and image’

**Type:** Input + image

**Behaviour:**  Enter any value to input fields if you want to update. Image is displayed as the current image of this product.

‘Update button’

**Type:** button

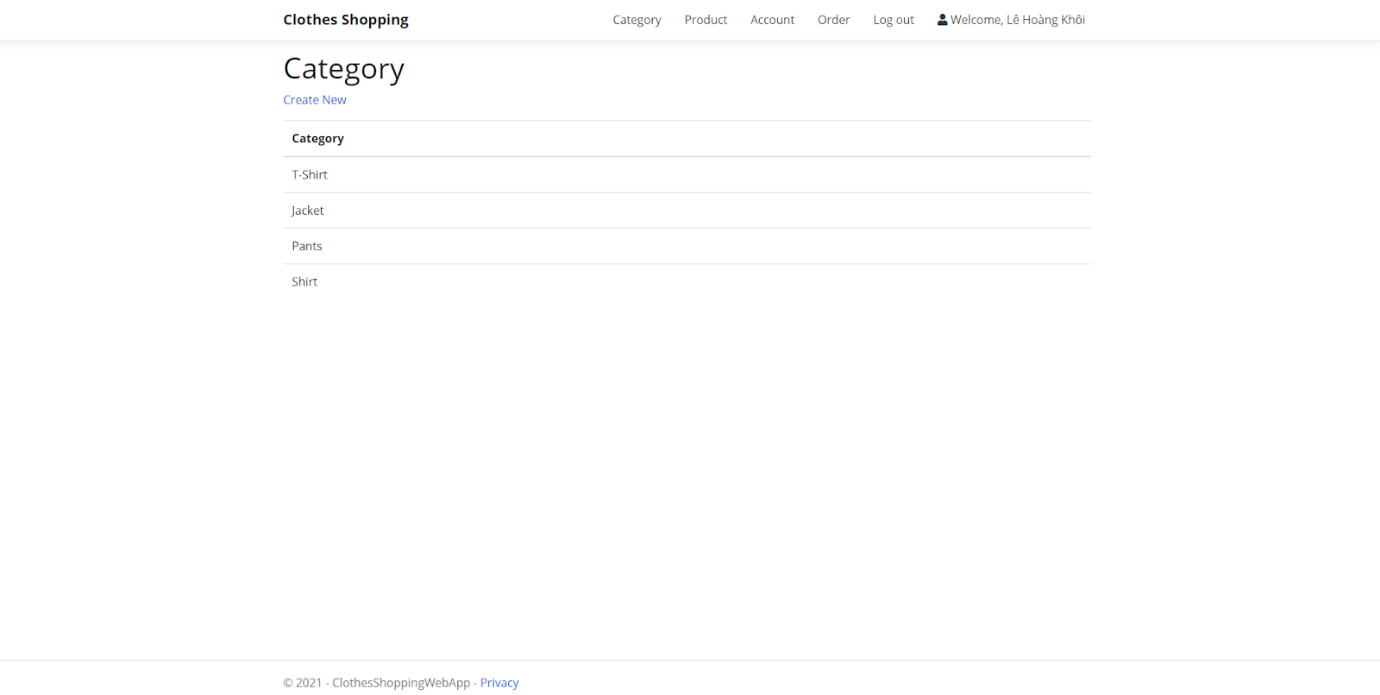
**Behaviour:**  By clicking this button, the update product form will be submitted.

‘Back to list link’

**Type:** Link

**Behaviour:**  By clicking this link, the page will redirect to the “Product list” page.

### Category page:

****

#### Description

This page is used for admin viewing all clothes categories available in the shop.

#### Navigation

Navigation to this screen by clicking on the “Category” navlink on the navbar.

#### Elements

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

‘Category list’

**Type:** list

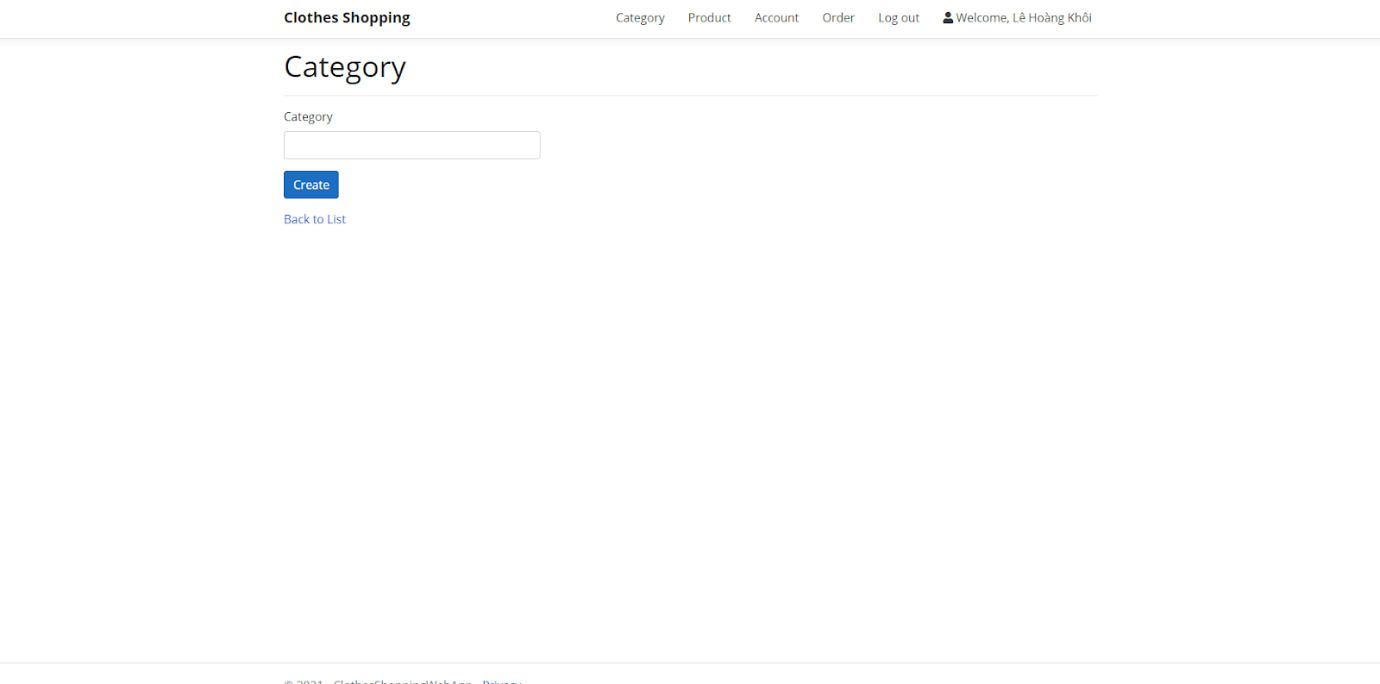
**Behaviour:**  Display all categories that are currently available in the shop.

‘Create link’

**Type:** Link

**Behaviour:**  By clicking this link, the page will redirect to the “Create category” page.

### Create category screen:

****

#### Description

This page is used for admin creating a new category for the shop.

#### Navigation

Navigation to this screen by clicking on the “Add new” link at the “Category list” page.

#### Elements

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

‘Input field for category’

**Type:** Input fields

**Behaviour:**  Enter the name of the category.

‘Create button’

**Type:** Button

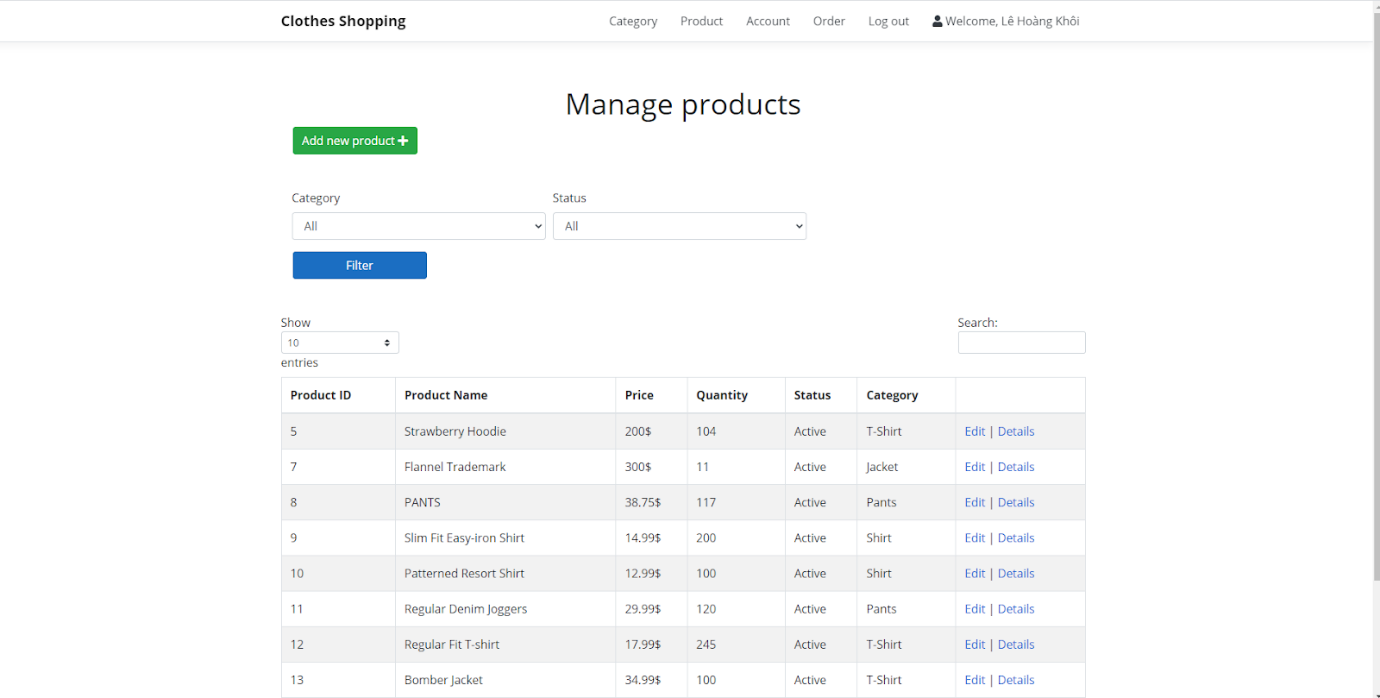
**Behaviour:**  By clicking this button, the category will be created with a given name.

‘Back to list link’

**Type:** Link

**Behaviour:**  By clicking this link, the page will redirect to the “Category list” page.

### Account list screen:



#### Description

The Account Page for admin to view all the accounts, filter, search user’s account.

#### Navigation

Click “Account” on the navbar.

#### Elements

‘Create button’

**Type:** button

**Behaviour:**  By clicking this button, the page will redirect to the “Create product” page.

‘Dropdown list for status’

**Type:** Dropdown list

**Behaviour:**  Choose status for filter

‘Filter button’

**Type:** button

**Behaviour:**  Clicking this button to process filters by status.

‘Account table’

**Type:** Table

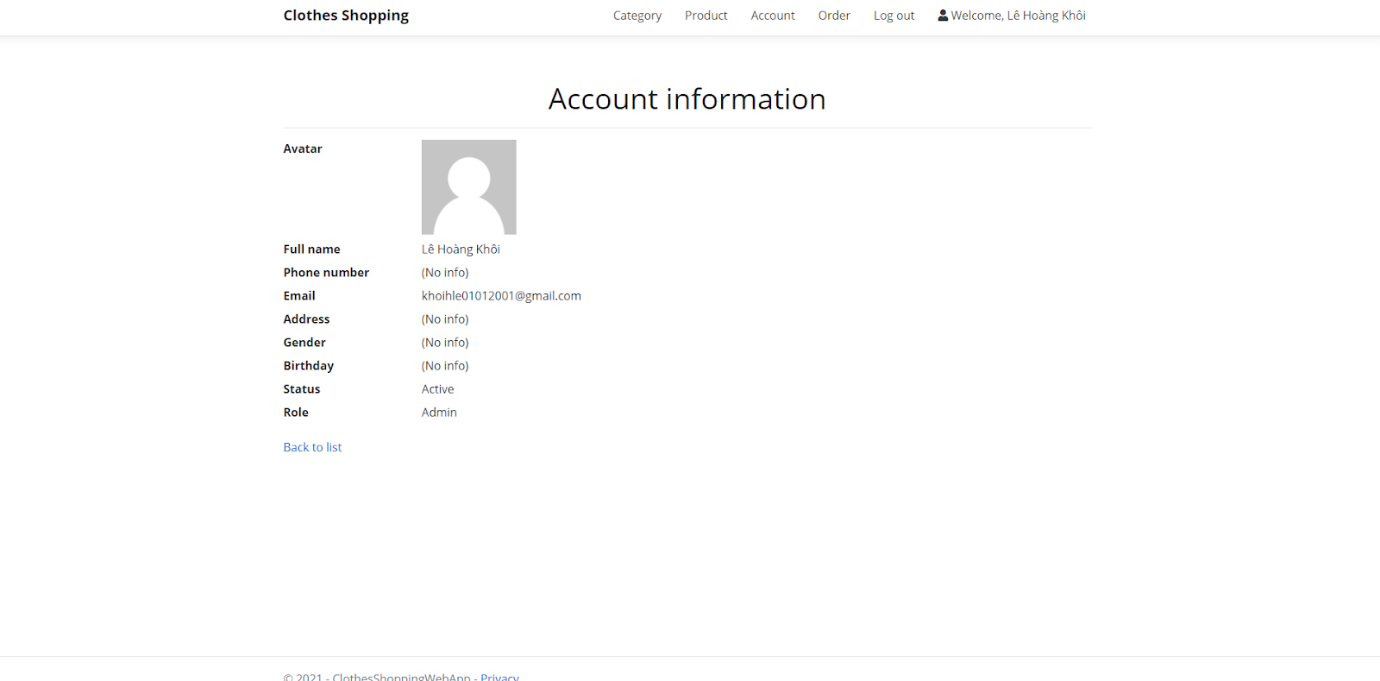
**Behaviour:**  Display table for all accounts.

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

### Account detail screen



#### Description

The Detail Account Page for admin to view information of a specific account.

#### Navigation

Click the “Details” link of a specific account on the table at the Account List Page.

#### Elements

‘Information text’

**Type:** Text

**Behaviour:**  Display all information about the account.

‘Back to list link’

**Type:** Link

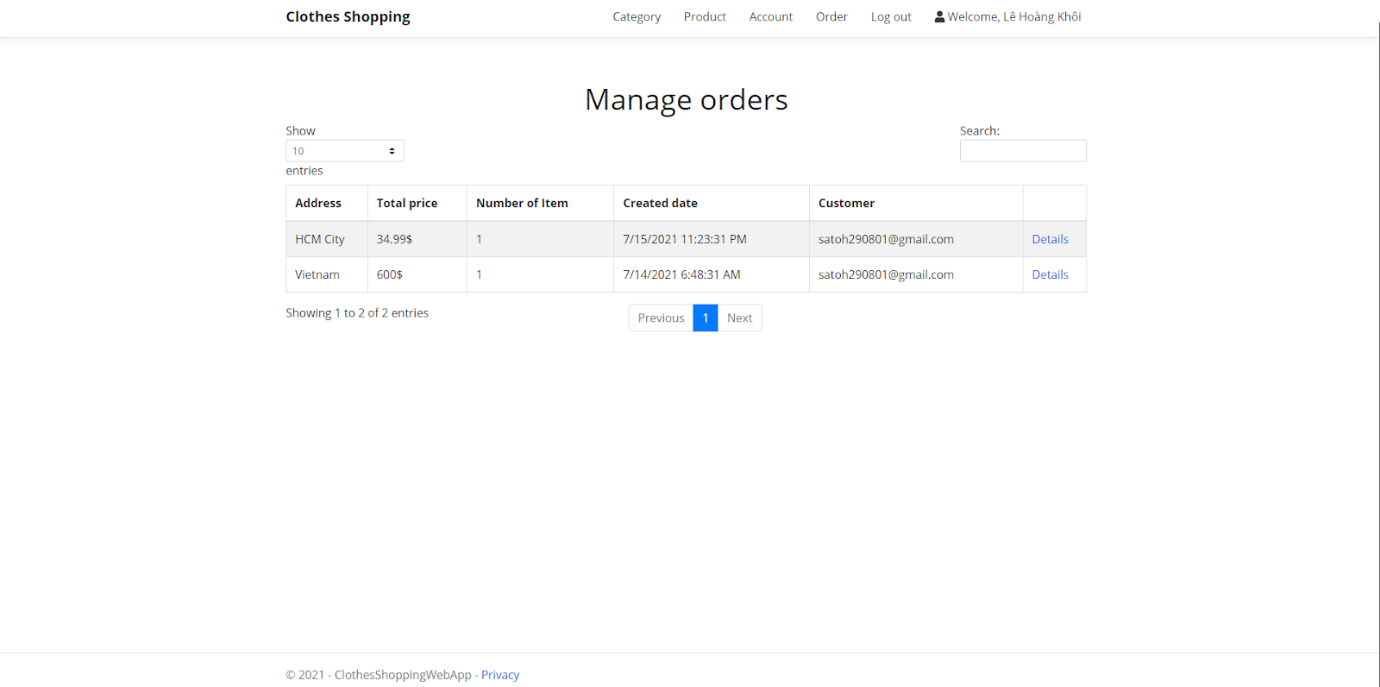
**Behaviour:**  By clicking this link, the page will redirect to the “Account list” page.

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

### Order list screen



#### Description

The Order list Page for admin to view all the orders.

#### Navigation

Click “Order” on the navbar.

#### Elements

Order table’

**Type:** Table

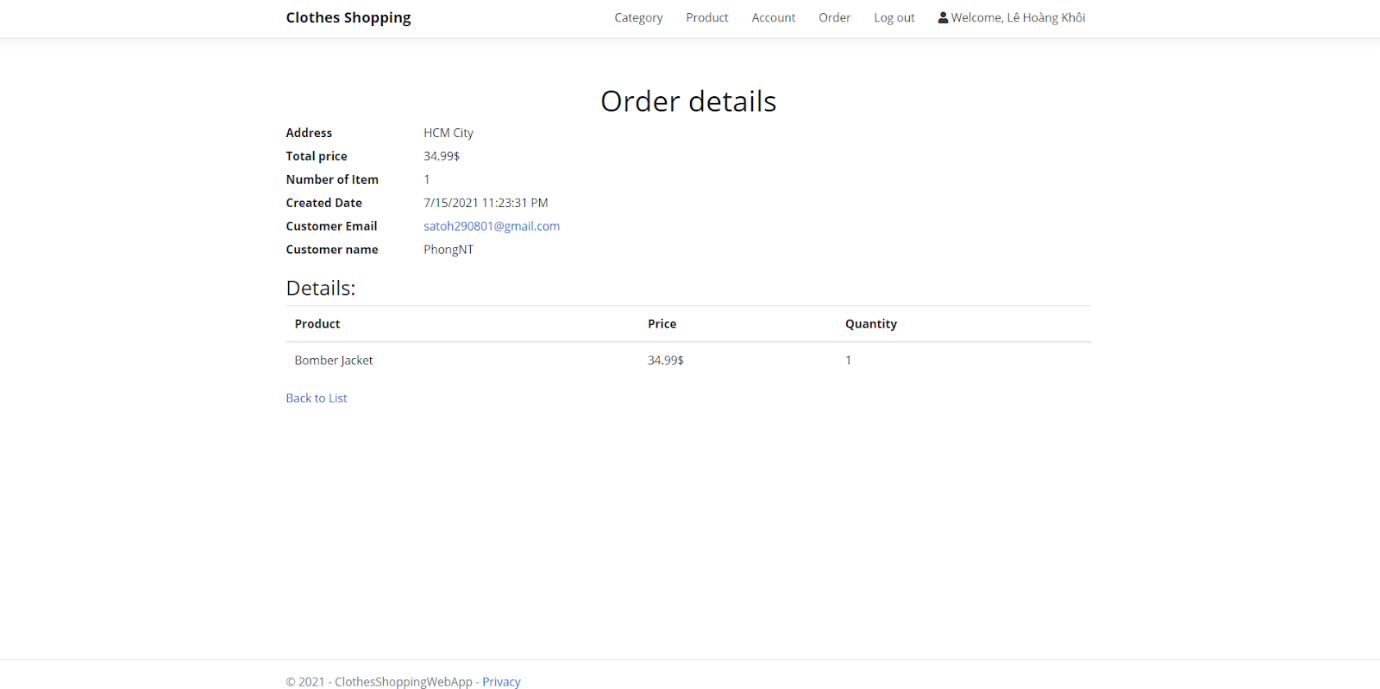
**Behaviour:**  Display table for all orders.

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

### Order detail screen



#### Description

The Detail Order Page for admin to view information of a specific order.

**Navigation**

Click the “Details” link of a specific order on the table at the Order List Page.

**Elements**

‘Order information text’

**Type:** Text

**Behaviour:**  Display all information about the order.

‘Product purchased table’

**Type:** Table

**Behaviour:**  Display products that have been purchased in the order.

‘Back to list link’

**Type:** Link

**Behaviour:**  By clicking this link, the page will redirect to the “Order list” page.

‘Menu Navbar’

**Type:** Navbar

**Behaviour:**  Navigation between sections.

------ The end ------