


ASSIGNMENT 2 FRONT SHEET

Qualification	BTEC Level 5 HND Diploma in Computing		
Unit number and title	10: Website Design & Development		
Submission date	03 – May – 2022	Date Received 1st submission	
Re-submission Date		Date Received 2nd submission	
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Student declaration <p>I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.</p>			
		Student's signature	

Grading grid

P5	P6	P7	M4	M5	D2	D3

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Signature & Date:

Contents

I. Design plan	5
1. User requirements	5
User requirements	5
Client requirements	5
2. Review accessibility standards and guidelines	5
3. Use-case diagram	7
4. Wireframes	8
Home page	8
Contact page	9
Log in page	10
Sign up page	11
Admin homepage	12
Add/edit a product	13
Account management	14
Edit account's info	15
Product details	16
5. Sitemap	17
II. Implementation	18
1. Source code samples	18
1.1 Home page	18
1.2 Contact page	21
1.3 Sign up page	23

1.4 Log in page	26
1.5 Admin page	28
1.6 Modify/Add product	30
1.7 Accounts.....	38
1.8 Add/edit staff account	43
1.9 Edit customer account	54
2. Comparison with the original design	60
III. Test plan.....	63
1. Introduction	63
2. Test case.....	63
3. Screenshot	65
3.1 Display products by brand and keyword	65
3.2 Contact form	68
3.3 Sign up.....	71
3.4 Log in	79
3.6 Delete product	83
3.7 Edit product.....	85
3.8 Add product	87
3.9 Account management.....	89
3.10 Edit account	91
3.11 Delete account	94
References	98

I. Design plan

1. User requirements

An owner of a smartphone store has requested my company to make a website for their store so that they can expand their business to an e-commerce platform. The website is expected to be minimalist while maintaining important function of an online shop. Items should be spaced appropriately so that it does not feel cluttered. There are a number of requirements to be followed:

User requirements

- A customer/user must be able to sign up for an account and log into the shop.
- Customers can add item(s) from the product page into their account's cart.
- Customers can go to their cart and modify the quantity of the products they have added or delete them.
- Customers can check out and pay for the items in their cart
- Site's visitors can submit a contact form to send feedback or to inquire for information.
- Visitors can search for products by inputting a product's name or just a part of its name
- Visitors can filter what products are displayed by brands

Client requirements

- The system must show the correct information for each product
- The correct products must be shown when the user performs a search function or chooses to display the products of a brand
- Links must direct the user to appropriate sites.
- The footer shows additional services that the store offers along with its social media accounts

2. Review accessibility standards and guidelines

To ensure that a website is accessible to its users, there are principles and guidelines that a website needs to follow in order to achieve that:

1. Perceivable

- a. Provide text alternatives for any non-text material so that it may be converted into formats that individuals require, such as big print, Braille, voice, symbols, or simpler language.
- b. Alternatives to time-based media should be provided.
- c. Create material that may be presented in a variety of ways (for example, a simpler layout) without sacrificing information or organization.
- d. Make it simpler for consumers to see and hear material by separating foreground and background elements.

2. Operable

- a. Make every function accessible through a keyboard.
- b. Allow users adequate time to read and interact with the material.
- c. Do not create content that is known or has a risk to trigger seizures.
- d. Provide methods to assist users in navigating, finding content, and determining their location.

3. Understandable

- a. Make your text more readable and comprehensible.
- b. Make Web pages appear and behave predictably.
- c. Assist users in avoiding and correcting errors.

4. Robust

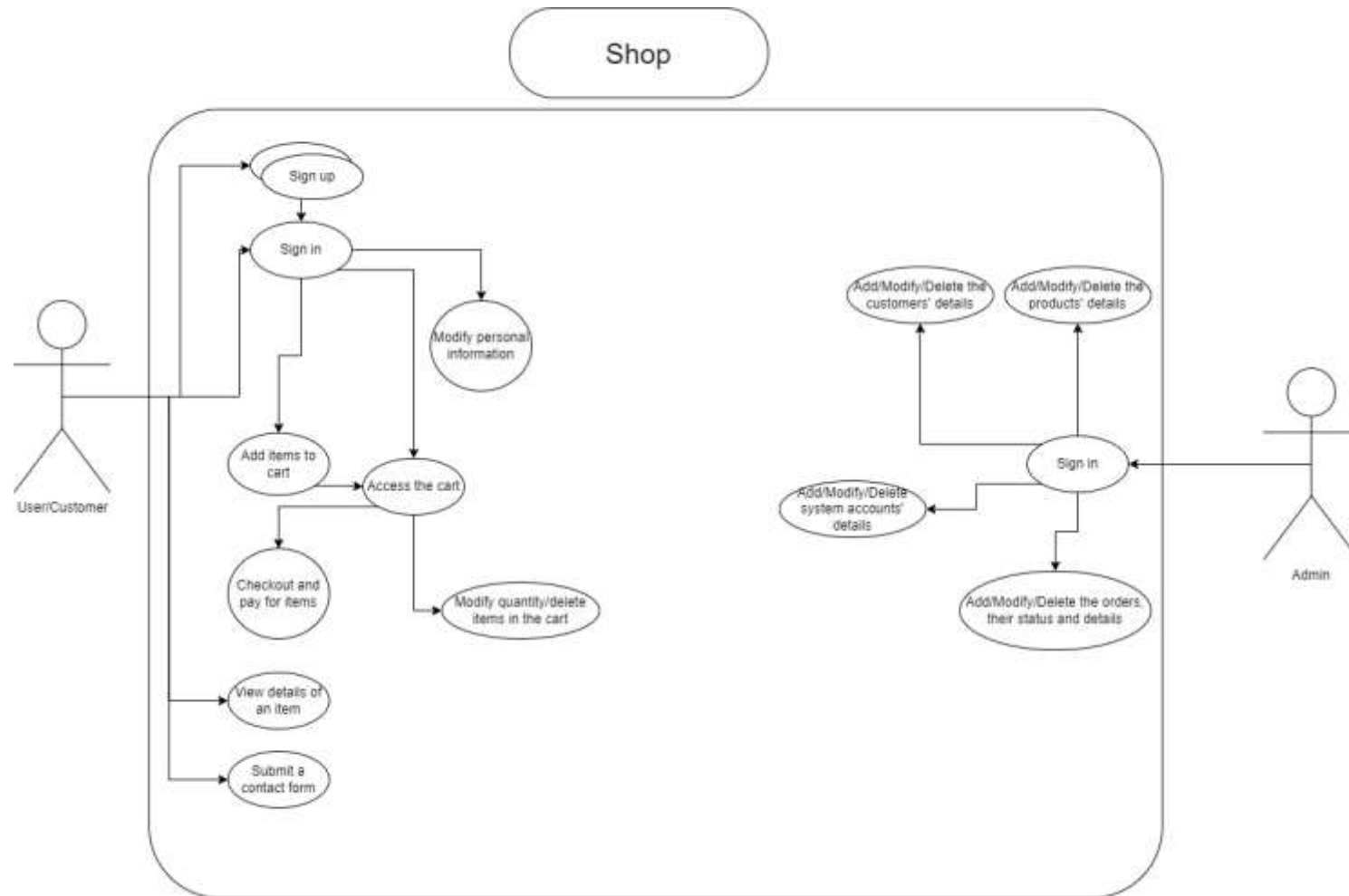
- a. Compatibility with present and future user agents, including assistive technology, should be maximized.

(Centre For Accessibility Australia, 2022)

To create an e-commerce website that follows the mentioned principles and guidelines, the aesthetics and designs of the website may be affected in various ways.

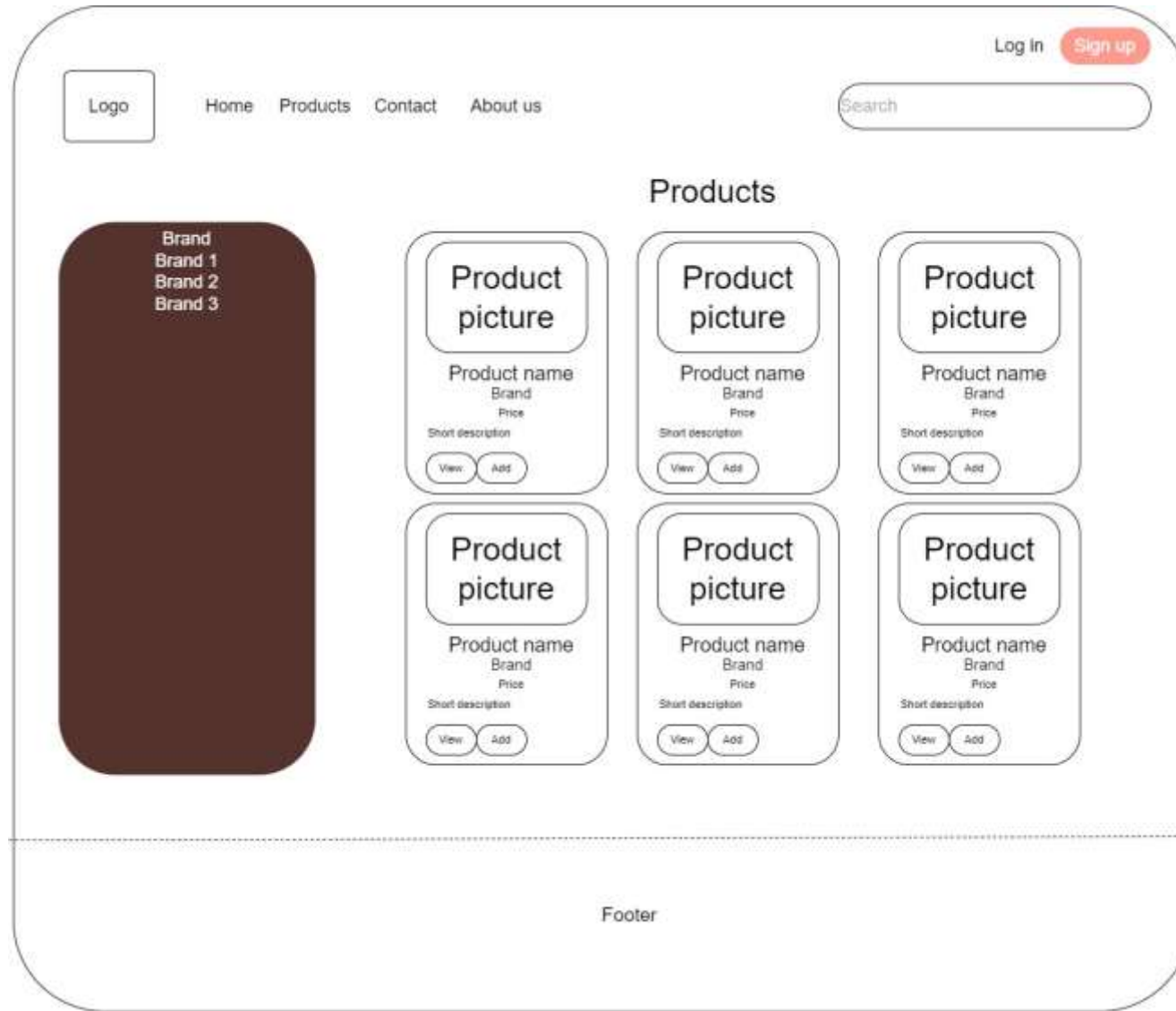
- Items and links need to be properly spaced out so that the user can make sense of what is appearing on the screen.
- Items, texts, need to have color that contrasts their container, like the dark text on a bright color button and vice versa
- Fonts chosen need to be clear and readable by everyone, avoid niche fonts that are only aesthetic but not functional

3. Use-case diagram



4. Wireframes

Home page



Contact page

Logo

HomeProductsContactAbout us

Log inSign up

Search

Image

Contact us

Please enter your information

Name

Email

Message

Footer

Log in page

Log in

Sign up

Logo

Home

Products

Contact

About us

Search

Image

Log in

Username

Password

Log In

Footer

Sign up page

Logo

HomeProductsContactAbout us

Search

Log inSign up

Image

Sign up

Username

Password

Email address

Full name

Address

Phone number

Log in

Footer

Admin homepage

Log in

Sign up

Logo

HomeProductsContactAbout us

Search

Category

Products

Accounts

Image	Name	Description	Price	Action
Image	Name	Short description of the product	\$232	<div>EditDelete</div>
Image	Name	Short description of the product	\$232	<div>EditDelete</div>
Image	Name	Short description of the product	\$232	<div>EditDelete</div>
Image	Name	Short description of the product	\$232	<div>EditDelete</div>

Add/edit a product

Logo

HomeProductsContactAbout us

Search

Log inSign up

Add/Edit a product

Category

Products

Accounts

Preview image

Product name

Product ID

Brand

Price

Description

Short description

ImageBrowse

Log in

Account management

Logo

HomeProductsContactAbout us

Search

LoginSign up

Category

- Products
- Accounts

Customer accounts

Username	Full name	Email	Action
user1	user full name	user@user.com	<div>EditDelete</div>
user1	user full name	user@user.com	<div>EditDelete</div>

Logo

HomeProductsContactAbout us

Search

LoginSign up

Category

- Products
- Accounts

Admin accounts

Username	Role	Action
user1	Admin	<div>EditDelete</div>
user1	Staff	<div>EditDelete</div>

Add account

Edit account's info

Logo

Home Products Contact About us

Log in Sign up

Search

Add/edit a staff account

Category

Products

Accounts

ID

Username

Password

Role

Log in

Logo

Home Products Contact About us

Log in Sign up

Search

Edit customer account

Category

Products

Accounts

ID

Username

Password

Full name

Address

Phone

Email address

Log in

Product details

Logo

HomeProductsContactAbout us

Search

Log inSign up

Go back

Product name

Brand

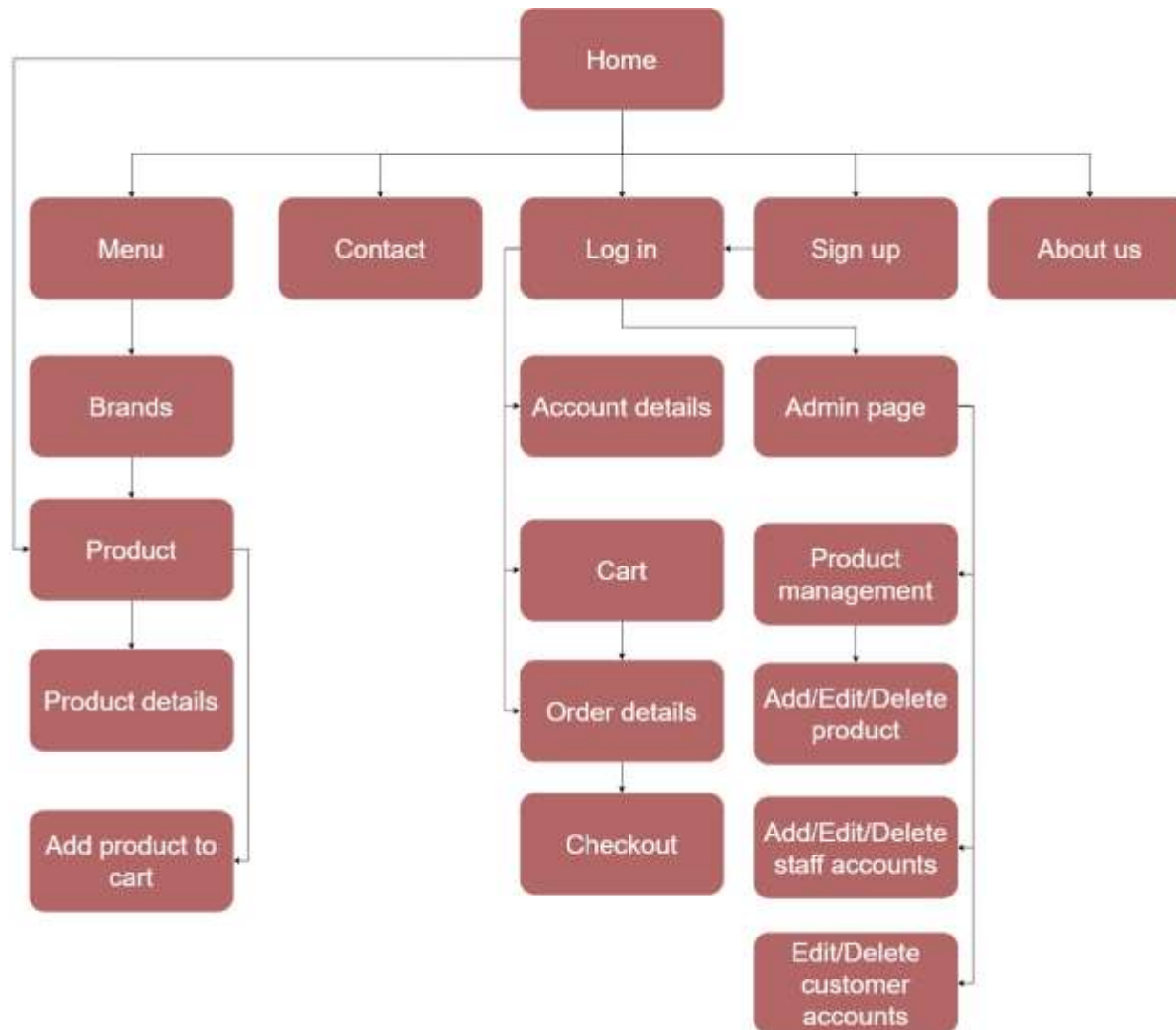
\$999.99

Short description

Full description

Product image

5. Sitemap

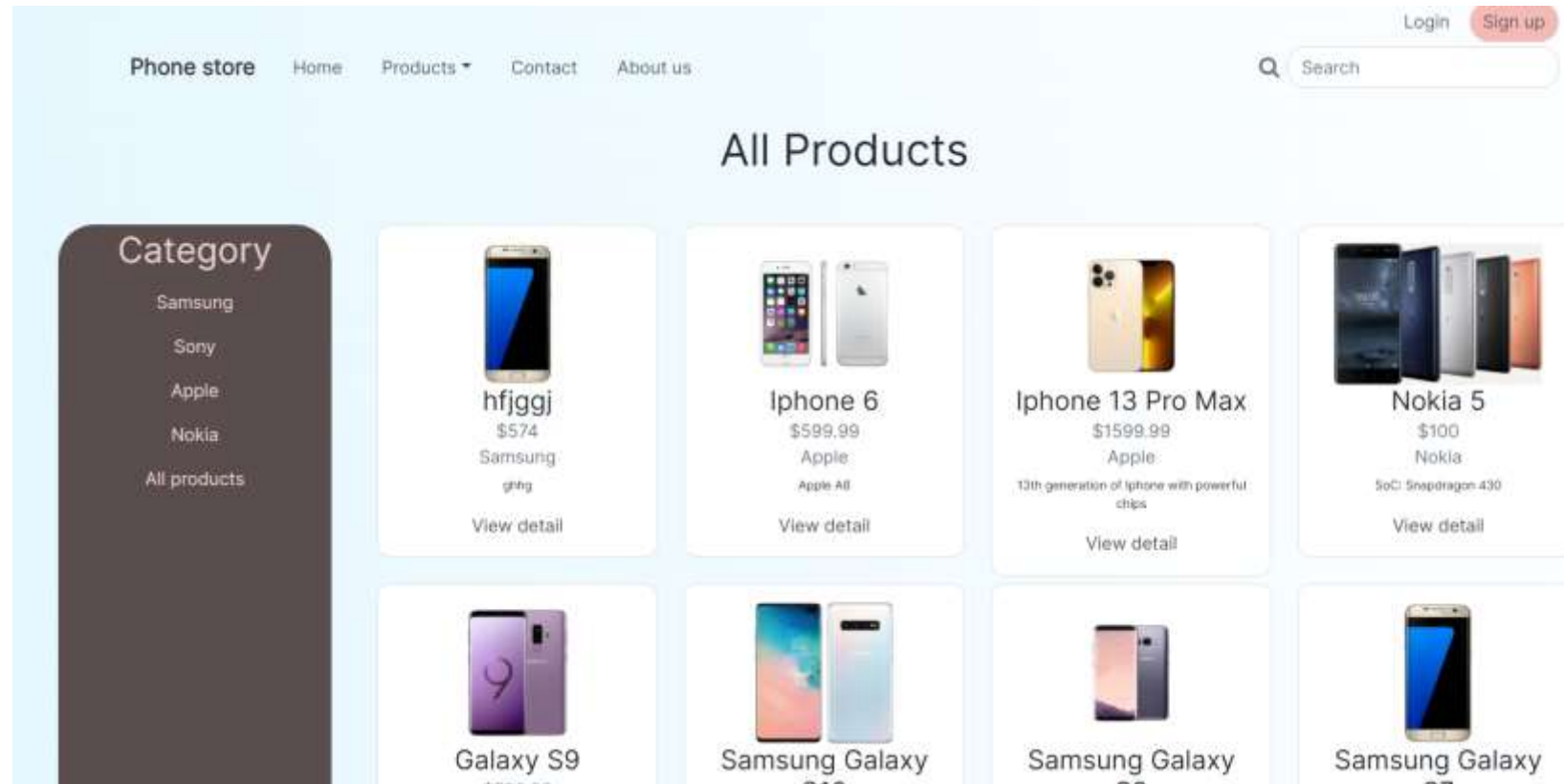


The Homepage contains multiple links, each leading to a different page. It also contains sections such as a menu, product list, and a search field for the user to search for some specific products. The menu contains multiple brands, when the user clicks on one, the products of that brand are displayed. In the products list. Each product is presented with its picture, brand, price, a short description and buttons to view details and add to the cart.

II. Implementation

1. Source code samples

1.1 Home page



This is the homepage of the store. On this page, logging in is not required, the visitor can choose to filter devices by brand, search by name, log in or sign up as they wish.

```
<div class="col-xl-3 col-xxl-2" style="background: #594d4d;border-radius: 33px;color: rgb(231,208,206);">
    <div></div>
    <h2 style="text-align: center;margin-top: 2%;">Category</h2>
```

```
<ul class="list-group" style="background: rgba(255,255,255,0);border-style: none;color:
rgb(231, 208, 206);text-align: center;">

    <?php foreach ($categories as $category) : ?>

        <a style="text-decoration: none" href="eshop.php?category=<?php echo $category[0];
?>"><li class="list-group-item" style="background: rgba(255,255,255,0);color: rgb(230,213,211);border-
style: none;"><span><?php echo $category[1]; ?></span></li></a>

    <?php endforeach; ?>

    <a style="text-decoration: none" href="eshop.php?category=<?php echo "all";?>"><li
class="list-group-item" style="background: rgba(255,255,255,0);color: rgb(230,213,211);border-style:
none;"><span>All products</span></li></a>

</ul>

</div>
```

This is the piece of code used to display the brands that are in the system. Using the function *foreach* in php, every brand of devices that exists in the system will be displayed without missing any.

```
<div class="col-lg-9 col-xl-8 col-xxl-9" style="margin-right: 0%;margin-left: 2%;border-style: none;border-radius: 56px;">

<div></div>

<div class="row">

    <?php foreach ($productsfull as $product) : ?>

        <div class="col-xxl-3 col-xl-3 justify-content-xxl-center align-items-xxl-center">

            <div class="card" style="border-radius: 12px; margin-bottom:3%">

                <div class="card-body">

                    <h4 class="card-title"><?php echo $product[1]; ?></h4>
```

```
<h6 class="card-subtitle mb-2 text-muted">${?php echo $product[3]; ?}</h6>

<h6 class="text-muted card-subtitle mb-2">{?php echo $product[8]; ?}</h6>

<p class="card-text" style="font-size: 11px;">{?php echo $product[6]; ?}</p><a class="card-link"
href="product.php?id={?php echo $product[0]; ?}" style="text-decoration: none;border-style: none;border-color: rgb(68,68,68);color:
rgb(72,72,72);">View detail</a>

</div>

</div>

</div>

<?php endforeach; ?>

</div>


</div>
```

This is the code used to display the products of the chosen brand onto the product list. If no brand is chosen, all products in the system will be displayed.

1.2 Contact page

[Phone store](#) [Home](#) [Products ▾](#) [Contact](#) [About us](#)

[Login](#) [Sign up](#)



Contact us

Please enter your information so we can support you

ⓘ
Please enter a correct email address.

localhost says

Message sent successfully!

OK

After the user inputs their information and message, the information entered will be transferred to the database.

```
<div class="col-md-6 text-center" style="color: rgba(51,58,65,0.71);">
```

```
<h1 style="text-align: left;">Contact us</h1>
```

```
<h6 style="text-align: left;">Please enter your information so we can support you</h6>
```

```
<form action="contact.php" method="post" style="width: 100%;">
```

```
  <div class="mb-3"><input class="form-control" type="text" id="name" name="name" placeholder="Name" style="width: 45%;border-radius: 32px;"></div>
```

```
  <div class="mb-3"><input class="form-control is-invalid" type="email" id="email" name="email" placeholder="Email" style="width: 45%;border-radius: 40px;"><small class="form-text text-danger">Please enter a correct email address.</small></div>
```

```
  <div class="mb-3"><textarea class="form-control" name="message" id="message" placeholder="Message" rows="14" style="border-radius: 11px;height: 194px;"></textarea></div>
```

```
  <div class="mb-3"><button class="btn btn-primary" id="submit" name="submit" type="submit" style="background: #c26f6f;width: 22%;height: 51px;border-radius: 43px;border-style: none;margin-left: 78%;">Send</button></div>
```

```
</form>
```

```
</div>
```

This is the code used to display the contact form, the form then uses the method POST to send the query to the server and saves the information there

1.3 Sign up page



Sign up

Please enter your information

Username

Username

Password

Password

Email address

Email address

Full name

Full name

Address

Address

Phone number

XXX-xxx-xxxx

Sign up

After the user input the information of the account that they want to create, the server checks if there is any username and email duplication before creating a new account in the system. If there's no duplication, the process succeeds.

localhost says

Username and Email are already in the database

OK

```
<div class="col-md-6 text-center" style="color: rgba(51,58,65,0.71);">

  <h1>Sign up</h1>

  <h2>Please enter your information</h2>

  <form action = "signup.php" method = "POST" class="d-xl-flex flex-column justify-content-xl-center align-items-xl-start" style="width: 60%;margin-right: auto;margin-left: auto;">

    <label class="form-label" for="username" style="margin-bottom: -2px;margin-left: 3.5%;">Username</label>

    <input class="form-control" type="text" id="username" name="username" placeholder="Username" style="border-radius: 25px;">

    <label class="form-label" for="password" style="margin-bottom: -2px;margin-top: 21px;margin-left: 3.5%;">Password</label>

    <input class="form-control" type="password" id="password" placeholder="Password" name="password" style="border-radius: 25px;">

    <label class="form-label" for="email" style="margin-bottom: -2px;margin-top: 21px;margin-left: 3.5%;">Email address</label>
```



```
<input class="form-control" type="text" id="email" name="email" placeholder="Email address" style="border-radius: 25px;">

<label class="form-label" for="fullname" style="margin-bottom: -2px;margin-top: 21px;margin-left: 3.5%;">Full name</label>

<input class="form-control" type="text" id="fullname" name="fullname" placeholder="Full name" style="border-radius: 25px;">

<label class="form-label" for="address" style="margin-bottom: -2px;margin-top: 21px;margin-left: 3.5%;">Address</label>

<input class="form-control" type="text" id="address" name="address" placeholder="Address" style="border-radius: 25px;">

<label class="form-label" for="phone" style="margin-bottom: -2px;margin-top: 21px;margin-left: 3.5%;">Phone number</label>

<input class="form-control" id="phone" type="tel" name="phone" placeholder="XXX-xxx-xxxx" style="border-radius: 25px;">

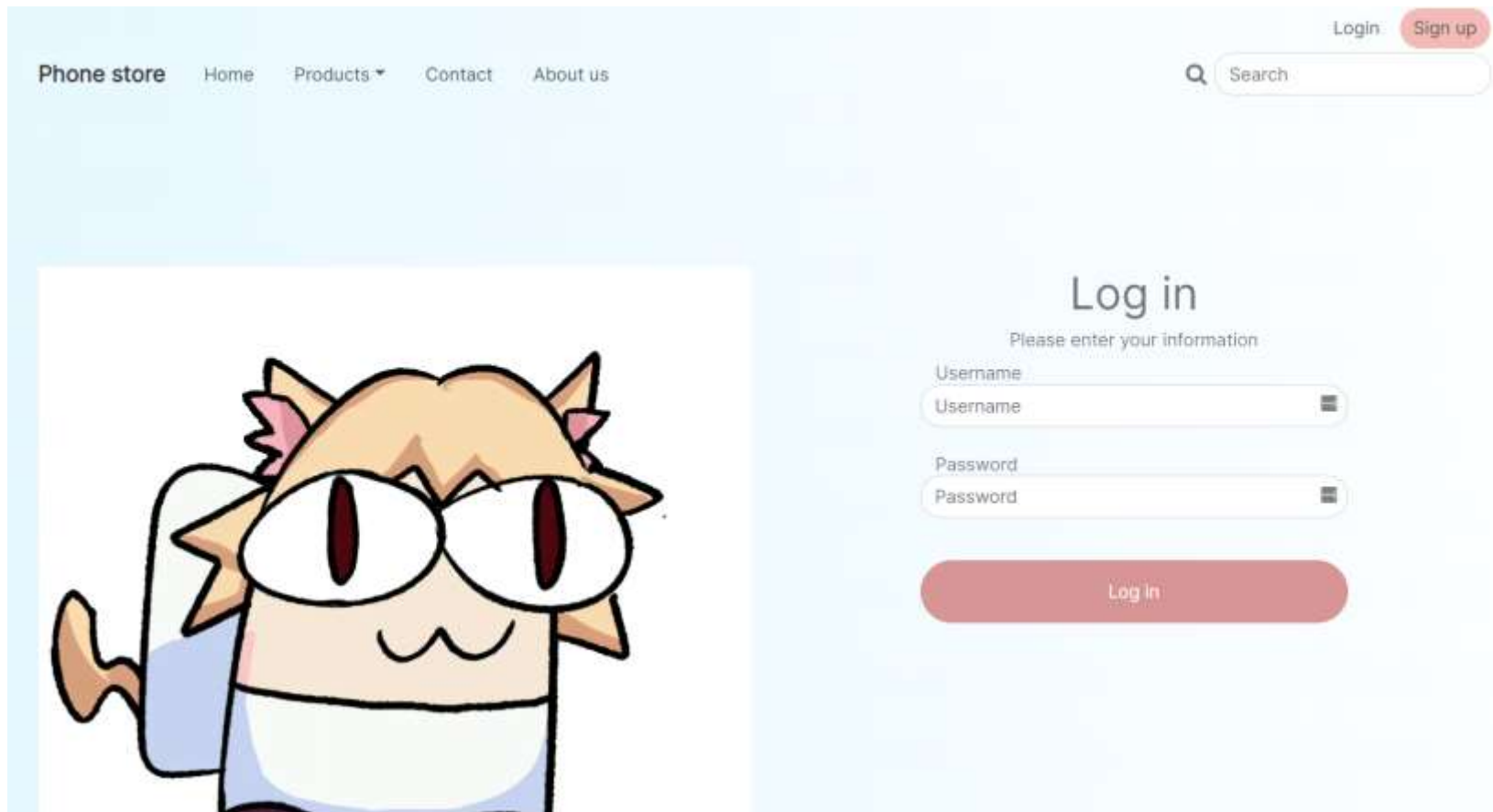
<button class="btn btn-primary" name="submit" type="submit" style="margin-left: auto;margin-right: auto;width: 100%;margin-top:
10%;border-radius: 56px;border-style: none;background: rgb(215,149,149);">Sign up</button>

</form>

</div>
```

This is the code to display the form that will take the input from the user and pass those to the server.

1.4 Log in page



Phone store Home Products Contact About us

Search

Log in

Please enter your information

Username

Username

Password

Password

Log in

This is the log in page for the admin. When the correct credentials are input, it redirects the user to the admin page where they can manage products and accounts.

```
<div class="col-md-6 text-center" style="color: rgba(51,58,65,0.71);">
```

```
<h1>Log in</h1>
```

```
<h6>Please enter your information</h6>
```

```
<form action="signin.php" method="post" class="d-xl-flex flex-column justify-content-xl-center align-items-xl-start" style="width: 60%;margin-right: auto;margin-left: auto;">

  <label class="form-label" for="Username" style="margin-bottom: -2px;margin-left: 3.5%;">Username</label>

  <input class="form-control" type="text" id="Username" name="Username" placeholder="Username" style="border-radius: 25px;">

  <label class="form-label" for="password" style="margin-bottom: -2px;margin-top: 21px;margin-left: 3.5%;">Password</label>

  <input class="form-control" type="password" placeholder="Password" name="password" id="password" style="border-radius: 25px;">

  <button class="btn btn-primary" type="submit" style="margin-left: auto;margin-right: auto;width: 100%;margin-top: 10px;border-radius: 56px;border-style: none;background: rgb(215,149,149);height: 56px;">Log in</button>

</form>

</div>
```

1.5 Admin page

Phone store
Home
Products
Contact
About us

Login
Sign up

Search





Category

Product

- Samsung
- Sony
- Apple
- Nokia
- All
- Add a product

Account

- Customer
- Admin

Image	Name	Description	Price	Action
	hfjggj	ghhg	\$574	Edit Delete
	Iphone 6	Apple A8	\$599.99	Edit Delete
	Iphone 13 Pro Max	13th generation of Iphone with powerful chips.	\$1599.99	Edit Delete
	Nokia 5.3	SoC: Snapdragon 430	\$100	Edit Delete

In this page, the user will be able to manage the products on the system.

```
<?php foreach ($productsfull as $product) { ?>

    <div class="row">

        <div class="col-xxl-2 d-xxl-flex align-items-xxl-center" style="border-radius: 21px;border: 1px solid rgb(87,93,99) ;">

            </div>
```

```

<div class="col-xxl-2 d-xxl-flex align-items-xxl-center" style="border-radius: 21px;border: 1px solid rgb(87,93,99) ;">

    <h3><?php echo $product[1]; ?></h3>

</div>

<div class="col-xxl-4 d-xxl-flex align-items-xxl-center" style="border-radius: 21px;border: 1px solid rgb(87,93,99) ;">

    <p><br><?php echo $product[6]; ?><br><br></p>

</div>

<div class="col-xxl-2 d-xxl-flex align-items-xxl-center" style="border-radius: 21px;border: 1px solid rgb(87,93,99) ;">

    <h3>$<?php echo $product[3]; ?></h3>

</div>

<div class="col-xxl-2 d-xxl-flex justify-content-xxl-center align-items-xxl-center" style="border-radius: 21px;border: 1px solid
rgb(87,93,99) ;">

    <div class="btn-group d-xxl-flex justify-content-xxl-center" role="group">

        <a role="button" href="editproduct.php?editID=<?php echo $product[0] ?>" class="btn btn-primary" type="button"
style="background: rgb(68,75,85);border-style: none;border-radius: 17px;">Edit</a>

        <a role="button" href="admin.php?delete=<?php echo $product[0] ?>" name="delete" class="btn btn-primary" type="button"
style="background: rgb(68,75,85);border-radius: 17px;border-style: none; text-decoration: none;">Delete</a>

    </div>

</div>

</div>

<?php } ?>

```

Similar to the product list on the homepage, php function *foreach* is used to display products onto the screen.

1.6 Modify/Add product

Phone store Home Products Contact About us

Login Sign up

Search

Category

Product

- Samsung
- Sony
- Apple
- Nokia
- All
- Add a product

Account

- Customer
- Admin

Modify a product

Product name: hfjggj

Product ID: ffufu

Brand: Samsung

Price: 574

Description: vvhhg

Short description: ghhg

Image: Choose File No file chosen

Submit

```
<div class="row">

    <div class="col-xxl-5 d-xxl-flex justify-content-xxl-center align-items-xxl-center"></div>

    <div class="col-xxl-7">

        <form action="editproduct.php" method="post" enctype="multipart/form-data">

            <div class="row">
```

```
<div class="col">

  <div class="row">

    <div class="col">

      <h1>Modify a product</h1>

      <div class="row" style="margin-bottom: 2%;">

        <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

          <div class="row">

            <div class="col">

              <h5>Product name</h5>

            </div>

          </div>

        </div>

      </div>

      <div class="col-xxl-6">

        <div class="row">

          <div class="col"><input class="form-control-lg" value="<?php echo $rows[0][1] ?>" type="text"
name="ProductName" placeholder="Product name" style="border-radius: 10px;border-style: solid;"></div>

        </div>

      </div>

    </div>

    <!--Input for product ID-->
```

```
<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Product ID</h5>

      </div>

    </div>

  </div>

</div>

<div class="col-xxl-6">

  <div class="row">

    <div class="col"><input class="form-control-lg" value="<?php echo $rows[0][0] ?>" type="text" id="ProductID"
name="ProductID" placeholder="Product ID" style="border-radius: 10px;border-style: solid;"></div>

  </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">
```



```
<h5>Brand</h5>

</div>

</div>

</div>

<div class="col-xxl-6">

  <div class="row">

    <div class="col"><select name="category" id="category" class="form-select-lg" style="border-radius: 20px;border-
style: solid;border-color: rgb(82,82,82);">

      <optgroup label="Choose a brand">

        <!--Default option-->

        <option value="<?php echo $rows[0][4] ?>"><?php echo $categoryEdit[0][8] ?></option>

        <?php foreach ($categories as $category) { ?>

          <option value="<?php echo $category[0]; ?>"><?php echo $category[1]; ?></option>

          <?php } ?>

        </optgroup>

      </select></div>

    </div>

  </div>

</div>

<div class="row" style="margin-bottom: 2%;">
```

```
<div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

  <div class="row">

    <div class="col">

      <h5>Price</h5>

    </div>

  </div>

</div>

<div class="col-xxl-6">

  <div class="row">

    <div class="col"><input class="form-control-lg" value = "<?php echo $rows[0][3] ?>" type="text" name="Price"
placeholder="Price" style="border-radius: 10px;border-style: solid;"></div>

  </div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Description</h5>

      </div>

    </div>

  </div>

</div>
```

```
</div>

</div>

<div class="col-xxl-6">

  <div class="row">

    <div class="col"><textarea class="form-control-lg" name="FDescription" placeholder="SoC: S*** 888" rows="5"
style="border-radius: 29px;"> <?php echo $rows[0][5] ?></textarea></div>

  </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Short description</h5>

      </div>

    </div>

  </div>

  <div class="col-xxl-6">

    <div class="row">
```

```

        <div class="col"><textarea class="form-control-lg" name="BDescription" placeholder="SoC: S*** 888" rows="5"
style="border-radius: 29px;"><?php echo $rows[0][6] ?></textarea></div>

    </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

    <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

        <div class="row">

            <div class="col">

                <h5>Image</h5>

            </div>

        </div>

    </div>

    <div class="col-xxl-6">

        <div class="row">

            <div class="col">

                <input type="file" value="<?php echo $rows[0][2] ?>" name="imageupload" id="imageupload"
onchange="showPreview(event);" onload="showPreview(event)">

            </div>

        </div>

    </div>

```


[Phone store](#) [Home](#) [Products](#) [Contact](#) [About us](#)

[Login](#) [Sign up](#)

Category

Product

- Samsung
- Sony
- Apple
- Nokia
- All
- [Add a product](#)

Account

- Customer
- Admin

Add a product

Product name

Product ID

Brand

Price

Description

Short description

Image

Samsung

SoC: S*** 888

SoC: S*** 888

Choose File

 No file chosen

Submit

Add and modify has similar design and code. The difference is that on the modify page the sql code used is UPDATE while it is INSERT on the add one.

1.7 Accounts

These pages display the information of accounts on the system along with actions that can be made on those accounts

[Phone store](#)
[Home](#)
[Products ▾](#)
[Contact](#)
[About us](#)

[Login](#)
[Sign up](#)

Category

Product

- Samsung
- Sony
- Apple
- Nokia
- All
- Add a product

Account

- Customer
- Admin

Customer accounts

Username	Full name	Email	Action
222	anh trinh edit dddd	222@222.com	Edit Delete
123213	agsdgs	wsfcdwqdwqd@gmail.com	Edit Delete

```
<?php foreach($customers as $customer) { ?>
```

```
    <div class="row" style="margin-bottom: 1%;">
```

```
        <div class="col-xxl-3 d-xxl-flex justify-content-xxl-center align-items-xxl-center">
```

```
            <h3><?php echo $customer[5]; ?></h3>
```

```
        </div>
```

```
        <div class="col-xxl-3 d-xxl-flex justify-content-xxl-center align-items-xxl-center">
```

```
            <h3><?php echo $customer[1]; ?></h3>
```

```
</div>

<div class="col-xxl-3 d-xxl-flex justify-content-xxl-center align-items-xxl-center">

    <h5><?php echo $customer[4]; ?></h5>

</div>

<div class="col-xxl-3 d-xxl-flex justify-content-xxl-center align-items-xxl-center">

    <div class="btn-group" role="group">

        <a role="button" href="editcustomer.php?editId=<?php echo$customer[0]?>" class="btn btn-primary" type="button"
style="background: rgb(108,108,108);border-style: none;border-radius: 22px;font-size: 23px;">Edit</a>

        <a role="button" href="admin-CustomerAccs.php?delete=<?php echo$customer[0]?>" class="btn btn-primary" type="button"
style="background: rgb(108,108,108);border-style: none;border-radius: 22px;font-size: 23px;">Delete</a>

    </div>

</div>

</div>

<?php } ?>
```


Phone store
Home
Products ▼
Contact
About us

Login
Sign up

Search

Category

Product

- Samsung
- Sony
- Apple
- Nokia
- All
- Add a product

Account

- Customer
- Admin

Admin accounts

Username	Role	Action
admin123	Admin	Edit Delete
dzunglm	Staff	Edit Delete
admin1231	Admin1	Edit Delete

Add account

```
<div class="row">
```

```
  <div class="col d-xxl-flex justify-content-xxl-center align-items-xxl-center">
```

```
    <h1>Admin accounts</h1>
```

```
  </div>
```

```
</div>
```

```
<div class="row" style="margin-bottom: 1%;">
```

```
  <div class="col-xxl-4 d-xxl-flex justify-content-xxl-center align-items-xxl-center EditColumnBorder">
```

```
<h3>Username</h3>

</div>

<div class="col-xxl-4 d-xxl-flex justify-content-xxl-center align-items-xxl-center EditColumnBorder">

    <h3>Role</h3>

</div>

<div class="col-xxl-4 d-xxl-flex justify-content-xxl-center align-items-xxl-center EditColumnBorder">

    <h3>Action</h3>

</div>

</div>

<?php foreach ($accounts as $account) { ?>

<div class="row" style="margin-bottom: 1%;">

    <div class="col-xxl-4 d-xxl-flex justify-content-xxl-center align-items-xxl-center">

        <h3><?php echo $account[1]; ?></h3>

    </div>

    <div class="col-xxl-4 d-xxl-flex justify-content-xxl-center align-items-xxl-center">

        <h3><?php echo $account[3]; ?></h3>

    </div>

    <div class="col-xxl-4 d-xxl-flex justify-content-xxl-center align-items-xxl-center">

        <div class="btn-group" role="group">
```

```

        <a role="button" href="editStaffAcc.php?editID=?php echo $account[0] ?>" class="btn btn-primary" type="button"
style="background: rgb(108,108,108);border-style: none;border-radius: 22px;font-size: 23px;">Edit</a>

        <a role="button" href="admin-accounts.php?delete=?php echo $account[0] ?>" class="btn btn-primary" type="button"
style="background: rgb(108,108,108);border-style: none;border-radius: 22px;font-size: 23px;">Delete</a></div>

    </div>

</div>

<?php } ?>

<div class="row">

    <div class="col d-xxl-flex justify-content-xxl-end">

        <a href="admin-addAcc.php" class="btn btn-lg" role="button" style="background: rgb(156,72,102);border-radius: 64px;border-
style: solid;color: rgb(252,203,203);height: 120px;width: 200.7031px;font-size: 30px;">Add account</a>

    </div>

</div>

```

Both pages use *foreach* php function to display the information along with actions on the accounts stored on the system. On the admin accounts page, there is an “Add account” button to add a staff account into the system.

1.8 Add/edit staff account

These pages allow the user to modify existing staff accounts on the system or to add a new one.

[Phone store](#)
[Home](#)
[Products ▾](#)
[Contact](#)
[About us](#)

[Login](#)
[Sign up](#)

Category

Product

- Samsung
- Sony
- Apple
- Nokia
- All

Add a product

Account

- Customer
- Admin

Edit Staff account

ID

Username

Password

Role

Submit

```

<div class="row">

  <div class="col">

    <h1 style="margin-bottom: 22px;">Edit Staff account</h1>

    <form action= "editStaffAcc.php" method="post" enctype="multipart/form-data">

      <div class="row" style="margin-bottom: 2%;">

        <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

          <div class="row">

```

```
<div class="col">

    <h5>ID</h5>

</div>

</div>

<div class="col-xxl-7">

    <div class="row">

        <div class="col"><input class="form-control-lg" type="text" id="id" name="id" value="<?php echo
$accountEdit[0][0]?>" placeholder="ID" style="border-radius: 10px;border-style: solid;width: 100%;" readonly></div>

    </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

    <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

        <div class="row">

            <div class="col">

                <h5>Username</h5>

            </div>

        </div>

    </div>

</div>
```

```
<div class="col-xxl-7">

    <div class="row">

        <div class="col"><input class="form-control-lg" type="text" id="username" name="username" value="<?php echo
$accountEdit[0][1]?>" placeholder="Username" style="border-radius: 10px;border-style: solid;width: 100%;"></div>

    </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

    <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

        <div class="row">

            <div class="col">

                <h5>Password</h5>

            </div>

        </div>

    </div>

    <div class="col-xxl-7">

        <div class="row">

            <div class="col"><input class="form-control-lg" id="password" type="text" name="password" value="<?php echo
$accountEdit[0][2]?>" placeholder="Password" style="border-radius: 10px;border-style: solid;width: 100%;"></div>

        </div>

    </div>

</div>
```

```
</div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Role</h5>

      </div>

    </div>

  </div>

  <div class="col-xxl-7">

    <div class="row">

      <div class="col"><input class="form-control-lg" type="text" name="role" value="<?php echo $accountEdit[0][3]?>"
placeholder="Admin" style="border-radius: 10px;border-style: solid;width: 100%;"></div>

    </div>

  </div>

</div>

<div class="row d-xxl-flex justify-content-xxl-end">

  <div class="col-auto d-xxl-flex justify-content-xxl-end">
```

```
<button name="submit" type="submit" class="btn btn-primary btn-lg" type="button" style="background:
rgb(157,120,86);border-style: none;border-radius: 22px;">Submit

</button>

</div>

</div>

</form>

</div>

</div>
```


[Phone store](#)
[Home](#)
[Products ▼](#)
[Contact](#)
[About us](#)

[Login](#)
[Sign up](#)

Category

Product

- Samsung
- Sony
- Apple
- Nokia
- All

Add a product

Account

- Customer
- Admin

Add a Staff account

ID	<input type="text"/>
Username	<input type="text"/>
Password	<input type="password"/>
Role	<input type="text" value="Admin"/>

Submit

```
<div class="row">
```

```
  <div class="col">
```

```
    <h1 style="margin-bottom: 22px;">Add a Staff account</h1>
```

```
    <form action= "admin-addAcc.php" method="post" enctype="multipart/form-data">
```

```
      <div class="row" style="margin-bottom: 2%;">
```

```
        <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">
```

```
<div class="row">

  <div class="col">

    <h5>ID</h5>

  </div>

</div>

</div>

</div>

<div class="col-xxl-7">

  <div class="row">

    <div class="col"><input class="form-control-lg" type="text" id="id" name="id" placeholder="ID" style="border-
radius: 10px;border-style: solid;width: 100%;" readonly></div>

  </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Username</h5>

      </div>

    </div>

  </div>

</div>
```

```
</div>

<div class="col-xxl-7">

  <div class="row">

    <div class="col"><input class="form-control-lg" type="text" id="username" name="username"
placeholder="Username" style="border-radius: 10px;border-style: solid;width: 100%;"></div>

  </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Password</h5>

      </div>

    </div>

  </div>

  <div class="col-xxl-7">

    <div class="row">

      <div class="col"><input class="form-control-lg" id="password" type="text" name="password"
placeholder="Password" style="border-radius: 10px;border-style: solid;width: 100%;"></div>
```

```
</div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Role</h5>

      </div>

    </div>

    <div class="col-xxl-7">

      <div class="row">

        <div class="col"><input class="form-control-lg" type="text" name="role" placeholder="Admin" style="border-
radius: 10px;border-style: solid;width: 100%;"></div>

      </div>

    </div>

  </div>

  <div class="row d-xxl-flex justify-content-xxl-end">
```

```
<div class="col-auto d-xxl-flex justify-content-xxl-end">  
  
    <button name="submit" type="submit" class="btn btn-primary btn-lg" type="button" style="background:  
rgb(157,120,86);border-style: none;border-radius: 22px;">Submit  
  
    </button>  
  
    </div>  
  
</div>  
  
</form>  
  
</div>  
  
</div>
```

Similar to the relationship add/edit product, add/edit staff accounts are similar in terms of design and code with differences in their sql code.

1.9 Edit customer account

Phone store Home Products Contact About us

Search

Category

Product

Samsung

Sony

Apple

Nokia

All

Add a product

Account

Customer

Admin

Edit customer account

ID

Username

Password

Full name

Address

Phone number

Email address

Submit

This page lets the user modify the information of a customer.

```
<div class="row">

    <div class="col">

        <h1 style="margin-bottom: 22px;">Edit customer account</h1>

        <form action = "editcustomer.php" method="POST" enctype="multipart/form-data">

            <div class="row" style="margin-bottom: 2%;">
```

```
<div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

        <div class="col">

            <h5>ID</h5>

        </div>

    </div>

</div>

<div class="col-xxl-7">

    <div class="row">

        <div class="col"><input class="form-control-lg" type="text" id="id" name="id" value="<?php echo  
$customerEdit[0][0]?>" placeholder="ID" style="border-radius: 10px;border-style: solid;width: 100%;" readonly></div>

    </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

    <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

        <div class="row">

            <div class="col">

                <h5>Username</h5>

            </div>

        </div>

    </div>

</div>
```

```
</div>

</div>

<div class="col-xxl-7">

  <div class="row">

    <div class="col"><input class="form-control-lg" value = "<?php echo $customerEdit[0][5]?>" type="text"
name="username" placeholder="Username" style="border-radius: 10px;border-style: solid;width: 100%;"></div>

  </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Password</h5>

      </div>

    </div>

  </div>

  <div class="col-xxl-7">

    <div class="row">
```



```
<div class="col"><input class="form-control-lg" type="text" name="password" placeholder="Password" value =
"<?php echo $customerEdit[0][6]?>" style="border-radius: 10px;border-style: solid;width: 100%;"></div>

</div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Full name</h5>

      </div>

    </div>

  </div>

  <div class="col-xxl-7">

    <div class="row">

      <div class="col"><input class="form-control-lg" type="text" name="fullName" placeholder="Alice Bob" value =
"<?php echo $customerEdit[0][1]?>" style="border-radius: 10px;border-style: solid;width: 100%;"></div>

    </div>

  </div>

</div>
```

```
<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Address</h5>

      </div>

    </div>

  </div>

  <div class="col-xxl-7">

    <div class="row">

      <div class="col"><input class="form-control-lg" type="text" name="address" placeholder="123 George Ave, Sunken
City, Banana" value = "<?php echo $customerEdit[0][2]?>" style="border-radius: 10px;border-style: solid;width: 100%;"></div>

    </div>

  </div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Phone number</h5>
```

```
</div>

</div>

</div>

<div class="col-xxl-7">

  <div class="row">

    <div class="col"><input class="form-control-lg" type="tel" name="phone" placeholder="123 456 7890" value =
    "<?php echo $customerEdit[0][3]?>" style="border-radius: 10px;border: 2px solid rgb(106,106,106);width: 100%;"></div>

  </div>

</div>

</div>

<div class="row" style="margin-bottom: 2%;">

  <div class="col-xxl-5 d-xxl-flex align-items-xxl-center">

    <div class="row">

      <div class="col">

        <h5>Email address</h5>

      </div>

    </div>

  </div>

  <div class="col-xxl-7">

    <div class="row">
```

```
<div class="col"><input class="form-control-lg" type="email" placeholder="abc@example.com" name="email"
value = "<?php echo $customerEdit[0][4]?>" style="border-radius: 11px;border-style: solid;border-color: rgb(129,129,129);width: 100%;"></div>

</div>

</div>

</div>

<div class="row d-xxl-flex justify-content-xxl-end">

  <div class="col-auto d-xxl-flex justify-content-xxl-end">

    <button class="btn btn-primary btn-lg" type="submit" name = "submit" style="background: rgb(157,120,86);border-
style: none;border-radius: 22px;">Submit</button>

  </div>

</div>

</form>

</div>

</div>
```

2. Comparison of custom-built multi-page website and design document

Originally, the wireframe of the website was designed to have a promotion banner that carousels between different promos to greet the customers with good deals that are happening. After presenting it to the client, they have requested that it be removed as they do not plan on any promotional program and that space would be unnecessary for the website. Therefore, the section has been removed from the final product.

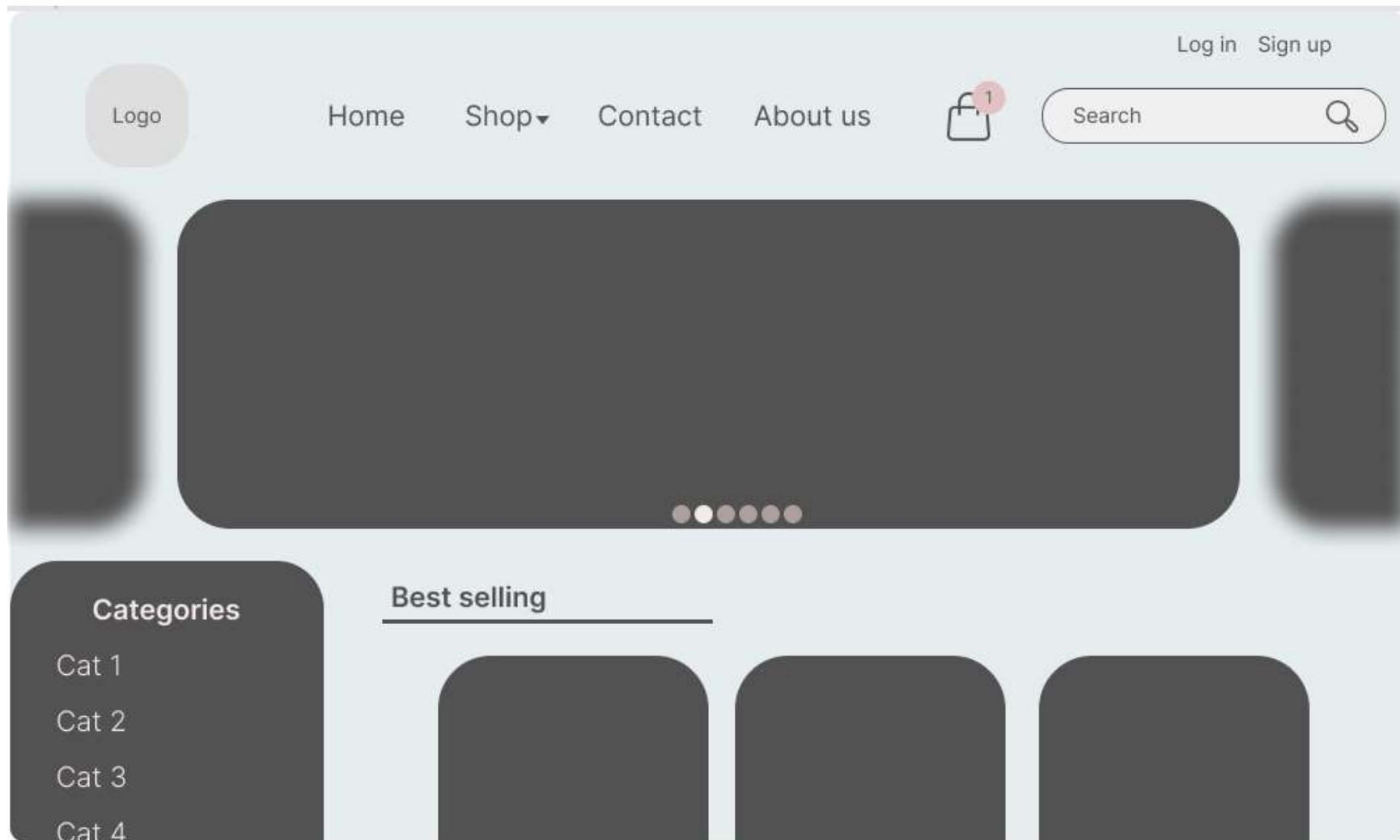


Figure 1 Original wireframe of the website

Additionally, the product cards' background has been changed from dark gray to a white color as most products has white background for their image, putting them inside a dark container would make the website feel cheap and be considered a design flaw. A footer for the website was also added to display additional information for the visitor.

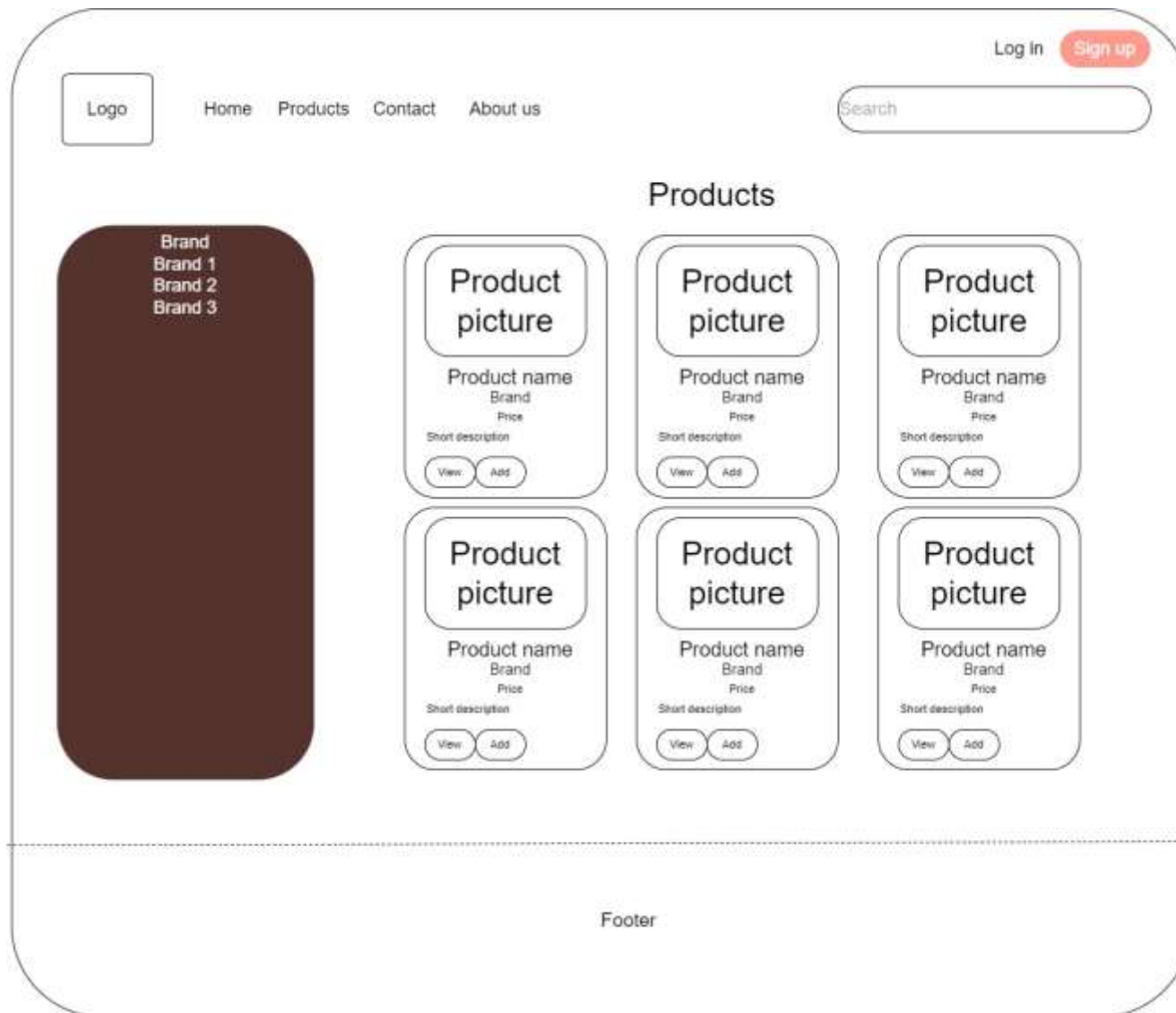


Figure 2 Wireframe of the final design

The changes made to the display of the product have made the website fit more well with the client's requirements and improved the user experience in terms of design structure. It also provides a new section for additional information where it is conventionally placed, helping the user navigate the website with ease.

III. Test plan

1. Introduction

This test plan aims to show that the website work as designed and developed. Numerous functions will be tested to ensure that the website work as intended

2. Test case

No	What is being tested	Methodology	Data used	Expected result	Actual result
1	Only products of a certain brand is displayed when a brand is clicked on	Click on a brand name on the sidebar menu	Samsung	Samsung products displays	Good
2	Only products whose names contain the keyword in the search bar is displayed	Enter a keyword and press enter	"13 pro max"	Iphone 13 promax is displayed	Good
3	Submitting a contact form	Enter full name, email address, and contact message into the form and submit	Name: "Bob Jackson" Email address: "b.jackson@gmail.com" Message: "I need help with device purchased from your store"	The form submits successfully and appear on the database	Good

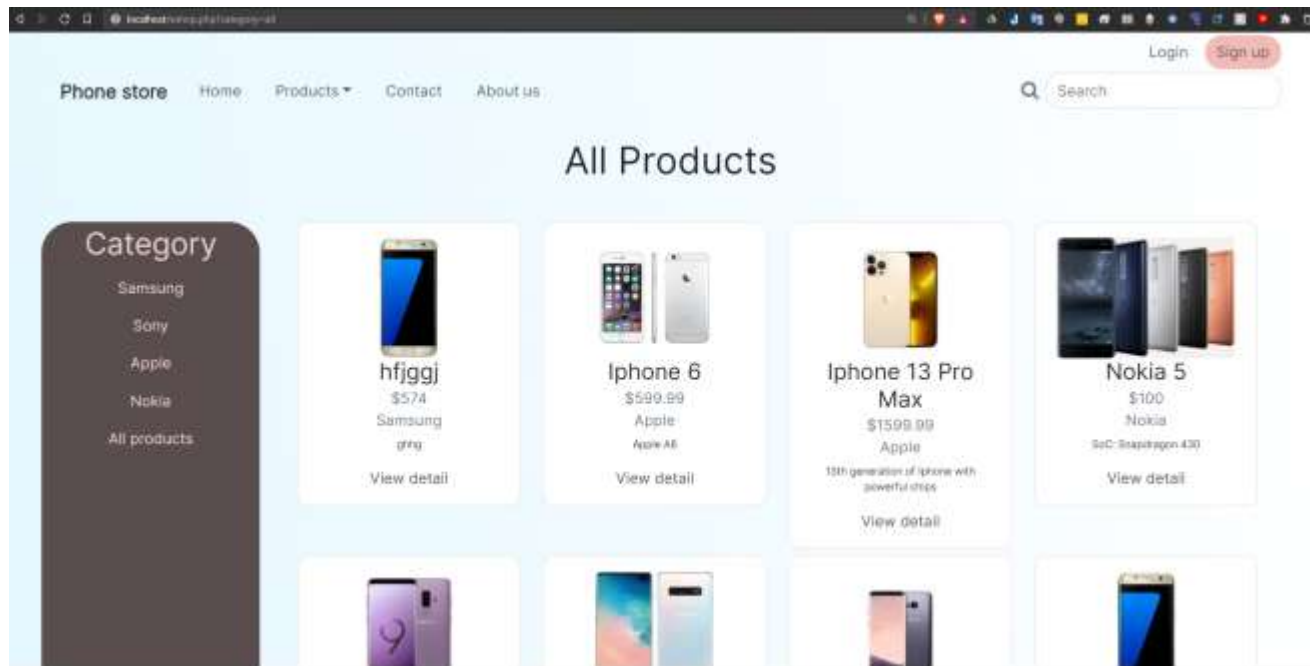
4	Sign up for a new customer account using valid data	Enter information into the field on the sign up page and click "Sign up" button	Random data into the fields with username and email unique from what are on the database	The account is successfully created and the account appear on the database	good
	Sign up for a new customer account using invalid data	Enter information into the field on the sign up page and click "Sign up" button	Random data into the fields with a username that already exists on the database	Error message saying username already exist and account not created	Good
	Sign up for a new customer account using invalid data	Enter information into the field on the sign up page and click "Sign up" button	Random data into the fields with a email address that already exists on the database	Error message saying email address already exist and account not created	Good
	Sign up for a new customer account using invalid data	Enter information into the field on the sign up page and click "Sign up" button	Random data into the fields with a email address and username that already exist on the database	Error message saying username and email address already exist and account not created	Good
5	Sign into the admin page using valid data	Enter information into the field on the log in page and click "Log in" button	Account data that exists on the database	The user is redirected to the admin page	Good
	Sign into the admin page using invalid data	Enter information into the field on the log in page and click "Log in" button	Account data that does not exist on the database	Error message saying invalid credential and returns to the log in page	Good
6	Delete a product	Click on the "Delete" button on a product in the admin page	Delete	The product is removed from the database	Good
7	Modify a product's information	Click on the "Edit" button on a product in the admin page, enter new information and click "Submit"	In every field except for the "Product ID", add the word "edited" and change the image	All information about the product except for the Product ID is added with "edited", new picture for the product appear	Good
8	Add a new product	Click on the "Add a product" link on the admin page's sidebar	Random information in each field with the correct data type	A product with entered information is added into the database	Good
9	Delete a customer account	Click on the "Delete" button on a customer account in the admin page	Delete	The account is removed from the database	Good

10	Delete a staff account	Click on the "Delete" button on a staff account in the admin page	Delete	The account is removed from the database	Good
11	Add a staff account	Click on the "Add an account" button on the staff accounts page, enter information on each field except for the ID	Random information in each field with the correct data type	A new account with entered information is added into the database	Good
12	Modify a customer information	Click on the "Edit" button on an account in the customer accounts page, enter new information and click "Submit"	In every field except for the "ID", add the word "edited"	All information about the customer except for the ID is added with "edited"	Good
13	Modify a staff account	Click on the "Edit" button on an account in the staff accounts page, enter new information and click "Submit"	In every field except for the "ID", add the word "edited"	All information about the customer except for the ID is added with "edited"	Good

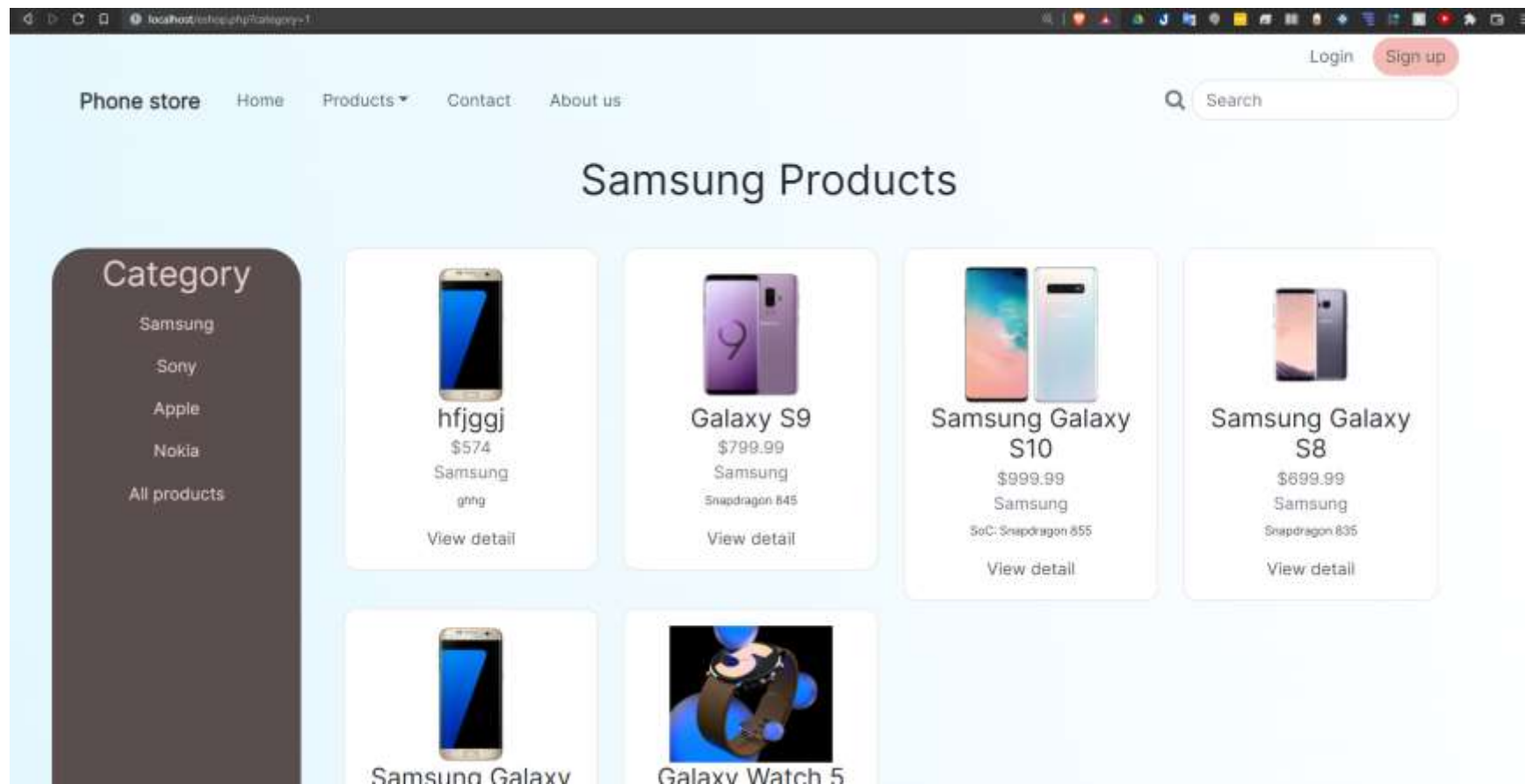
3. Screenshot

3.1 Display products by brand and keyword

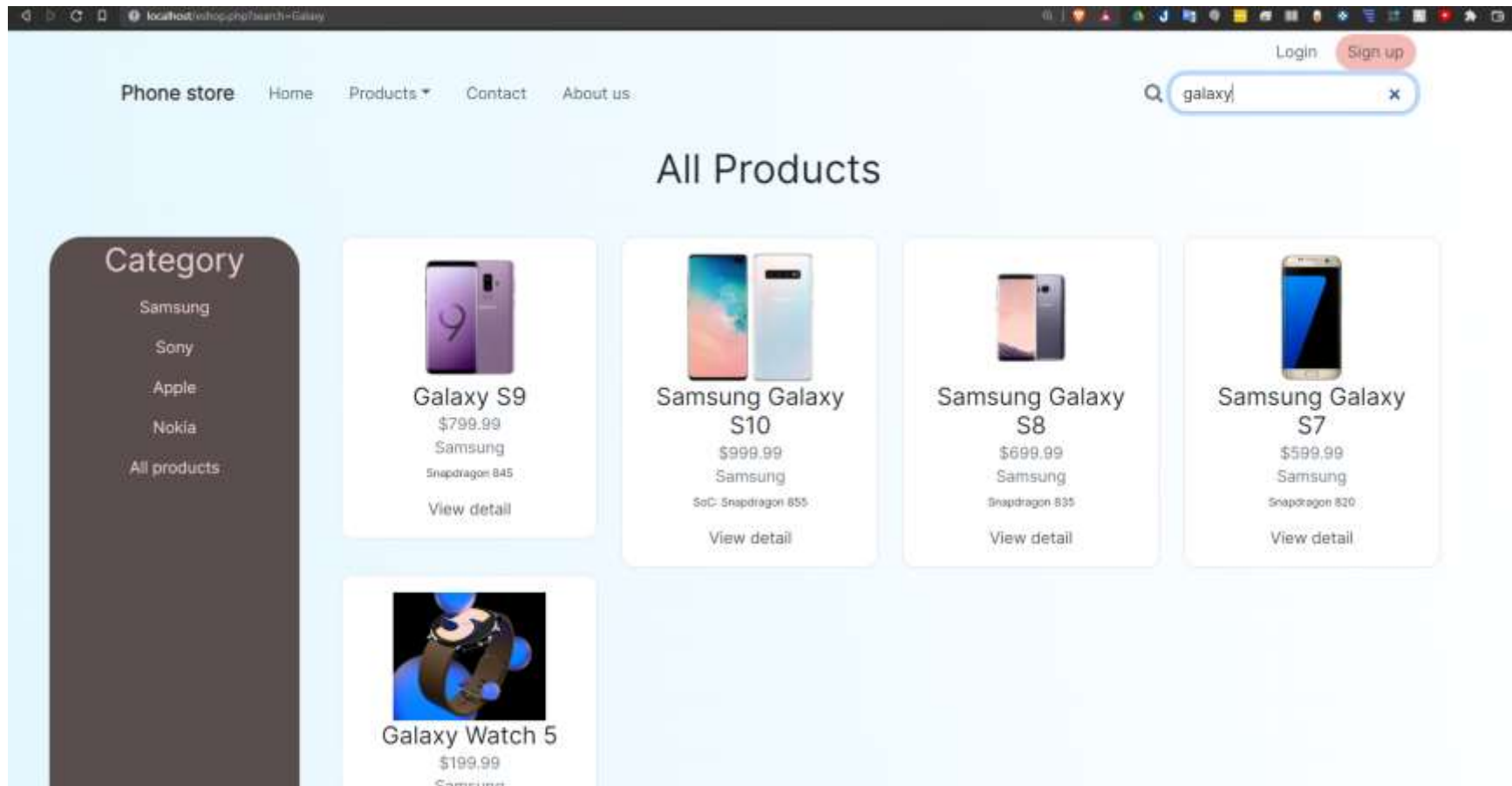
This is the product list by default. It is apparent that all products are displayed



When the brand “Samsung” is clicked on, only Samsung products are displayed



When the keyword “galaxy” is input and enter button is clicked, only products that contain the keyword “galaxy” display



3.2 Contact form

The information will be input into the form and the “Send” button is clicked

Login

Sign up

Phone store

Home

Products ▾

Contact

About us

Q Search



Contact us

Please enter your information so we can support you

Bob Jackson

b.jackson@gmail.com



Please enter a correct email address.

I need help with a product purchased from your store

Send

An alert window saying the message is sent successfully is displayed

localhost says

Message sent successfully!

OK

The message along with the information appears in the database




✓ Showing rows 0 - 0 (1 total, Query took 0.0013 seconds.)





`SELECT * FROM `contact``

☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]

☐ Show all | Number of rows: 25 ▼ Filter rows:

+ Options

	contactid	fullname	email	messagesent
<input type="checkbox"/>  Edit  Copy  Delete	11	Bob Jackson	b.jackson@gmail.com	I need help with a product purchased from your sto...

↑ ☐ Check all With selected:  Edit  Copy  Delete  Export

☐ Show all | Number of rows: 25 ▼ Filter rows:

Query results operations

3.3 Sign up

In the database, currently, there is one customer account

✓ Showing rows 0 - 1 (2 total, Query took 0.0011 seconds.)

`SELECT * FROM `customer``

☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	CusId	FullName	Address	Phone	Email	username	password
<input type="checkbox"/> Edit Copy Delete	1	anh trinh edit dddd	ha noi	2222222222	222@222.com	222	222

↑ ☐ Check all With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Now the data will be input into the field with unique username and email address

Sign up

Please enter your information

Username

123



Password

...



Email address

123@222.com

Full name

anh trinh

Address

ha noi

Phone number

21423523523

Sign up

localhost says
Sign up successfully!

OK







✓ Showing rows 0 - 1 (2 total, Query took 0.0012 seconds.)

```
SELECT * FROM `customer`
```

☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]

☐ Show all | Number of rows: 25 ▼ Filter rows: Sort by key: None ▼

+ Options

			CusId	FullName	Address	Phone	Email	username	password
<input type="checkbox"/>				1	anh trinh edit dddd	ha noi	2222222222	222@222.com	222
<input type="checkbox"/>				12	anh trinh	ha noi	21423523523	123@222.com	123

 ☐ Check all With selected:  Edit  Copy  Delete  Export

☐ Show all | Number of rows: 25 ▼ Filter rows: Sort by key: None ▼

Now information with duplicated username, email address, and both will be entered

Sign up

Please enter your information

Username

222

Password

...

Email address

gfewgrfefeewqdwqd@gmail.com

Full name

agasgsdgsd

Address

111

Phone number

5235325

Sign up

localhost says

Username is already in the database

OK

Sign up

Please enter your information

Username

3123123



Password

...



Email address

222@222.com

Full name

agasgsdgsd

Address

hrehdrh

Phone number

214325325|

Sign up

localhost says

Email is already in the database

OK

Sign up

Please enter your information

Username

222

Password

...

Email address

222@222.com

Full name

agsdgs

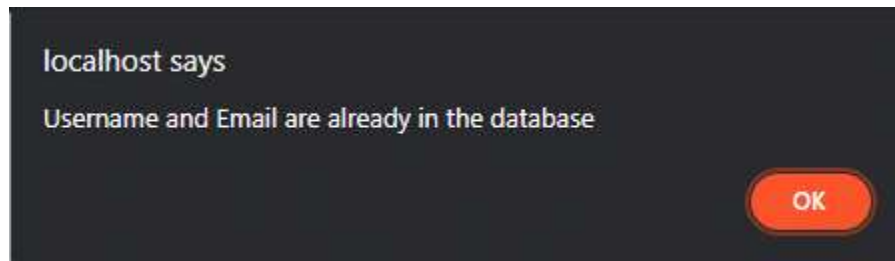
Address

214rwefdsf

Phone number

111

Sign up



After all the attempts, only one account with valid data is created in the database







✓ Showing rows 0 - 1 (2 total, Query took 0.0009 seconds.)






`SELECT * FROM `customer``

☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

				CusId	FullName	Address	Phone	Email	username	password
<input type="checkbox"/>				1	anh trinh edit dddd	ha noi	2222222222	222@222.com	222	222
<input type="checkbox"/>				12	anh trinh	ha noi	21423523523	123@222.com	123	123

 ☐ Check all | With selected:  Edit  Copy  Delete  Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

3.4 Log in

In this page, wrong credentials will be input first to show how the system responds to them first before moving on the correct ones

Log in

Please enter your information

Username

abc

Password

...



Log in

localhost says

Wrong username or password

OK

Then, the right credentials are input

Log in

Please enter your information

Username

admin123

Password

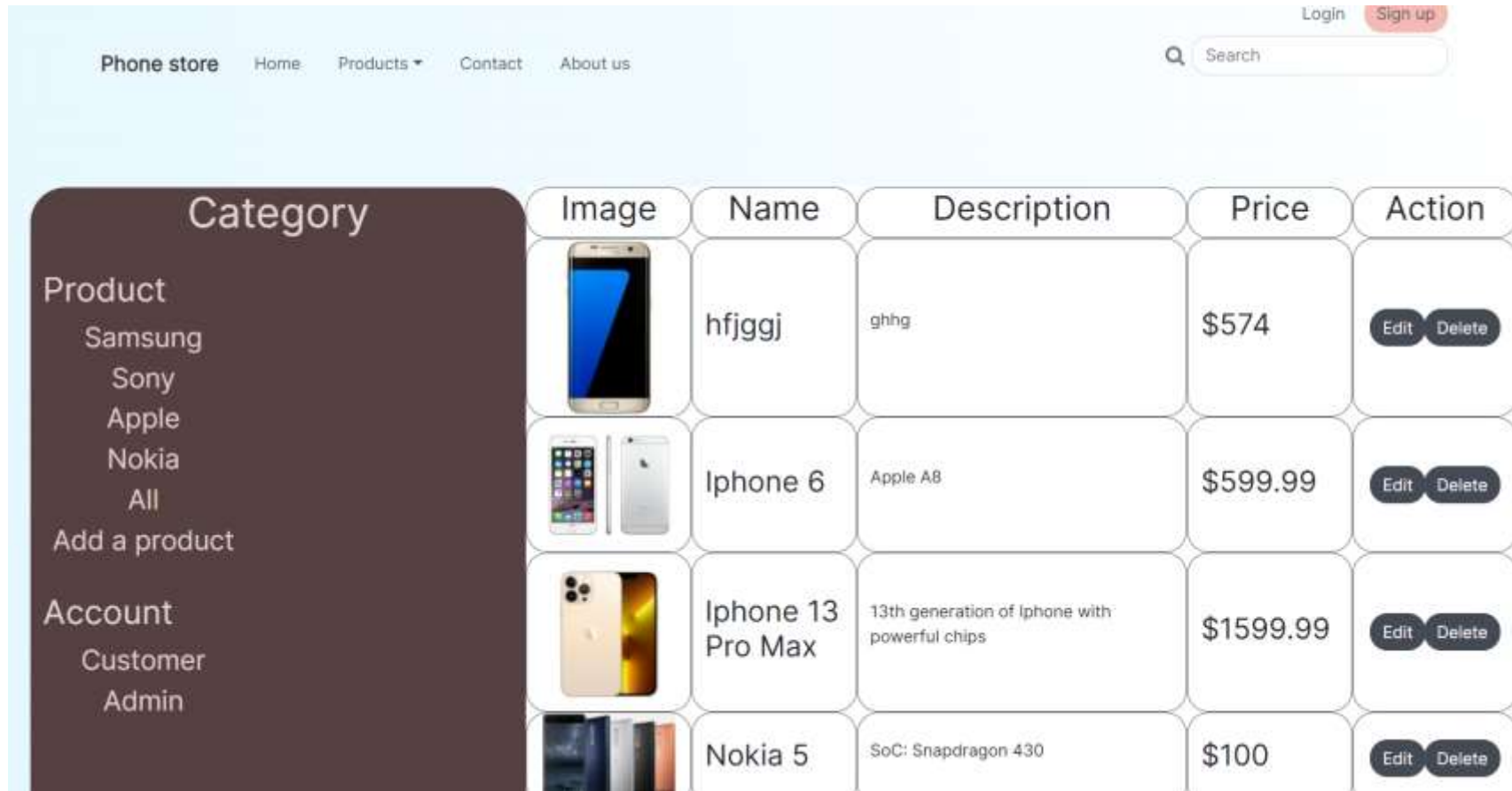
...







Log in

3.5 Admin page

After the user entered the credentials of an admin account, they will be transferred to the admin page



The screenshot shows the Admin page of a 'Phone store'. The top navigation bar includes 'Phone store', 'Home', 'Products', 'Contact', and 'About us'. On the right, there are 'Login' and 'Sign up' buttons, and a search bar. The left sidebar menu is divided into three sections: 'Category' (with a link to 'Product'), 'Product' (listing 'Samsung', 'Sony', 'Apple', 'Nokia', 'All', and 'Add a product'), and 'Account' (listing 'Customer' and 'Admin'). The main content area displays a table of products.

Image	Name	Description	Price	Action
	hfjggj	ghhg	\$574	Edit Delete
	Iphone 6	Apple A8	\$599.99	Edit Delete
	Iphone 13 Pro Max	13th generation of Iphone with powerful chips	\$1599.99	Edit Delete
	Nokia 5	SoC: Snapdragon 430	\$100	Edit Delete

3.6 Delete product

The product with the name “hfjggj” will be deleted by clicking the “Delete” button

Image	Name	Description	Price	Action
	hfjggj	ghhg	\$574	<button>Edit</button> <button>Delete</button>

localhost says

Delete Successfully





OK

Now the product is gone from the list

Phone store
Home
Products ▼
Contact
About us

Category


Product
Samsung
Sony
Apple
Nokia
All
Add a product
Account
Customer
Admin

Image	Name	Description	Price	Action
	Iphone 6	Apple A8	\$599.99	<button>Edit</button> <button>Delete</button>
	Iphone 13 Pro Max	13th generation of Iphone with powerful chips	\$1599.99	<button>Edit</button> <button>Delete</button>
	Nokia 5	SoC: Snapdragon 430	\$100	<button>Edit</button> <button>Delete</button>
	Galaxy S9	Snapdragon 845	\$799.99	<button>Edit</button> <button>Delete</button>

3.7 Edit product

By clicking the edit button on a product, the user will be transferred to a page that lets them edit its details

Modify a product



Product name:

Product ID:

Brand:

Price:

Description:


NETWORK
Technology
GSM / CDMA / HSPA /
EVDO / LTE
LAUNCH Announced

Short description:

Apple A8

Image: No file chosen

Modify a product



Product name:

Product ID:

Brand:

Price:

Description:

NETWORK EDITED
Technology
GSM / CDMA / HSPA /
EVDO / LTE
LAUNCH Announced

Short description:

Apple A8 edited

Image: Scratch-Resis...1B-01-p(1).jpg

localhost says

Product has been modified

OK

Image	Name	Description	Price	Action
	Iphone 6 edited	Apple A8 edited	\$599	<button>Edit</button> <button>Delete</button>

The product's information has been changed

3.8 Add product

When the user clicks the “add a product” link on the sidebar, they will be redirected to a page that lets them add a product onto the system

Add a product

Product name

Product ID

Brand

Price

Description

Short description

Image No file chosen

Add a product

Product name

Product ID

Brand

Price

Description

Short description

Image GalaxyTab_S8_Pen_MO(1).jpg

localhost says

Product has been added

OK

Product Samsung Sony Apple Nokia All Add a product Account Customer Admin		Galaxy S9	Snapdragon 845	\$799.99	Edit Delete
		Samsung Galaxy S10	SoC: Snapdragon 855	\$999.99	Edit Delete
		Samsung Galaxy S8	Snapdragon 835	\$699.99	Edit Delete
		Samsung Galaxy S7	Snapdragon 820	\$599.99	Edit Delete
		Galaxy Tab S8 Ultra	Short des	\$899.99	Edit Delete

3.9 Account management

From the admin page, the user can manage accounts on the system by clicking on either Customer or Admin link under the Account section, each will lead the user to a list of different accounts

Phone store

Home

Products ▾

Contact

About us

Login

Sign up



Search

Category

Product

Samsung

Sony

Apple

Nokia

All

Add a product

Account

Customer

Admin

Customer accounts

Username	Full name	Email	Action
222	anh trinh edit dddd	222@222.com	<button>Edit</button> <button>Delete</button>
123	anh trinh	123@222.com	<button>Edit</button> <button>Delete</button>

Category

Product

- Samsung
- Sony
- Apple
- Nokia
- All
- Add a product

Account

- Customer
- Admin

Admin accounts

Username	Role	Action
admin123	Admin	<button>Edit</button> <button>Delete</button>
dzunglm	Staff	<button>Edit</button> <button>Delete</button>
admin1231	Admin1	<button>Edit</button> <button>Delete</button>

Add account

3.10 Edit account

On the account management, click on the “Edit” button

Edit customer account

ID	<input type="text" value="1"/>
Username	<input type="text" value="222"/>
Password	<input type="password" value="222"/>
Full name	<input type="text" value="anh trinh edit dddd"/>
Address	<input type="text" value="ha noi"/>
Phone number	<input type="text" value="2222222222"/>
Email address	<input type="text" value="222@222.com"/>

Submit

Edit Staff account

ID	<input type="text" value="1"/>
Username	<input type="text" value="admin123"/>
Password	<input type="password" value="123"/>
Role	<input type="text" value="Admin"/>

Submit

Edit customer account

ID	<input type="text" value="1"/>
Username	<input type="text" value="222edit"/>
Password	<input type="password" value="222edit"/>
Full name	<input type="text" value="anh trinh edit dddd edited"/>
Address	<input type="text" value="ha noi edited"/>
Phone number	<input type="text" value="2222222222 edited"/>
Email address	<input type="text" value="222edited@222.com"/>

Submit

Edit Staff account

ID	<input type="text" value="5"/>
Username	<input type="text" value="admin1231edited"/>
Password	<input type="password" value="123edited"/>
Role	<input type="text" value="AdminEdited"/>

Submit

localhost says

Edit Successfully

OK

Customer accounts

Username	Full name	Email	Action
222edit	anh trinh edit dddd edited	222edited@222.com	Edit Delete
123	anh trinh	123@222.com	Edit Delete

Admin accounts

Username	Role	Action
admin123	Admin	Edit Delete
dzunglm	Staff	Edit Delete
admin1231edited	AdminEdite	Edit Delete

Add
account

3.11 Delete account

The Delete button on the account “admin1231edited” and “222edit” will be clicked



Admin accounts

Username	Role	Action
admin123	Admin	<button>Edit</button> <button>Delete</button>
dzunglm	Staff	<button>Edit</button> <button>Delete</button>
		<button>Add account</button>

Customer accounts

Username	Full name	Email	Action
123	anh trinh	123@222.com	<button>Edit</button> <button>Delete</button>

IV. Quality assurance (QA) process and how it was implemented in the project

Quality assurance (QA) is a systemized process to ensure that a product or a service meet specific expectations. (Gillis, 2019)

QA creates and maintains standards for creating or producing dependable goods. A quality assurance system is intended to boost consumer confidence and a firm's legitimacy while also enhancing work procedures and efficiency, allowing a company to compete more effectively. (Gillis, 2019)

Steps to implement QA

1. Functionality testing

Functionality testing is a process that makes sure that the software components work up to expectations. Functions are input with mock data and the output will be evaluated to see if it passes the testing.

A typical functional testing includes:

- Addressing the expectations on the functions tested.
- Data to be input.
- Test case execution.
- Analysis of the result.

2. Usability testing

A combination of functionality testing and overall user experience to ensure that an average internet user can make use of the website.

Usability testing involves:

- Developing a test plan that put every function under test and evaluation, including navigation and content.
- Inviting test participants, from inside and outside of the team.
- Running the test under professional observation.
- Analyzing the results to improve the application accordingly.

3. Interface testing

Interface testing is implemented to ensure that all interactions between the web server and application interfaces run smoothly. This is done by checking the processes of communication and ensure that error messages are displayed correctly and ensure that both sides handle any interruptions correctly

4. Compatibility testing

This step ensures that the application/website is compatible on as many devices and software as possible. It can be the compatibility between the application and browser, operating systems, or mobile devices.

5. Performance testing

After ensuring that the application/website functions properly and responsively on every platform specified. It is time that it got tested under load. This is done by sending the application various rate of request to see how the system handle the normal and peak loads (load testing). It is also put under increasing load until the it stops working to determine the system's breakpoint (stress testing).

6. Security testing

Security testing ensures that the data is stored safely on the system and transferred safely between the server and clients in order to protect their information, increasing the credibility of the company. It includes:

- Secure transmission
- Authentication
- Session Management
- Authorization
- Cryptography

- Data Validation
- Denial of Service
- Specific Functionality Tests
- Error Handling

How the QA is applied to this project

In this project, these steps have been applied in testing the system

- Functionality testing to make sure that every function programmed work as intended
- Interface testing to make sure that the user can use the website with ease
- Compatibility to make sure that it can run properly on multiple platforms

References

Centre For Accessibility Australia, 2022. *What is WCAG?*. [Online]

Available at: <https://www.accessibility.org.au/guides/what-is-the-wcag-standard/>

[Accessed 01 May 2022].

Gillis, A. S., 2019. *quality assurance (QA)*. [Online]

Available at: <https://www.techtarget.com/searchsoftwarequality/definition/quality-assurance?vnextfmt=print>

[Accessed 03 May 2022].