

Hong Kong Diploma of Secondary Education Examination 20XX

Information and Communication Technology

School-based Assessment

Online Store for Stationery and Books

United Christian College (Kowloon East)

Name

Table of Contents

DESIGN	3
INTRODUCTION.....	4
WEBSITE FEATURES	4
WEBSITE STRUCTURE.....	4
LAYOUT DESIGN.....	5
DESIGN FACTORS	8
IMPLEMENTATION	9
MULTIMEDIA ELEMENTS.....	10
A. <i>Graphics</i>	10
B. <i>Video</i>	11
WEBSITE CODING WITH PROGRAMMING LANGUAGE	13
A. <i>General</i>	13
B. <i>Home Page</i>	21
C. <i>Register Page</i>	24
D. <i>Login Page</i>	27
E. <i>Promotion Page</i>	29
F. <i>Product Catalogue</i>	30
G. <i>Product Page</i>	31
H. <i>Cart</i>	34
I. <i>Order History</i>	37
J. <i>Account Page</i>	38
K. <i>Admin Page</i>	39
L. <i>Add Products</i>	41
M. <i>Delete Products</i>	42
N. <i>Customer Orders</i>	43
O. <i>FAQ Page</i>	44
FINAL RESULTS	45
TESTING	58
WEBSITE TESTING	59
MAJOR CHANGE.....	64
EVALUATION	68
FEEDBACK COLLECTION	69
PROS OF THE WEBSITE.....	77
CONS OF THE WEBSITE	77
FURTHER IMPROVEMENTS	78
REFERENCE	79
APPENDIX	80

Design

Introduction

The aim of the design is to create a website for an online store selling stationery and books to customers.

Website Features

Guests:

1. Browse the catalogue without logging in
2. Register a new account

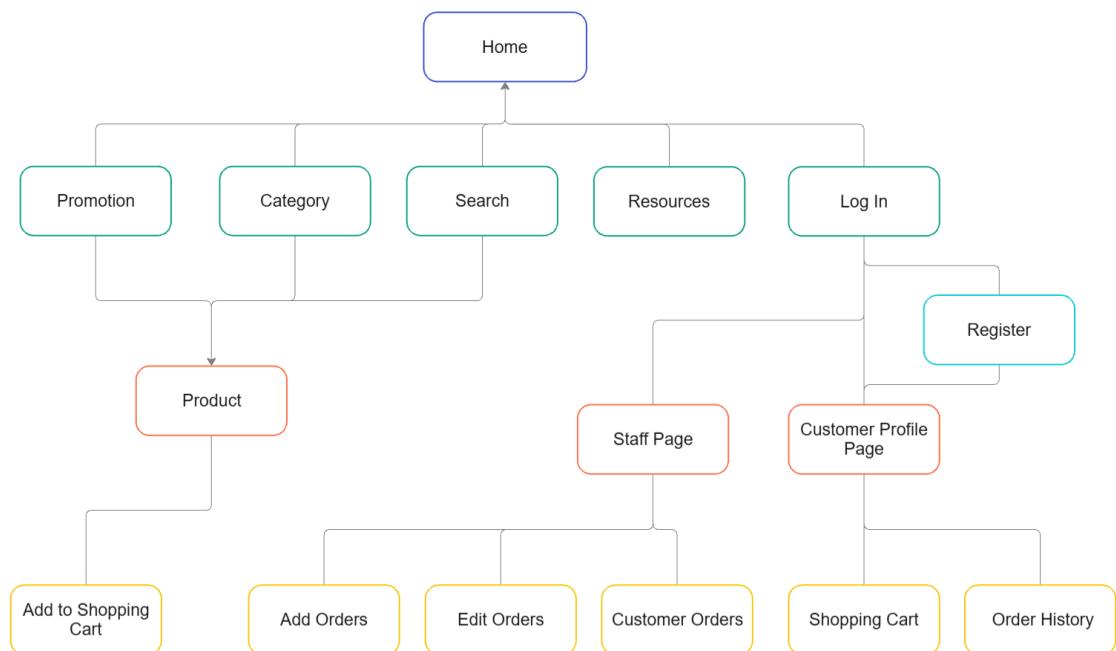
Customers:

1. Login to purchase items
2. See previous order history

Staff:

1. Add new products to the catalogue
2. Have records of customer orders

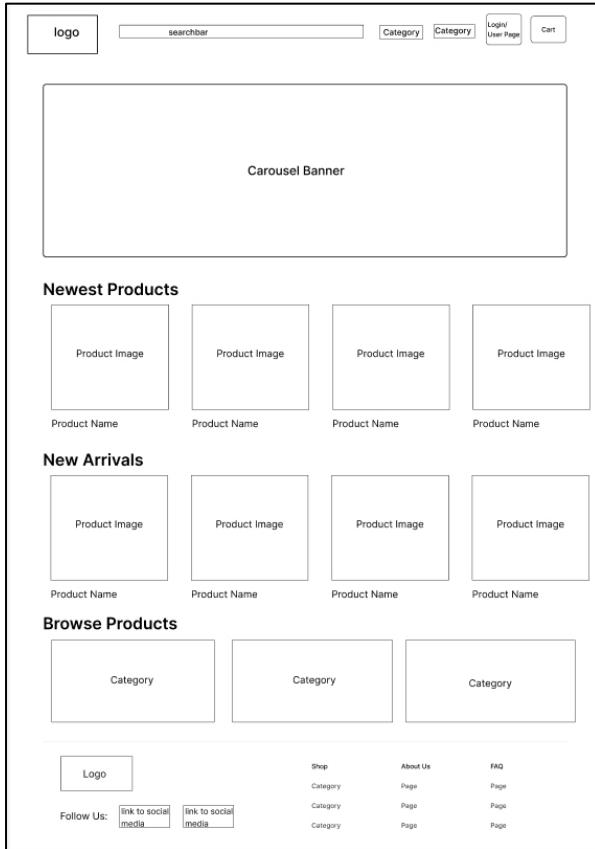
Website Structure



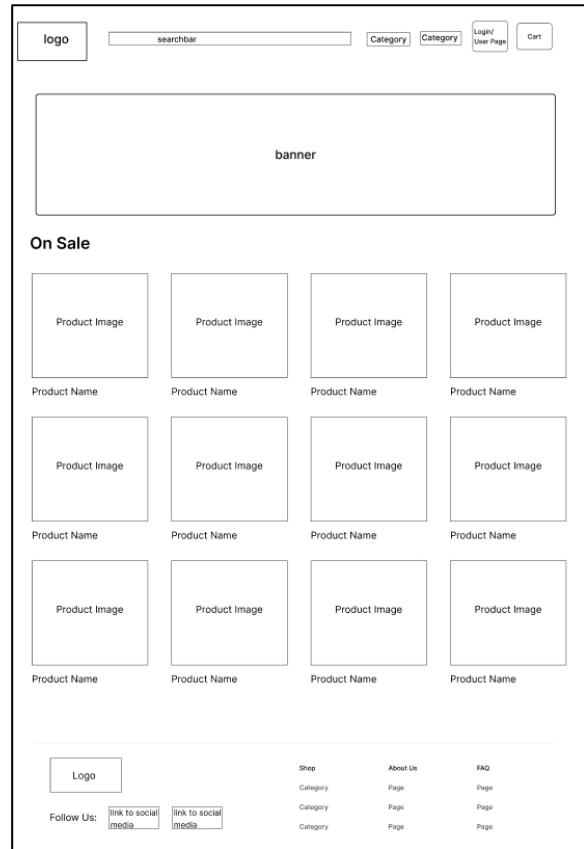
Layout Design

The following is the draft for the user interface.

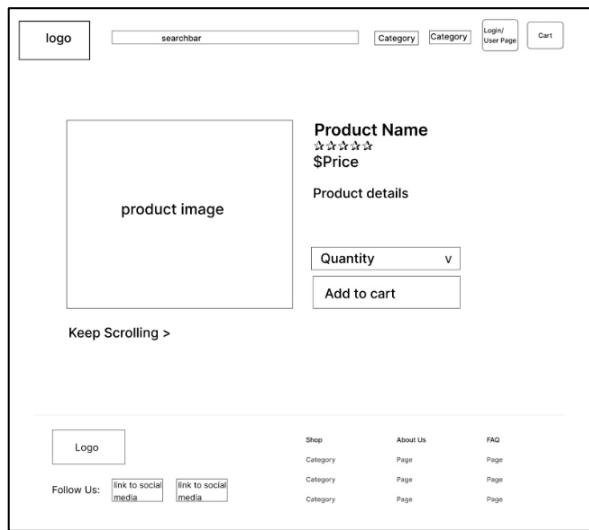
Home Page



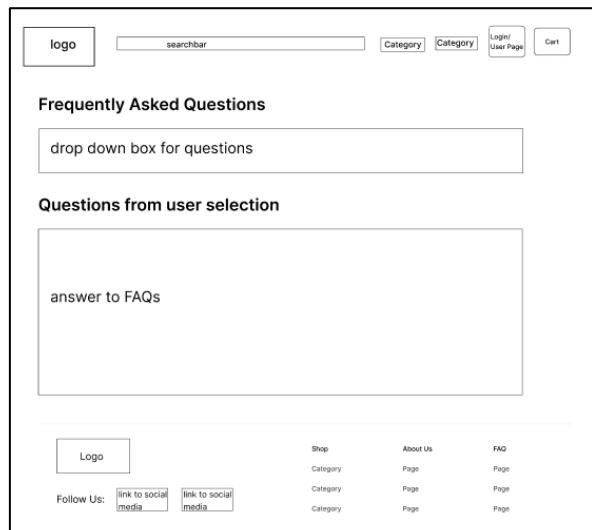
Promotion Page



Product Page



FAQ



Customer Account Page

Logo searchbar Category Category Login/ User Page Cart

Your Account

Name

Order History >

Shopping Cart >

Change Account Details

Name:

Email:

Phone Number:

Address:

Password:

Re-enter Password:

Logo

Shop Category About Us Page FAQ Page

Follow Us: [link to social media](#) [link to social media](#)

Product Catalogue (Categories)

Logo searchbar Category Category Login/ User Page Cart

On Sale

Filter clear filters

Price Range to

Product Image	Product Name	Product Image	Product Name	Product Image	Product Name
	Product Name 1		Product Name 2		Product Name 3
	Product Name 4		Product Name 5		Product Name 6
	Product Name 7		Product Name 8		Product Name 9
	Product Name 10		Product Name 11		Product Name 12

← 1 2 →

Logo

Shop Category About Us Page FAQ Page

Follow Us: [link to social media](#) [link to social media](#)

Sign Up Page

Logo searchbar Category Category Login/ User Page Cart

Register

Name

Email

Password

Re-enter Password

Logo

Shop Category About Us Page FAQ Page

Follow Us: [link to social media](#) [link to social media](#)

Login Page

Logo searchbar Category Category Login/ User Page Cart

Login

Email

Password

[forgot email?](#) [new user?](#)

Logo

Shop Category About Us Page FAQ Page

Follow Us: [link to social media](#) [link to social media](#)

Customer Shopping Cart

Logo searchbar Category Login/ User Page Cart

Shopping Cart

product image	Product Name	\$Price
<input type="button"/>	Quantity <input type="text"/>	<input type="button"/> Delete
<input type="button"/>	Product Name	\$Price
<input type="button"/>	Quantity <input type="text"/>	<input type="button"/> Delete

Checkout

Logo
Shop About Us FAQ
Category Page Page
Category Page Page
Category Page Page

Follow Us: link to social media link to social media

Order History

Logo searchbar Category Login/ User Page Cart

Pending Orders

product image	Product Name	\$Price
<input type="button"/>	Quantity :	

Order History

product image	Product Name	\$Price
<input type="button"/>	Quantity :	

← 1 2 →

Logo
Shop About Us FAQ
Category Page Page
Category Page Page
Category Page Page

Follow Us: link to social media link to social media

Staff Page

Logo searchbar Category Login/ User Page Cart

Your Account

Name <input type="text"/>
Add/Edit Items <input type="button"/>
Customer Orders <input type="button"/>

Logo
Shop About Us FAQ
Category Page Page
Category Page Page
Category Page Page

Follow Us: link to social media link to social media

Customer Orders

Logo searchbar Category Login/ User Page Cart

Pending Orders

product image	Product Name	\$Price
<input type="button"/>	Quantity : <input type="text"/>	user: <input type="text"/>
<input type="button"/>	Product Name	\$Price
<input type="button"/>	Quantity : <input type="text"/>	user: <input type="text"/>
<input type="button"/>	Product Name	\$Price
<input type="button"/>	Quantity : <input type="text"/>	user: <input type="text"/>

← 1 2 →

Logo
Shop About Us FAQ
Category Page Page
Category Page Page
Category Page Page

Follow Us: link to social media link to social media

Design Factors

When designing the website, the following factors are considered:

1. User-Friendliness

A user-friendly website is crucial to enhance the user experience. The website should therefore be visually appealing, so users are attracted to use the website for shopping. The general structure of the website should also be intuitive for the user to easily shop, and a menu is included for easier navigation.

2. Multimedia Elements

Multimedia elements presented on the website can make the shopping experience more engaging by presenting information in various formats. Text, Images and Videos are included as multimedia elements on the website.

3. Accessibility

The website should be accessible for users to use to ensure the best user experience. Contrasting colours are used for text and backgrounds while clear headings in bold are used to differentiate between bodies of text. Alternative text is also offered in images for screen readers as an accessibility option for blind people, partially sighted users and those with reading disorders.

4. Audience Awareness

The user is a shopper looking to buy products. As such, an FAQ page is dedicated to help users answer frequent questions about the brand and products. A feedback form is also used to collect the opinions of users. For staff, they should be able to check orders in a straightforward manner, so the work process is efficient.

Implementation

Multimedia Elements

A. Graphics

Software used:



Adobe Illustrator

The above software is used to design the website logo and promotional banners.

Examples:

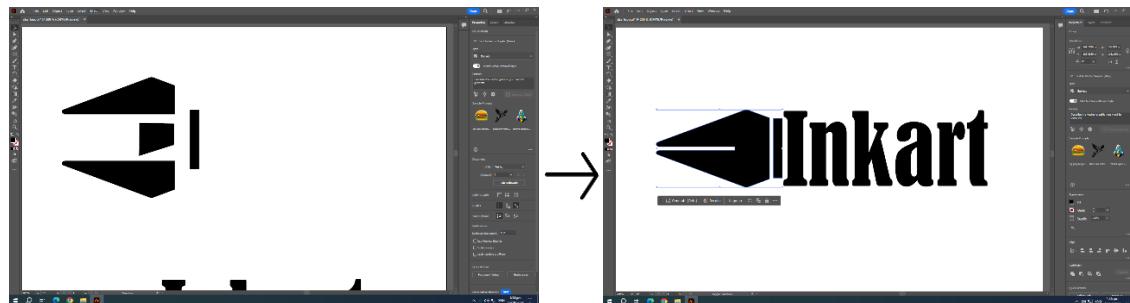


Logo



Banner

Shapes are merged using the pathfinder tool and letters are added to form the image.



Software used:



OpenArt



Photopea

Artificial Intelligence is used to generate images for the products sold.

Examples:



Squirrel Figure



Erasers

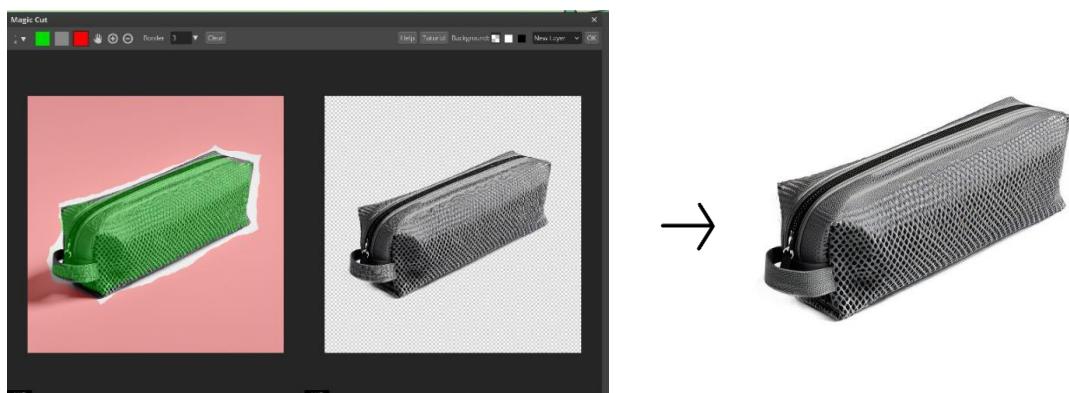
The following prompt is given to the OpenArt AI:

A photorealistic picture of a grey nylon mesh pencil case in an angle that showcases the pencil case's zipper.

The following image was generated by the AI engine:



The Magic Cut Tool in Photopea was used to remove the background from the generated image in exchange for a white background to create the feel of a product image.



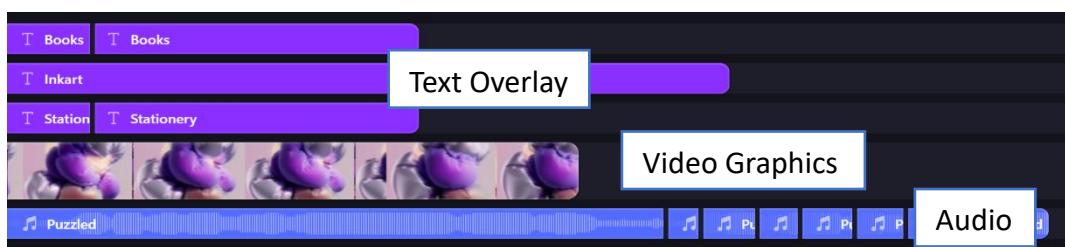
Minor touch-ups are done manually using the eraser tool to remove any blurred edges or unremoved shadows.

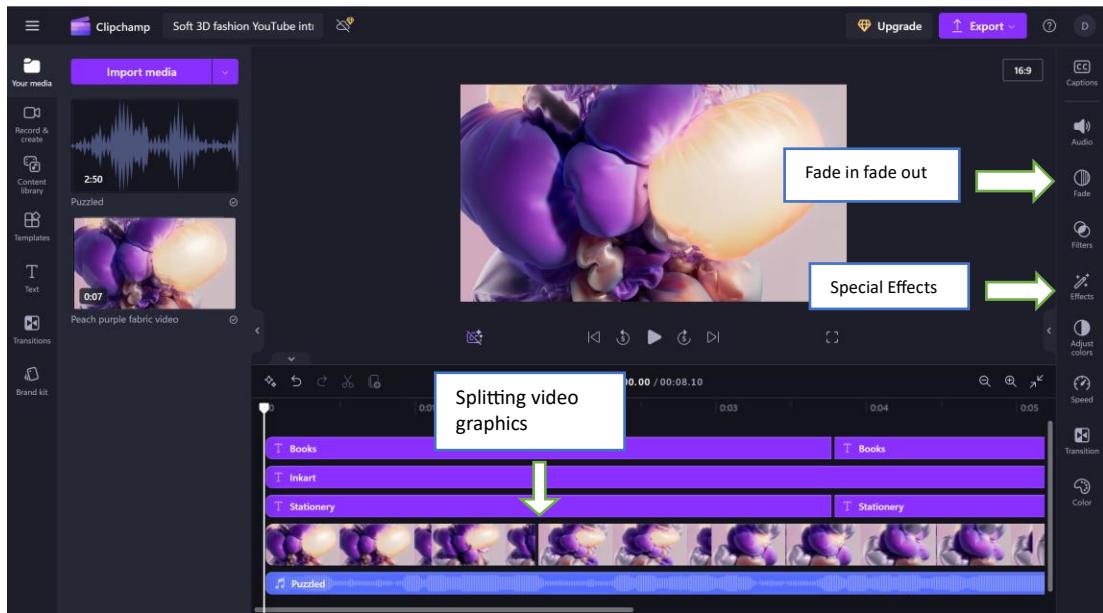
B. Video

Software used:



The above software is used to create a video for the promotion of the shop and media is imported into the software.

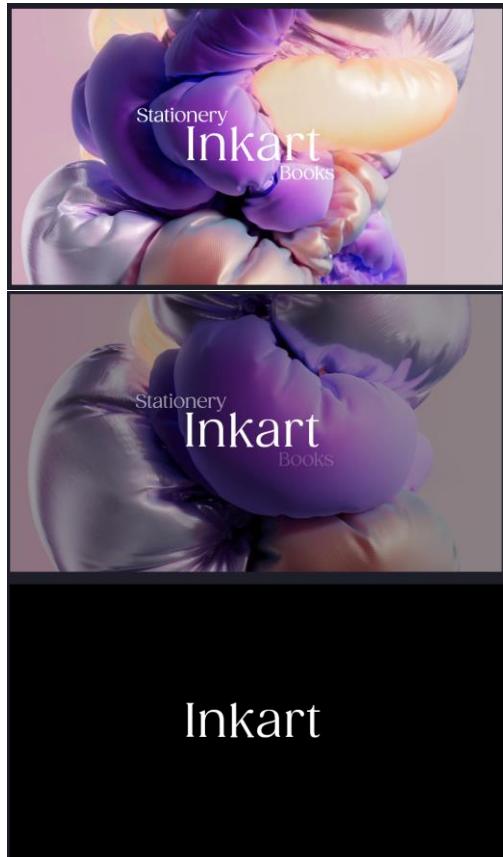




Techniques used include:

- Splitting audio and video
- Fade in Fade out for both video and audio
- Special Effects such as flashing

Fade in Fade out is particularly used to show transition from scene to scene smoothly.



Website Coding with Programming Language

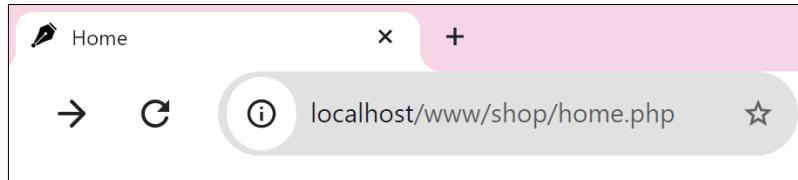
A. General

HTML

```
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="styles.css">
  <link rel="icon" href="images/favicon.png" type="image/x-icon"/>
  <title>Home</title>
</head>
```

The following is included in the page inside the `<head>` element.

- The attribute `charset` declares the page's character encoding as UTF-8.
- Viewport is the visible area of a website to a user. The width of the page is set to the width of the user device using the `<meta>` tag. The initial zoom level when the page is first loaded is also set to the default.
- The external stylesheet `styles.css` is linked in all pages with `<link>` element.
- The title for each page is included using the `<title>` element and the icon for the website is included using the `<link>` element. It will show as follow:



CSS

```
@charset "utf-8";
*{
  margin:0px;
  padding:0px;
  box-sizing: border-box;
  font-family: sans-serif;
  scroll-behavior: smooth;
}

.margin{
  margin-left: 5%;
  margin-right: 5%;
  margin-top: 3%;
  margin-bottom: 5%;
}

a {
  color: #rgb(48, 42, 42);
  text-decoration: none;
}

a:hover {
  color: #brown;
  text-decoration: none;
}
```

- All elements are set to have no margin and padding in CSS to ensure objects can be shown to their full length.
- The `font-family` property sets sans-serif as the default font of all text.
- Some items are enclosed in a margin to provide a layout with border space so that the page feels less crowded.
- The colour of links is set as black and will turn brown when hovered over.
- Text decoration is removed to remove underlines when the link is hovered over.

The `@media` rule is used to apply different styles when using different devices for a responsive layout.

```
@media (max-width: 880px) {
    .logo a{
        font-size: 200%;
        padding-left: 15%;
    }
    .search-bar{
        max-width: 350px;
    }
    .navbar ul li{
        margin-right: 6px;
    }
    .navbar ul li a{
        font-size: 15px;
    }
}
```

The max width of a device is specified with regards to the viewport of the device as a condition. While default styles apply to all devices, the CSS rules will be applied when the condition is met. For the example above:

- When the viewport width is less or equal to 880px, it will apply the included CSS rules to parts of the navigation bar to create a responsive design.

Connection to Database

```
$con=mysqli_connect("localhost","root","","shop") or die(mysqli_error($con));
```

All pages that require a connection to the database include the above PHP code. The parameters passed to the `mysqli_connect` function are:

- The host of the server (“localhost”)
- The username to authenticate the database (“root”)
- The password for the user (“ ”)
- The name of the database (“shop”)

If the connection is successful, it is stored in `$con`. If the connection fails, the `die` function is called to return an error message and stop the script.

```
mysqli_close($con);
```

The above PHP code is included at the end of each page that requires a database, which ensures the database connection is closed when there is no usage of the database.

HTTP request methods

The GET and POST methods are HTTP request methods commonly used for web communication. As the website includes many forms and requires multiple instances of communication between pages, it is important to differentiate between the two.

GET method:

- The data transmitted is included as part of the URL query string. As the data is visible in the URL, it is less secure for sensitive information.
- Examples: Product categories, Product page

POST method:

- The data transmitted is sent in the request body, and is not visible in the URL, so this method is more secure for sensitive information compared to GET. This method should be used in any form that contains sensitive data such as passwords.
- Examples: Login form, Register form

Navigation Bar

The navigation bar on the top of the page is composed of:

- Shop logo that redirects to the Home Page
- Search bar for users to search for products
- Hyperlinks that redirect to different pages of the website

A hyperlink is used to redirect users to different pages when the navigation buttons are clicked.

```
<ul>
    <li><a href="products.php?category=stationery">Stationery</a></li>
    <li><a href="products.php?category=book">Books</a></li>
<?php
    if (isset($_SESSION["email"])){
        if ($_SESSION["email"]=="admin"){
?>
            <!-- admin-->
            <li><a href="admin.php"></span> Admin</a></li>
            <li><a href="orders.php"></span> Orders</a></li>
<?php
        } else {
?>
            <!-- customer-->
            <li><a href="account.php"></span> Account</a></li>
            <li><a href="cart.php"></span> Cart</a></li>
<?php
        }
    } else {
?>
            <!-- customer-->
            <li><a href="login.html">Login</a></li>
            <li><a href="register.html">Sign-Up</a></li>
<?php
        }
?>
</ul>
```

Whether the user is logged in is checked using `isset($_SESSION["email"])`.

- If the user has logged in with an admin account, links to the admin page and customer orders will be displayed instead.
- If the user has logged in with a customer account, links to the account page and shopping cart will be shown.
- If the user has not logged in, links to the login page and register page will be shown along with the product categories.

Admin:



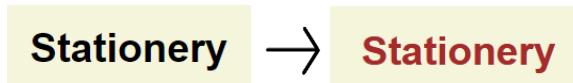
Customer:



Guest:



When the users hover over the links, it will change color to indicate.



Search Bar

```
<form class="search-bar" method="get" action="search.php">
    <input type="text" class="search-input" placeholder="Search..." id="keyword" name="keyword">
    <input type="submit" class="search-button" value="Search">
</form>
```

The search bar is created using a form.

- When the user enters a keyword into the search bar and presses the search button, they are directed to `search.php` and the input values are received via the HTTP GET method.

```
<?php
if (isset($_GET["keyword"])){
    $keyword = $_GET["keyword"];
    $sql = "select * from ( select * from items where name like '%$keyword%'"
    union select * from items where category like '%$keyword%'"
    union select * from items where description like '%$keyword%' ) as result LIMIT 5;";
}
if ($result = mysqli_query($con, $sql)){ //execute and store result in $result
    while ($row = mysqli_fetch_row($result)){ //fetch row from result
?>
        <div class="thumbnail">
            <a href="product.php?ProductID=<?php echo $row[0]?>">
                ">
            </a> <div class="item-info"><h3><?php echo $row[1]?></h3> </a>
                <p>Price: $<?php echo $row[2]?></p>
            </div>
        </div>
    }
?>
```

In *search.php*, the keyword is stored in PHP variable \$keyword using `$_GET`.

- The SQL query searches across table columns *name*, *category*, and *description* where it contains \$keyword using the `LIKE` operator and returns all columns.
- The `UNION` operator is used to combine the overlapping results of each selection into one result.
- A nested query is necessary to ensure the result prioritizes items with the keyword in the name, followed by items with the keyword in the category and description respectively. This helps present the most relevant results first.
- The search result is limited to 5 regardless of how many columns \$keyword was found in using the nested query. This presents the results without overwhelming the user with too many items.
- After the SQL statement is carried out, the result is stored in rows. The product ID, name, price, image file name, category and description of the products are stored in `$row[0]`, `$row[1]`, `$row[2]`, `$row[3]`, `$row[4]` and `$row[5]` respectively.

A while loop is used to output the product items for each result. The stored variables in the rows are used to display the product image and product name, which direct the user to the item product page when pressed. The price of the product is also shown.

```
if ($result->num_rows == 0) {  
?>  
|   <p class="search-result">No Matching Results. </p>  
|   <a href="products.php">Browse More</a>  
<?php  
| }
```

If the number of rows \$result has is 0, it means that no items matched the keyword and no result was returned. In this case, “No Matching Results” is displayed and a hyperlink to the product catalogue is included.



No Matching Results.
[Browse More](#)

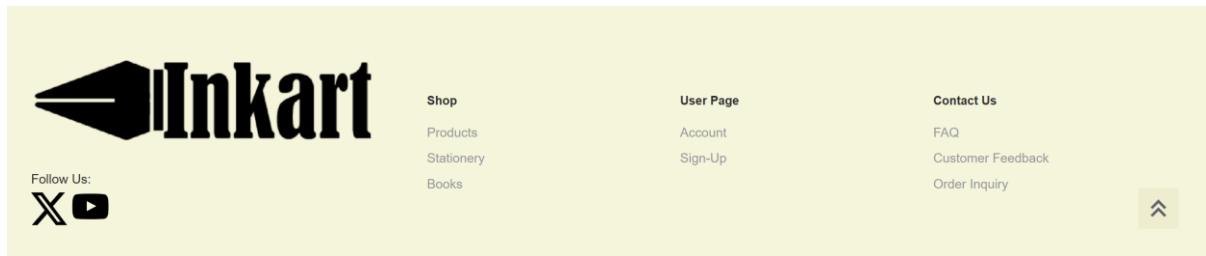
Footer

Basic HTML and CSS is used to create a footer at the bottom of each page.

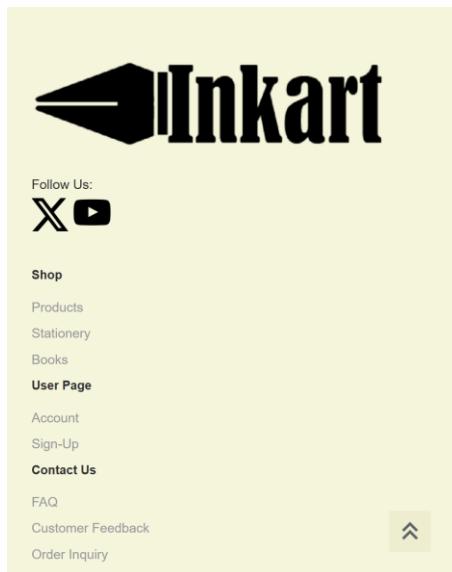
The footer is composed of the following parts.

- Shop Logo that redirects to the Home Page.
- Links to Social Media.
- Links to different pages of the website.
- Links to customer feedback and order inquiry forms made with Google Forms.

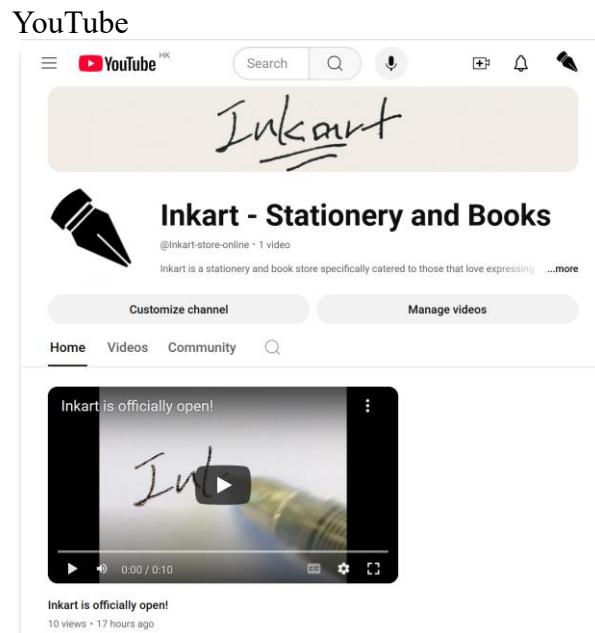
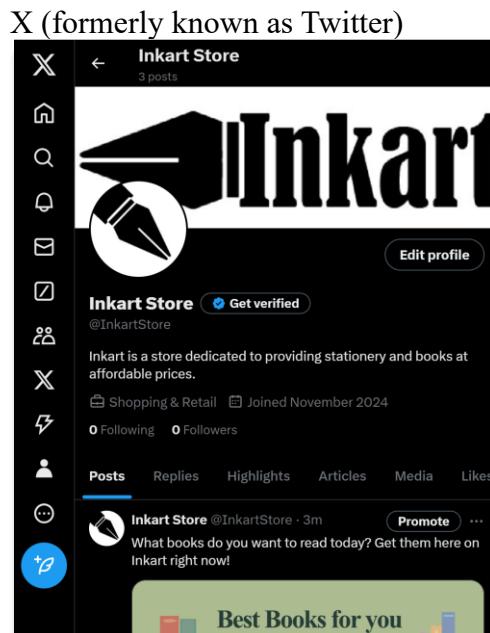
On PC:



On Mobile:



Social Media:



Customer Forms:

Customer Enquiry Form

Inkart Customer Feedback Form

Thank you for shopping with us! Please take a few minutes to rate us so we can serve you better.

missddwong@gmail.com [Switch account](#)

* Indicates required question

Section 1

Name *

Your answer

Phone *

Your answer

Age *

Your answer

Email *

Your answer

[Next](#) [Clear form](#)

Our Services

Please answer the following questions according to your experience with our services.

On a scale of 1 to 5, how would you rate your overall shopping experience? *

1 2 3 4 5

☆ ☆ ☆ ☆ ☆

Section 2

On a scale of 1 to 5, how would you rate your experience?

1 2 3 4 5

☆ ☆ ☆ ☆ ☆

On a scale of 1 to 5, how would you rate your satisfaction with our products? *

1 2 3 4 5

☆ ☆ ☆ ☆ ☆

Would you recommend our shop to your friends/family? *

Yes

No

Maybe

Suggestions

What areas do you think our shop can improve in? *

Product Quality

Product Variety

Customer Service

Website's Ease of Use

Other: _____

Section 3

Any suggestions on how our shop can better serve you?

Your answer

[Back](#) [Next](#) [Continue to Section 4](#) [Clear form](#)

To Section 3

To Section 4

Feedback

Anything you would like to tell us?

Your answer

[Back](#) [Next](#) [Clear form](#)

Section 4

Thank you for filling out our form!

We will continue to improve to provide you with a better shopping experience.

[Back](#) [Submit](#) [Clear form](#)

Section 5

Order Inquiry Form

Order Inquiry Form

Your answer

Email: *

Your answer

Order ID: *

Your answer

What are you looking to contact us about? *

- Order Inquiry [To Section 2](#)
- Product Inquiry [To Section 3](#)
- Complaint [To Section 4](#)

[Next](#) [Clear form](#)

Inquiry Form

Please describe your enquiries regarding your order / our products. *

Your answer

Section 2

[Back](#) [Next](#) [Clear form](#)

Inquiry Form

Please describe your enquiries regarding your order / our products. *

Your answer

Section 3

Please describe your enquiries regarding your order / our products. *

Your answer

[Back](#) [Next](#) [Clear form](#)

Order Complaint

Please describe your problem: *

Your answer

Please provide additional photo evidence if your problem is related to product damage.

Upload 1 supported file: image or video. Max 10 MB.

[Add file](#)

I acknowledge that I am being truthful in my complaints.

[Back](#) [Next](#) [Clear form](#)

Section 4

Thank you for filling out our form.

We will get back to you as soon as possible.

[Back](#) [Submit](#) [Clear form](#)

Section 5

Back-to-Top Button

A Back-to-Top Button is added using the following code:

```
<a href="#" class="back-to-top">
| 
</a>
```

The `href="#"` attribute sends the users to the top of the page when pressed. As the scroll behaviour in CSS is set as smooth, it will scroll to the top of the page instead of reloading the page.

The position of the button is fixed to the bottom right of the page and the background is set to transparent so as to not affect the readability of the page.

The original background is set as transparent so the content behind can still be read. On mouseover, the background colour of the button will turn darker to indicate.

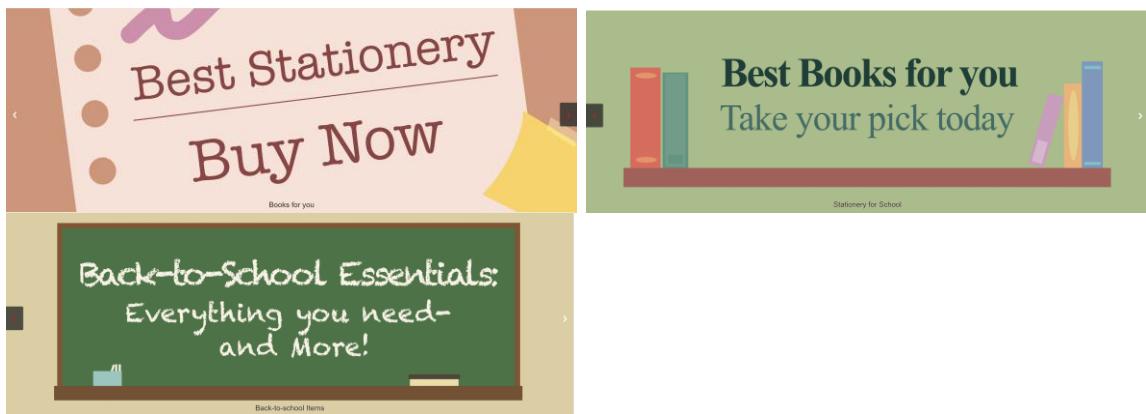


B. Home Page

The homepage consists of a carousel, multi-item showcase, a button to the products page and a shop introduction.

Carousel

A carousel is created using a template on w3schools with changes made to fit the website.



The user can press through the side buttons on the carousel to go through 3 different promotional events. The hyperlink embedded on the slides will lead the user to the promotional page for the different events.

Newest Arrivals

A Newest Arrivals section can help provide users with latest updates on the catalogue.

Newest Arrivals



The section for newest arrivals is created by accessing the four newest items added to the database table items using a SQL statement.

```
$sql="SELECT * FROM items ORDER BY id DESC LIMIT 4;";
```

The result is stored in rows and used to output the product information.

Popular Items

A Popular Items section can provide product recommendations to the users.

Popular Products



The section for popular products is created by accessing the items with the most reviews.

```
$sql = "SELECT item_id FROM reviews GROUP BY item_id ORDER BY COUNT(item_id) DESC;";
$count_result = mysqli_query($con, $sql);

if ($count_result) {
    while ($count_row = mysqli_fetch_row($count_result)) {
        $item_id = $count_row[0];

        $sql = "SELECT * FROM items WHERE id = '" . mysqli_real_escape_string($con, $item_id) . "' LIMIT 4;";
        $result = mysqli_query($con, $sql);

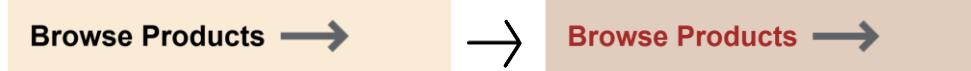
        if ($result) {
            while ($row = mysqli_fetch_row($result)) {
                ?>
                <div class="thumbnail">
                    <a href="product.php?ProductID=<?php echo $row[0] ?>">
                        ">
                    </a>
                    <div class="item-info">
                        <a href="product.php?ProductID=<?php echo $row[0] ?>">
                            <h3><?php echo $row[1] ?></h3>
                        </a>
                        <p>Price: $<?php echo $row[2] ?></p>
                    </div>
                </div>
                <?php
            }
        }
    }
}
```

That is achieved through the above code snippet.

- \$item_id is selected from the reviews table where the results are grouped and ordered in descending order based on the count of item_id in the table. This means the most reviewed items will appear first in the result.
- The result of the query is stored in the variable \$count_result.
- If the query was successful and \$count_result is a valid result set, a loop iterates over each result in \$count_result by counting the number of rows in the result.
- Inside the loop, \$item_id is set to the first column of the row
- Another SQL query selects all columns in the table items where the id matches \$item_id. The mysqli_real_escape_string() function will escape the string so that it is safe to place in a query. The result is limited to four items so only four products will show up.
- The SQL statement is executed, and another loop is used to output each product by using the result stored in rows.

Button to Product Page

A button that directs the user to the product catalogue is included on the home page.



The background is set to change colour on hover using CSS.

Store Introduction

A screenshot of a website page. On the left, there is a white box with a thin black border containing the heading "Our Mission" in bold. Below it is a horizontal line and a paragraph of text: "We wish to bring everyone joy through our books and stationery. We specifically cater to those that love expressing themselves, offering quality products at an affordable price. We hope to inspire more people to develop their interests through using our unique products." To the right of this box is a dark video player interface. At the top of the player, the brand name "Inkart" is displayed next to its logo. To the right of the logo are three small icons: a list icon, a clock icon, and a share icon. Below these are the numbers "1/1" and "Watch later". The main video area is black with the word "Inkart" in white. At the bottom of the player is a control bar with icons for back, forward, volume, and playback progress (0:06 / 0:08). To the right of the progress bar are icons for closed captions, settings, and YouTube.

A brief description of the store is included next to an embedded YouTube video. The `<iframe>` tag is used to display another document inside the current page, allowing for the video from another source to be played within the page.

- The video is set to autoplay and be on mute when the page is first loaded.
- It will automatically loop when the video ends.

C. Register Page

Register

Name:

Email:

Password

Confirm Password

already have an account? [click here](#)

Register

A form is used to collect information from the user for registration. It is created using the following code.

```
<form method="post" class="info-form" action="register_submit.php" onsubmit="return validateForm()">
    <fieldset>
        <legend>Register</legend>
        <div class="field">
            <label for="name">Name:</label>
            <div class="form-group">
                <input type="text" class="form-control"
                    name="name" id="name" placeholder="Name" required="true">
            </div>
        </div>

        <div class="field">
            <label for="email">Email:</label>
            <div class="form-group">
                <input type="email" class="form-control"
                    name="email" id="email" placeholder="Email" required="true">
            </div>
        </div>

        <div class="field">
            <label for="pwd">Password</label>
            <div class="form-group">
                <input type="password" class="form-control"
                    name="password" id="password" placeholder="Password (min. 8 characters)" required="true">
            </div>
        </div>

        <div class="field">
            <label for="cpwd">Confirm Password</label>
            <div class="form-group">
                <input type="password" class="form-control"
                    name="confirmpassword" id="confirmpassword" placeholder="Password (min. 8 characters)" required="true">
            </div>
        </div>

        <div class="submit-box">
            <div class="redirect-button">
                <p style="margin-right: 10px;">already have an account? </p> <a href="login.html">click here</a>
            </div>
            <input type="submit" class="submit-button" value="Register">
            <br>
        </div>
    </div>
</form>
```

Data validation helps prevent inaccurate information. It can be done through HTML input attributes and JavaScript.

Data Validation using HTML attributes

- All Input fields include the `<required>` attribute set as true. This acts as a presence check and ensures users must input information into the field.
- Each field has a data type set using the `<type>` attribute. The data type for email acts as a format check and ensures users input a properly formatted email address.
- The user cannot submit the form and a message is displayed if it does not pass these conditions.

Presence Check

Name:

Email:

 Please fill out this field.

Format Check

Email:

 Please enter a part following '@'. 'invalid@' is incomplete.
Password (min 8 characters)

Email:

 Please include an '@' in the email address. 'invalid format' is missing an '@'.
Password (min 8 characters)

Data Validation Using JavaScript

```
function validateEmail(email) {
    let regex = /^[a-zA-Z0-9._+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,3}$/;

    if (email.match(regex)) {
        return true;
    } else {
        alert("Email is not in proper format.");
        return false;
    }
}

function validatePassword(password) {
    //this is to validate if the password length is 8 characters or longer.
    if (password.length > 7) {
        return true;
    } else {
        alert("Password must be at least 8 characters long.")
        window.href="register.html";
        return false;
    }
}
```

An external JavaScript document is linked in the <head> of the page for data validation.

- `validatePassword` acts as a length check. If the user does not pass it, they receive a pop-up message from the function `validateForm` and are directed to `register.html`.
- `validateEmail` also acts as a format check. A regular expression is used so that the input value of email should match the format

```
$name = $_POST["name"];
$email = $_POST["email"];
$password = $_POST["password"];
$confirmpassword = $_POST["confirmpassword"];
```

- The input values are sent to `register_submit.php` and stored in PHP variables using the POST method.

```
$con=mysqli_connect("localhost","root","","shop") or die(mysqli_error($con));

$sql="SELECT * FROM users WHERE email = '$email'";
$result = mysqli_query($con, $sql);
$no_rows = mysqli_num_rows($result);

if ($no_rows == 1) {
?>
<script>
alert("Please use a unique email");
window.location.href = "register.html";
</script>
<?php
} else {
    if ($password == $confirmpassword) {
        $sql="INSERT INTO users (name, email, password, contact, city, address)
VALUES ('$name','$email','$password','','','')";
        mysqli_query($con, $sql);

    } else {
?>
<script>
alert("Password not matching");
window.location.href = "register.html";
</script>
<?php
    }
}
?>
<script>
alert("Sign up succeeded")
window.location.href = "products.php";
</script>
```

A connection to the database is established.

- The number of results where the inputted value is identical to an email previously existing in the database is stored in `$no_rows`. If there is a previous account using that email account, there will be a result of 1, and a pop-up message will notify the user. As the email should be unique, uniqueness check is used.
- Data verification by double data entry is used to confirm whether the user is sure of the password entered. If the 2 passwords do not match, a pop-up message will alert the user.

If the user fulfils all of the above data validation conditions, then their input values are inserted into the database table `users`, and they are redirected to the Products Page.

already have an account? [click here](#)

A link to redirect users with an account to the login page is also included in `register.html`.

D. Login Page

The screenshot shows a login form titled "Login". It contains two input fields: "Email" and "Password", both with placeholder text. Below the fields is a link "new user? click here". To the right of the fields is a yellow "Login" button.

The login page includes a login form asking for the user email and password as well as a link to redirect users to the Register Page.

```
<form method="post" class="info-form" action="login_submit.php">
    <fieldset>
        <legend>Login</legend>
        <div class="field">
            <label for="email">Email:</label>
            <div class="form-group">
                <input type="text" class="form-control" name="email" id="email" placeholder="Email" required="true">
            </div>
        </div>

        <div class="field">
            <label for="pwd">Password</label>
            <div class="form-group">
                <input type="password" class="form-control" name="password" id="password" placeholder="Password" required="true">
            </div>
        </div>

        <div class="submit-box">
            <div class="redirect-button">
                <a href="register.html">new user? click here</a>
            </div>
            <input type="submit" value="Login" class="submit-button">
        </div>
    </fieldset>
</form>
```

Basic presence check and format check for email in HTML is used to confirm if the user is submitting valid information. A message will show if the user entered invalid values.

```
session_start();

$email = $_POST["email"];
$password = $_POST["password"];

$con=mysqli_connect("localhost","root","","shop") or die(mysqli_error($con));

$stmt = $con->prepare("SELECT * from users where email = ? and password = ?");
$stmt->bind_param("ss", $email, $password);
$stmt->execute();
$result = $stmt->get_result();

$num_rows = mysqli_num_rows($result);
```

When the user presses the login submit button, they are redirected to *login_submit.php*, and the input values are sent to the page through the POST method.

A session starts and the email and password values are retrieved using `$_POST` from `login.html`.

- A connection to the database is formed.
- A prepared SQL statement is used to prevent SQL injection. This is due to the sensitivity of username and passwords. The placeholders `?` are used in place.
- The parameters are binded to the prepared statement, replacing the placeholders. `bind_param()` ensures the variables are safely passed to the SQL query.
- The SQL statement with bound parameters is executed and stored in `$result`.
- The number of rows returned by the query is stored in `$num_rows`.

```
if ($result->num_rows == 1) {

    mysqli_close($con);

    if ($num_rows == 1) {
        $_SESSION["email"] = $email;
    }
    <script>
    alert("Login succeeded");
    window.location.href = "home.php";
    </script>
<?php
    }
} else {
    <script>
    alert("Incorrect Email or Password. Please Try Again. ");
    window.location.href = "login.html";
    </script>
<?php
}
?>
```

- If the condition that \$num_rows has exactly one result is true, it indicates that the login credentials are correct, i.e. there is a matching email and password in the database.
- If so, the user email is stored in a session to ensure the user is logged in across different pages, and JavaScript is used to alert the user about the successful login, redirecting them to the Home Page.
- If \$num_rows is zero, it means that the login credentials are incorrect, showing an alert message to show that the login failed, and redirects the user to the login page to try again.

If the login credentials are correct, a session is started,

E. Promotion Page



The promotion page includes a banner along with the item catalogue.

```
<a href="promotion.php?event=1">
    
</a>
```

The query for the promotion event is stored within the carousel link. The Promotion Page will either show the promotion for event 1, event 2 or event 3 depending on the query.

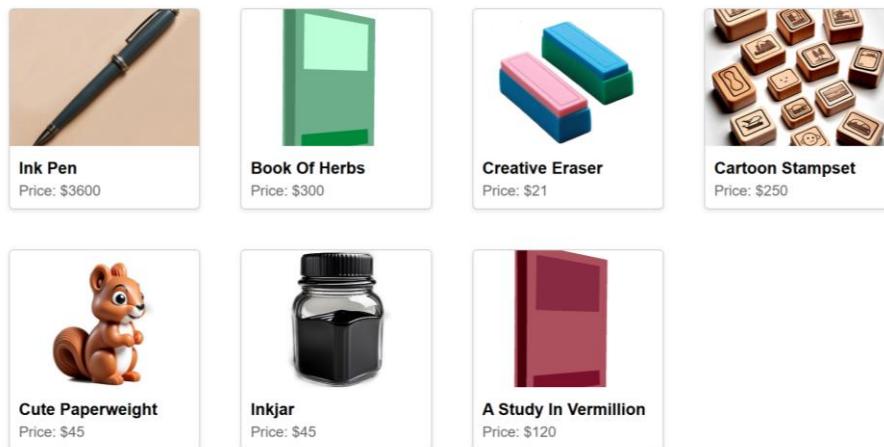
```
if (isset($_GET["event"])){
    $event = $_GET["event"];
    $eventsq1 = "select id from event where event = '$event' ";
    if ($result = mysqli_query($con, $eventsq1)){ //execute and store result in $result
        while ($eventrow = mysqli_fetch_row($result)){
            $eventbanner = "eventbanner".$event.".PNG";
        }
    }
}

" width="100%" height="auto">
```

The following products are retrieved from the database by using the event number to select the of item ID all items from the database table *event* that matches the event number. The item IDs are then used to retrieve product information from the table *items* where the item ID matches.

F. Product Catalogue

This page displays the product catalogue.



```
<li><a href="products.php?category=stationery">Stationery</a></li>
<li><a href="products.php?category=book">Books</a></li>
```

The query for the category is stored in the hyperlink of the navigation bars. If the user accesses the page from the navigation bar or footer, they will enter the stationery or book category. If the user chooses to access the page using the the button on the home page, there will be no query for category.

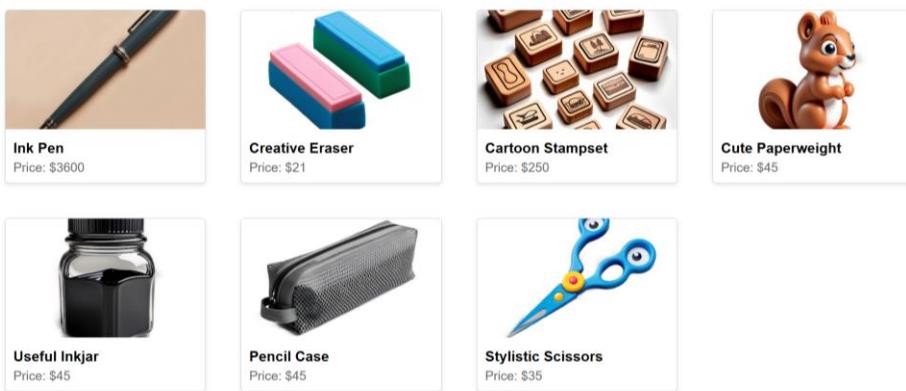
```
<?php
    if (isset($_GET["category"])){
        $category = $_GET["category"];
        $sql = "select * from items where category = '$category' ";
    }
    else {
        $sql="SELECT * from items"; //sql
    }
    if ($result = mysqli_query($con, $sql)){ //execute and store result in $result
        while ($row = mysqli_fetch_row($result)){ //fetch row from result
?>
            <div class="thumbnail">
                <a href="product.php?ProductID=<?php echo $row[0]?>">
                    ">
                </a>
                <div class="item-info">
                    <a href="product.php?ProductID=<?php echo $row[0]?>">
                        <h3><?php echo $row[1]?></h3>
                    </a>
                    <p>Price: $<?php echo $row[2]?></p>
                </div>
            </div>
        <?php
    }
}
?>
```

The page first checks for a query for the category.

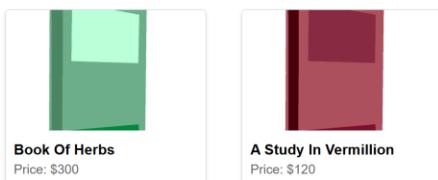
- If there is a query, the SQL statement will be set to only select items from the matching category.
- If there is no query, the SQL statement will be set to select all items from table items.

A SQL statement is used to select all columns from a certain category from the tables *items*, and the result is stored in rows. The items (product name, price, image file name) are output using the rows.

Filtering for stationery products:



Filtering for book products:



G. Product Page

The page is for the display of one individual product.

Product

Creative Eraser
Price: \$21

This creatively designed eraser effectively removes pencil marks and stands out with its eye-catching shape and vibrant colors. Made from high-quality, non-toxic materials, it is perfect for students and artists alike.

Add to Cart

A query from the link on *products.php* is used to determine which product is shown.

```
<a href="product.php?ProductID=<?php echo $row[0]?>">
```

The query result is used to get the product ID, and a SQL statement returns the results from the table *products* where the product ID matches the variable and stores it in rows. The rows are used to output the product details such as image, title, price and description.

Buy Now Button

The buy now button appears differently for different users. The page checks if the user is logged in using `isset($_SESSION["email"])`.

- If the user is logged in, it will appear as “Buy Now” and add the product to the shopping cart of the user.
- If the user is logged out, it will appear as “Add to Cart” and will redirect the user to the Login Page.
- The button will darken in colour when hovered over.



Review Submission

Submit a Review

The screenshot shows a light green rectangular form. At the top left, it says "Review This Product" with a text area below it. To the left of the text area is a small square checkbox. Next to the checkbox is the text "Post Anonymously". At the bottom left of the form is a "Submit" button.

```
<?php
if (isset($_SESSION["email"])) && $_SESSION["email"] != "admin") {
?>
<h3>Submit a Review</h3>
<div class = "review-input-box">
    <form method="post" action="review_submit.php">
        <textarea class="review-input" required="true"
            placeholder="Review This Product" id="review" name="review"></textarea><br>
        <input type="checkbox" id="anon" name="anon" value="on">
        <label for="anon">Post Anonymously</label><br>
        <input type = "hidden" name = "item_id" value = "<?php echo $productID ?>">
        <input type = "hidden" name = "user_id" value = "<?php echo $_SESSION["email"] ?>">
        <input type="submit" class="review-submit" value="Submit">
    </form>
</div>
<?php
}
?>
```

- `isset($_SESSION["email"])` checks if the user is logged in. An extra condition that the email must not be an admin account is added. If so, a review submission box will appear.
- The user can type their review into a vertically adjustable input box and choose whether their review is anonymous using a checkbox. Presence check is used to ensure the user inputs a review.
- The user and reviewed product are set using `<input type = "hidden">`.
- The variables are sent to `review_submit.php` using the POST method.

```

<?php
$item_id = $_POST["item_id"];
$user_id = $_POST["user_id"];
$review = $_POST["review"];
$anon = $_POST["anon"];
if (isset($_POST['anon'])){
    $anon = 1;
} else {
    $anon = 0;
}
date_default_timezone_set("Asia/Hong_Kong");
$now = date("Y-m-d H:i:s");
?>

```

In `review_submit.php`,

- The input values are stored in PHP variables using `$_POST[""]`.
- The Boolean value of `$anon` is checked and its value is changed to 1 if it is true and 0 if it is false.
- The date and time of Hong Kong at that moment is taken and stored in `$now`.

```

<?php
$con=mysqli_connect("localhost","root","","shop") or die(mysqli_error($con));

$sql="INSERT INTO reviews (item_id, user_id, date, review, anon)
      VALUES ('$item_id','$user_id','$now','$review','$anon')";
      mysqli_query($con, $sql);

mysqli_close($con);

header("location: product.php?ProductID=$item_id");
?>

```

- After connecting to the database, a SQL statement that inserts the PHP variable into the database table `reviews` is carried out using `mysqli_query`.
- The review is now inserted into the database and the user is redirected to the product page.

Reviews

bag	on 2024-11-18 23:49:28
Very great good book	

Reviews are shown under the product display and review submission box.

```
<div class="review">
    <div class="review-user">
        <?php if ($row[5] == 0) { ?>
            <p>
                <?php
                    $sql = "SELECT name from users where email = '$row[2]'";
                    $name_results = mysqli_query($con, $sql);
                    $name_row = mysqli_fetch_row($name_results);
                    echo $name_row[0]; ?></p>
        <?php } else { ?>
            <p>Anonymous User</p>
        <?php } ?>
            <p class="review-date">on <?php echo $row[3] ?></p>
        </div>
        <div class="review-content">
            <p><?php echo $row[4]?></p>
        </div>
    </div>
```

The reviews of the product include the name of the user, their review and date of review.

- A SQL statement gets the results from table *reviews* where results have a matching product ID. The result is stored in rows.
- It is checked if the user chose to be anonymous. If they are, their name is taken from the database by checking the name that matches with the email.
- The review is output using the rows.

H. Cart

The Cart Page is for users to store the items they wish to buy temporarily until checkout.

Item Number	Item Name	Price	
1	Stylistic Scissors	\$35	Remove
2	A Study In Vermillion	\$120	Remove
	Total	\$155	Confirm Order

A table is used to display the cart.

```

<?php
$total = 0;
$num = 1;
foreach ($cart as $key => $value) {
?>
<tr>

<th><?php echo $num ?></th><?php echo $value["name"] ?></th>$<?php echo $value["price"] ?></th>
<th><a href='cart_remove.php?ProductID=<?php echo $key ?>'>Remove</a></th>
<?php
    $total = $total + $value["price"];
    $num = $num + 1;
?>
</tr>

```

- `$total` is a variable to accumulate the total price of items in the cart.
- `$num` is used to count the item numbering
- A for-loop is used to create a new row in the table to display the item number, name, price and a link to remove the product.
- The total price is calculated by adding the current items price to `$total` every iteration of the loop.
- `$num` is incremented by one for the next iteration.

Add Products to Cart

The “Add to Cart” button on *product.php* leads the user to add the product to the shopping cart by directing them to *cart.php* with the product ID in the query.

```

if (!isset($_SESSION["cart"])){
    $_SESSION["cart"] = [];
}

```

An empty session for cart is started if there are no previous sessions.

```

if (isset($_GET["ProductID"])){
    $productID = $_GET["ProductID"];
    $sql = "select name, price from items where id = '$productID';

    if ($result = mysqli_query($con, $sql)){
        while ($row = mysqli_fetch_row($result)){
            $name = $row[0];
            $price = $row[1];

            $product = array(
                "name" => $name,
                "price" => $price
            );

            $_SESSION["cart"][$productID] = $product;
        }
    }
}

```

- ProductID is retrieved and a SQL statement selects the name and price of products from table *items* with a matching productID.
- The query is executed, and product details are stored in the session variable `$_SESSION["cart"]` using an array with the product ID as the index.
- The product is added to the session cart, and will remain until the cart session is cleared.

Remove Products

Users can remove products from the cart if they desire to. When they press on the remove button, they are redirected to *cart_remove.php*.

```
if(isset($_GET["ProductID"])) {
    $id = $_GET["ProductID"];

    unset($_SESSION["cart"][$id]);

}

header("location: cart.php");
```

The product ID is received using the GET method and is unset from `$_SESSION["cart"]`. It is effectively removed from the shopping cart.

Checkout

```
<script>
    function confirmOrder() {
        if (confirm("Confirm order?")) {
            window.location.href = "success.php";
        }
    }
</script>
```

JavaScript function `confirmOrder()` is called when the button “Confirm Order” is pressed. It sends an alert for user to confirm the order. If the user confirms, it sends the user to *success.php*.

- A unique ID is generated for each order using `uniqid()`
- The time in Hong Kong is stored in `$now`
- A loop iterates over each item in the cart to insert into the orders table along with order details.
- The total price is calculated by adding the price of each item everytime the loop iterates.
- A SQL query is executed to insert the order into `order_status` with a pending status.
- The shopping cart is cleared from the session and all items are removed from it.

```

$order_id = uniqid(); // Create unique ID
date_default_timezone_set("Asia/Hong_Kong");
$now = date("Y-m-d H:i:s"); // Get current date time

if (isset ($_SESSION["cart"])) {
    $cart = $_SESSION["cart"];
    $email = $_SESSION["email"];
    $total = 0;

    foreach ($cart as $id => $value){
        $name = $value["name"];
        $price = $value["price"];
        $sql = "insert into orders (user_id, order_id, date, item_id, name, price)
                values ('$email', '$order_id', '$now', '$id', '$name', '$price')";
        $result = mysqli_query($con,$sql);
        $total = $price + $total;
    }
    $sql = "insert into order_status (order_id, status, user_id, date, total)
            values ('$order_id', 'Pending', '$email', '$now', '$total')";
    $result = mysqli_query($con,$sql);

    unset($_SESSION["cart"]);
}

```

I. Order History

The customer can get their order history using a SQL statement.

Pending Orders

Order Number			Order Time	Total
675962782e6a2			2024-12-11 17:59:20	\$120
Item ID	Item	Price	Order Inquiry	
23	A Study In Vermillion	\$120		
6759628966289			2024-12-11 17:59:37	\$300
Item ID	Item	Price	Order Inquiry	
2	Book Of Herbs	\$300		

The user orders are displayed using a nested table.

- A SQL statement to select all columns from the table *order_status* for one status (pending, delivering or completed) is used for the larger table.
- A SQL statement to select each individual item from the table *order* is used for the smaller table.
- The query results are stored in rows, which is then used to output each order and its individual items. A form for order inquiry is included next to the order.

```

if ($result = mysqli_query($con, $sql)){
    $no_rows = mysqli_num_rows($result);
    if ($no_rows == 0) {

```

It is checked whether there are particular orders of this status using `$no_rows`. If there are zero rows, it means that there are no orders of this status and “No Orders” will be shown.

Delivering Orders

Order Number	Order Time	Total
No Delivering Orders	--	--

J. Account Page

The account page includes the account information, hyperlinks for navigation and a form to update account information.

```

if (!isset($_SESSION["email"])){
    header("location: login.html");
}

```

The above code is included in all pages that require logging in such as the Account Page, Order History and Shopping Cart. If the user is not logged in, they are redirected to login.

Account Information

Account Details

Name: Luigi
Email: luigi@gmail.com
Contact: 123456768
City: New City
Address: Banana Flat, Pip Estate, New City

The information is retrieved from the database using a SQL statement and stored in rows, then output individually.

Navigation

Order History

Shopping Cart

Links to Order History and the Shopping Cart is included in the Account Page.

Update Account Details

The user can use this function to update their account information.

The form is titled "Update Account Details". It includes fields for "Update Name" (with a "Name" input and "Submit" button), "Update Email" (with "Email" and "Password" inputs and "Submit" buttons), "Update Phone Number" (with "Phone Number" input and "Submit" button), "Update Address" (with "Address" and "City" inputs and "Submit" button), and "Update Password" (with "New Password", "Confirm New Password", and "Old Password" inputs and "Submit" button).

Forms similar to the register form is used to collect the information for the update.

Logout Button

The logout button sends the user to *logout.php* when pressed.

```
<?php
    session_start();
    session_unset();
    session_destroy();

    header("location: home.php");
?>
```

- `session_start` resumes the previous (logged in) session.
- `session_unset` clears the data stored in variables in the current session.
- `session_destroy` destroys the current session and logs out the user.
- The user is then sent to the top of the home page in a logged out state.

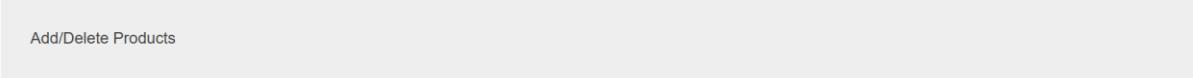
K. Admin Page

The admin page includes links to the pages Add Order, Edit Order and Customer Orders as well as a logout button.

```
if (!isset($_SESSION["email"])){
    header("location: login.html");
} else{
    if ($_SESSION["email"] != 'admin'){
        header("location: home.php");
    }
}
```

For the admin page and other admin only pages such as Add Products, Edit Products and Customer Orders, the above PHP code is used to see if the user has logged in and is an admin account. If not, the user is sent to the Login Page and Home Page respectively.

Add/Delete Products Toggle



Add/Delete Products

A Toggle Button for the Links to the Add Product Page and Delete Product Page is included.



Add/Delete Products

When the Toggle Button is folded, it will turn into a darker colour when hovered over.



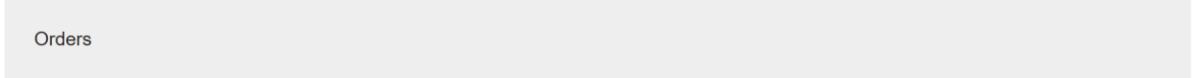
Add/Delete Products

Add Products

Delete Products

When the Toggle Button is clicked, the contents inside will unfold and show separate links for Add Products Page and Delete Products Page.

Link



Orders

A link to the Customer Orders Page is included on the page.

Logout Button

Logout

A logout button that functions the same as the logout button in the customer page is also included in the admin page for the admin to logout.

L. Add Products

The admin can add new products through this page.

Category

Stationery

Item

Enter Item Name

Price

Enter Price

Description

Enter Item Description

Image

Choose File No file chosen

Submit

This is a screenshot of a web form for adding a new product. The form fields are labeled: Category, Item, Price, Description, and Image. The Category field is a dropdown menu with 'Stationery' selected. The Item field is a text input field with placeholder text 'Enter Item Name'. The Price field is a text input field with placeholder text 'Enter Price'. The Description field is a text area with placeholder text 'Enter Item Description'. The Image field is a file upload input with placeholder text 'Choose File' and 'No file chosen'. At the bottom of the form is a yellow 'Submit' button.

A form is used to collect information for the information of the new product. Some basic data validation is used in the collection form.

Category

Stationery

Stationery

Book

Enter Item Name

This is a screenshot of a dropdown menu for the 'Category' field. The menu items are 'Stationery', 'Stationery' (which is highlighted with a blue background), and 'Book'. Below the menu is a text input field with placeholder text 'Enter Item Name'.

- Fixed Value Check is used for the category of the Item by using a dropdown box.
- Type Check (number) is used for the price
- Presence Check is included for all of them to ensure the user inputs all values

If the input values passes all the checks, the values are sent to *admin_add_submit.php* using `$_POST` and `$_FILES`.

The file upload for the product image is done using the following code:

```

if (isset($_FILES["image"])) {
    $target_dir = "images/";

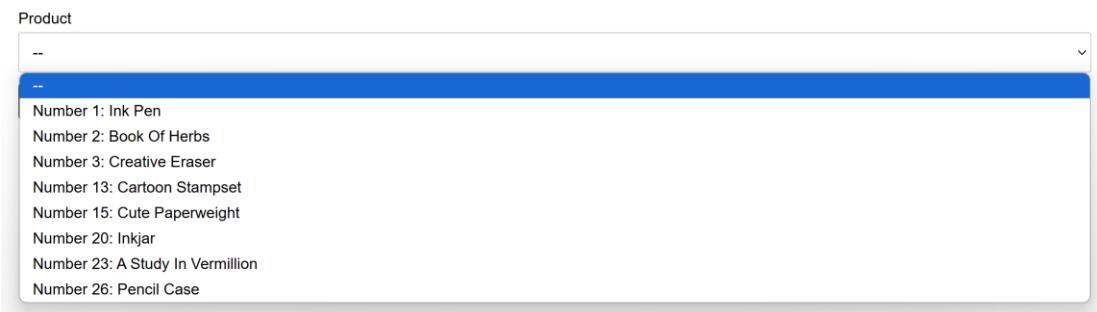
    $target_file = $target_dir . $_FILES["image"]["name"];
    if (move_uploaded_file($_FILES["image"]["tmp_name"], $target_file)) {
        echo "File Uploaded<br/>";
    }>
    <script>
        alert("Product Added. ");
        window.location.href = "register.html";
    </script>
    <?php
        header("location: admin.php");
    }
    else {
        echo "File Upload Failed<br/>";
        header("location: add_product.php");
    }
}

```

- The directory where the uploaded file will be stored (“*images/*”) is specified
- The target file directory and original file name is combined and stored in `$target_file`.
- The `move_uploaded_file()` functions moves the uploaded file to directory “*images/*”
- If the file upload is successful, there will be a message displayed confirming it.
- The user is also notified that the product was added successfully, and redirected to *register.html* after.
- If the file upload fails, an error message is displayed and the user is redirected back to the Add Product Page.

M. Delete Products

This page is used to delete products from the product catalogue.



The admin can select an option from a dropdown box of product items. After they press the submit button, the option is sent to `admin_delete.php`.

```

$sql = "delete from items where id = '$productID'";

```

An SQL statement deletes the row with the same product id as selected from table *items* and the product is deleted from the catalogue.

N. Customer Orders

Pending Orders

Order Number			User	Order Time	Total
67596023e46aa			p@gmail.com	2024-12-11 17:49:23	\$ 165
Item ID	Item	Price	Update Status:		
20	Useful Inkjar	\$ 45	<input type="button" value="Pending"/> <input type="button" value="Submit"/>		
23	A Study In Vermillion	\$ 120			
675962782e6a2			I@gmail.com	2024-12-11 17:59:20	\$ 120
Item ID	Item	Price	Update Status:		
23	A Study In Vermillion	\$ 120	<input type="button" value="Pending"/> <input type="button" value="Submit"/>		
6759628966289			I@gmail.com	2024-12-11 17:59:37	\$ 300
Item ID	Item	Price	Update Status:		
2	Book Of Herbs	\$ 300	<input type="button" value="Pending"/> <input type="button" value="Submit"/>		

This page functions similarly to the Order History Page with some changes.

Customer Order Information

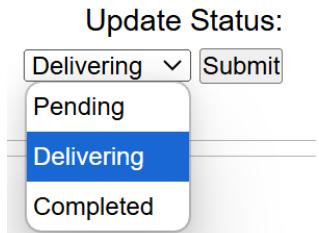
Unlike the account order page, the admin page allows the admin to see all customer orders.

```
$sql="SELECT * from order_status where status='completed';"
```

Instead of only selecting orders of one user, all user orders under the same status are selected in the SQL statement. The user email of the purchaser is also shown.

Change Order Status

This function allows the admin to change the status of the orders.



A drop-down box is used to change the order status.

```
<form method="post" action="update_status.php">
    <label for="status">Update Status:</label>
    <select name="status" id="status">
        <option value="Pending" selected="selected">Pending</option>
        <option value="Delivering">Delivering</option>
        <option value="Completed">Completed</option>
    </select>
    <input type="hidden" name="order_id" value="<?php echo $order_id ?>" />
    <input type="submit" value="Submit">
</form>
```

When the user presses submit, it will direct them to *update_status.php* where the selected status and order ID is received via POST.

```
$sql="UPDATE order_status SET status= '$status' WHERE order_id = '$order_id'";
mysqli_query($con, $sql);
```

A SQL statement is used to update he order status in table `order_status`.

O. FAQ Page

A Frequently Asked Questions Page is added to answer questions from customers.

Folded State:

Do you offer refunds?

Toggled State:

Do you offer refunds?

We do not offer refunds. However, please feel free to reach out to our staff using the order inquiry form to discuss the best solution.

The FAQ page toggle has a heading and the answer. Each question will toggle the visibility of the answer on click.

```
.faq-answer {
  display: none; /* Initially hide answers */
  padding: 15px;
  background-color: #f8f9fa;
  color: #424242;
}
```

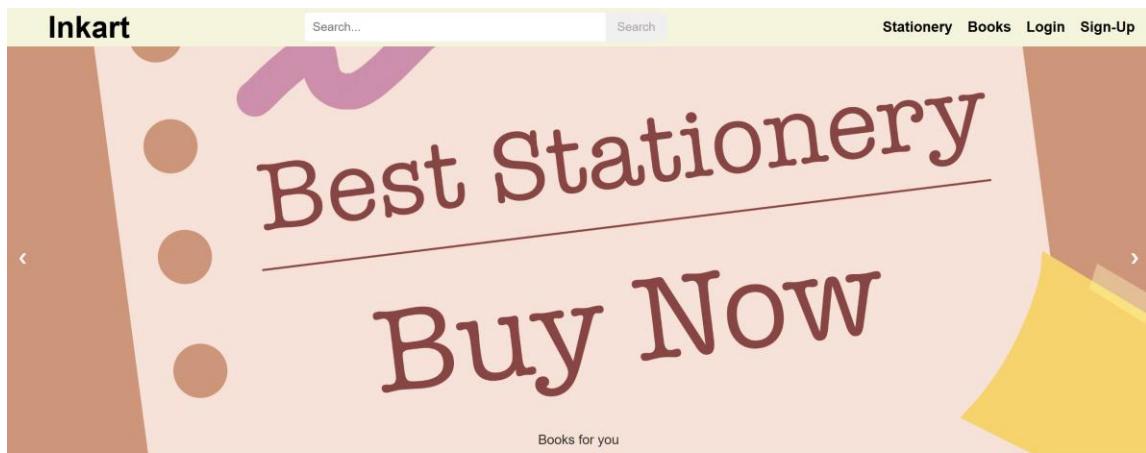
This is achieved through Javascript and CSS by hiding the answers and showing it when clicked on.

```
<script>
  document.addEventListener("DOMContentLoaded", function() {
    const questions = document.querySelectorAll('.faq-question');

    questions.forEach(question => {
      question.addEventListener('click', function() {
        const answer = this.nextElementSibling;
        answer.style.display = answer.style.display === "block" ? "none" : "block";
      });
    });
  });
</script>
```

Final Results

Home Page:



Newest Arrivals



Stylistic Scissors
Price: \$35



Pencil Case
Price: \$45



A Study In Vermillion
Price: \$120



Useful Inkjar
Price: \$45

Popular Products



Ink Pen
Price: \$3600



Useful Inkjar
Price: \$45



A Study In Vermillion
Price: \$120



Pencil Case
Price: \$45

Browse Products →

Our Mission

We wish to bring everyone joy through our books and stationery. We specifically cater to those that love expressing themselves, offering quality products at an affordable price. We hope to inspire more people to develop their interests through using our unique products.



Follow Us:



Shop

Products
Stationery
Books

User Page

Account
Sign-Up

Contact Us

FAQ
Customer Feedback
Order Inquiry

Search Page:

(With Matching Results)

**Ink Pen**
Price: \$3600**Pencil Case**
Price: \$45**Creative Eraser**
Price: \$21

Follow Us:

**Shop**[Products](#)
[Stationery](#)
[Books](#)**User Page**[Account](#)
[Sign-Up](#)**Contact Us**[FAQ](#)
[Customer Feedback](#)
[Order Inquiry](#)

(No Matching Results)

No Matching Results.
[Browse More](#)

Register Page:

Inkart

Search... Search

Stationery Books Login

Register

Name:

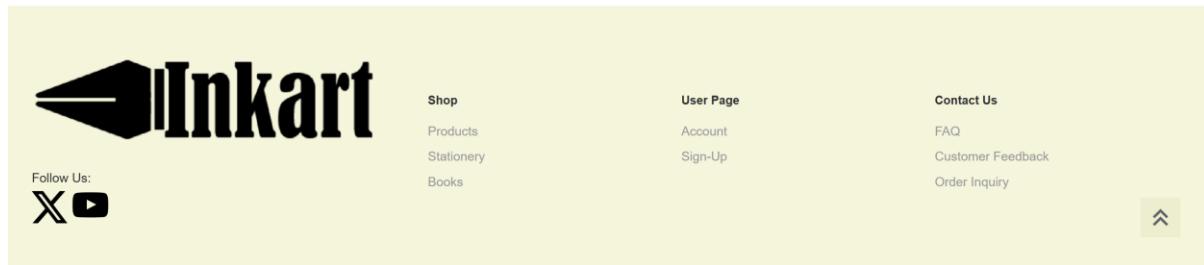
Email:

Password Password (min. 8 characters)

Confirm Password Password (min. 8 characters)

[already have an account? click here](#)

Register



Login Page:

Inkart

Search... Search

Stationery Books Sign-Up

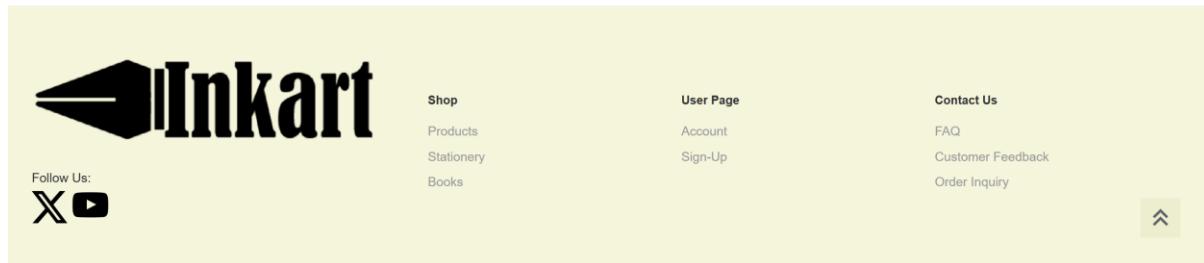
Login

Email:

Password

[new user? click here](#)

Login



Promotion Page:

The screenshot shows the Inkart website's promotion page. At the top, there is a navigation bar with the Inkart logo, a search bar, and links for Stationery, Books, Login, and Sign-Up. The main header features a chalkboard background with the text "Back-to-School Essentials: Everything you need-and More!" written in white chalk. Below the header, there are four product cards: "Ink Pen" (Price: \$3600), "Creative Eraser" (Price: \$21), "Useful Inkjar" (Price: \$45), and "Pencil Case" (Price: \$45). At the bottom, there is a footer section with the Inkart logo, social media links for X and YouTube, and navigation links for Shop (Products, Stationery, Books), User Page (Account, Sign-Up), and Contact Us (FAQ, Customer Feedback, Order Inquiry).

Inkart

Search...

Search

Stationery Books Login Sign-Up

Back-to-School Essentials: Everything you need- and More!

Ink Pen
Price: \$3600

Creative Eraser
Price: \$21

Useful Inkjar
Price: \$45

Pencil Case
Price: \$45

Inkart

Follow Us:

X YouTube

Shop

Products
Stationery
Books

User Page

Account
Sign-Up

Contact Us

FAQ
Customer Feedback
Order Inquiry

Product Catalogue:

Inkart

Search... Search Stationery Books Login Sign-Up

The grid displays nine products:

- Ink Pen**
Price: \$3600
- Book Of Herbs**
Price: \$300
- Creative Eraser**
Price: \$21
- Cartoon Stampset**
Price: \$250
- Cute Paperweight**
Price: \$45
- Useful Inkjar**
Price: \$45
- A Study In Vermillion**
Price: \$120
- Pencil Case**
Price: \$45
- Stylistic Scissors**
Price: \$35

Inkart

Follow Us: [X](#) [YouTube](#)

Shop
Products
Stationery
Books

User Page
Account
Sign-Up

Contact Us
FAQ
Customer Feedback
Order Inquiry

Product Catalogue on Mobile (Responsive Design)

The grid displays three products:

- Ink Pen**
Price: \$3600
- Creative Eraser**
Price: \$21
- Cartoon Stampset**
Price: \$250

Product Page:

The screenshot shows a product page for 'A Study In Vermillion'. At the top, there's a navigation bar with 'Inkart' on the left, a search bar, and links for 'Stationery', 'Books', 'Account', and 'Cart'. Below the navigation is a large image of the book cover, which is red with a dark binding. To the right of the image, the book title 'A Study In Vermillion' is displayed in bold black font, followed by 'Price: \$120' in smaller text. A brief description below the price states: 'A famous mystery novel written by genius writer Artier Jonan Doyill. Get ready to sink your teeth into this fascinating tale!'. A yellow 'Add to Cart' button is located at the bottom right of this section. Below this, there's a 'Submit a Review' form with a text area, a checkbox for 'Post Anonymously', and a 'Submit' button. Underneath the review form, there's a section titled 'Reviews' containing two entries. The first review is from 'Mario' on 2024-12-11 at 21:47:13, stating: 'I gifted my brother this book. He liked it a lot. Very nice.' The second review is from 'Luigi' on 2024-11-18 at 21:24:36, stating: 'Big Fan of this book. I always read this when I have time.'

The screenshot shows the Inkart website footer. It features the Inkart logo with a stylized pen nib icon. Below the logo, social media links for 'Follow Us:' and icons for X and YouTube are shown. The footer is divided into several sections: 'Shop' (Products, Stationery, Books), 'User Page' (Account, Sign-Up), and 'Contact Us' (FAQ, Customer Feedback, Order Inquiry). On the right side, there's a small upward-pointing arrow icon.

Product Page on Mobile (Responsive Design)

The screenshot shows the same product page for 'A Study In Vermillion' as the desktop version, but it's displayed on a mobile device. The layout is responsive, with the product image and title on the left and the description and reviews on the right. The 'Add to Cart' button is visible at the bottom. The mobile interface includes a navigation bar with 'Stationery', 'Books', 'Admin', and 'Order' tabs, where 'Order' is currently active. The overall design is clean and modern, utilizing a light color palette and clear typography.

Shopping Cart:

Inkart

Search... Search

Stationery Books Account Cart

Item Number	Item Name	Price	
1	Pencil Case	\$45	Remove
2	Useful Inkjar	\$45	Remove
	Total	\$90	Confirm Order

Inkart

Follow Us: X YouTube

Shop
Products
Stationery
Books

User Page
Account
Sign-Up

Contact Us
FAQ
Customer Feedback
Order Inquiry

Order History:

Inkart

Search... Search

Stationery Books Account Cart

Pending Orders

Order Number	Order Time	Total		
675997f5221c9	2024-12-11 21:47:33	\$120		
Item ID	Item	Price	Order Inquiry	
23	A Study In Vermillion	\$120		

Delivering Orders

Order Number	Order Time	Total
No Delivering Orders	--	--

Past Orders

Order Number	Order Time	Total
No Past Orders	--	--

Inkart

Follow Us: X YouTube

Shop
Products
Stationery
Books

User Page
Account
Sign-Up

Contact Us
FAQ
Customer Feedback
Order Inquiry

Account Page:

Inkart

Search... Search Stationery Books Account Cart

Your Account

Account Details

Name: Mario
Email: m@gmail.com
Contact: 85678567
City: Hong Kong
Address: Nino Headquarters

Order History

Shopping Cart

Update Account Details

Update Name: Submit
Update Email: Password Submit
Update Phone Number: Submit
Update Address: City Submit
Update Password: Confirm New Password Old Password Submit

[Logout](#)



Follow Us: [!\[\]\(e84c425322150e26c8b4da4b630dcc86_img.jpg\)](#) [!\[\]\(506525c223f3a3409ea348f8395766ba_img.jpg\)](#)

Shop
Products
Stationery
Books

User Page
Account
Sign-Up

Contact Us
FAQ
Customer Feedback
Order Inquiry



Admin Page:

Inkart

Search... Search

Stationery Books Admin Orders

Admin Page

Add/Delete Products

Orders

Logout

Inkart

Follow Us: X YouTube

Shop
Products
Stationery
Books

User Page
Account
Sign-Up

Contact Us
FAQ
Customer Feedback
Order Inquiry

Search... Search

Stationery Books Admin Orders

Add Product Page:

Inkart

Search... Search

Stationery Books Admin Orders

Add Product

Category
Stationery

Item
Enter Item Name

Price
Enter Price

Description
Enter Item Description

Image
Choose File No file chosen

Submit

Inkart

Follow Us: X YouTube

Shop
Products
Stationery
Books

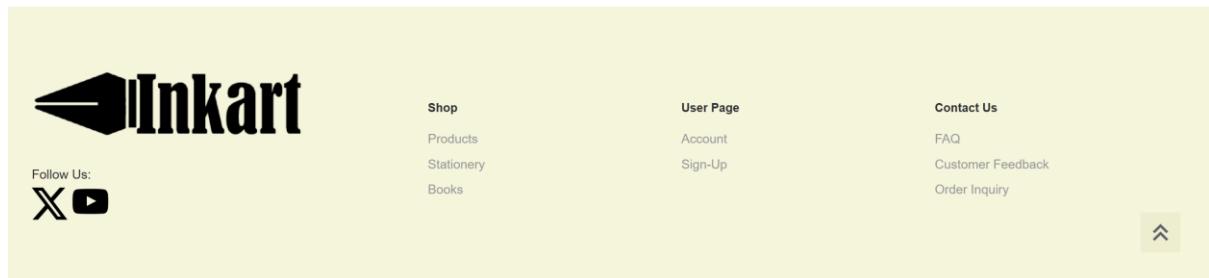
User Page
Account
Sign-Up

Contact Us
FAQ
Customer Feedback
Order Inquiry

Search... Search

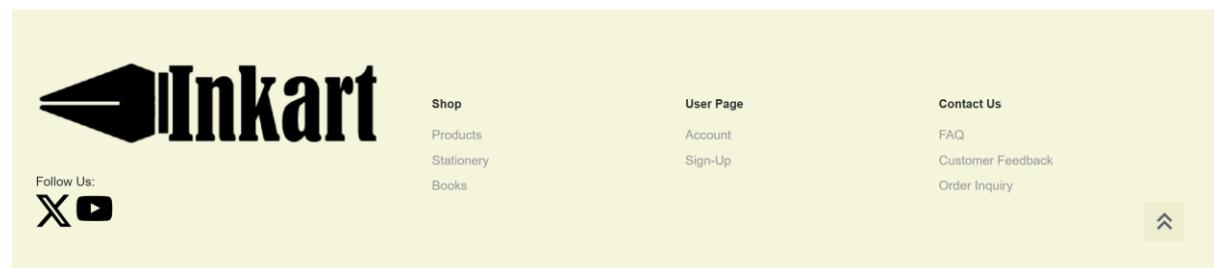
Stationery Books Admin Orders

Delete Product Page:



Customer Orders:

Inkart		Search...	Search	Stationery	Books	Admin	Orders																																																					
Pending Orders																																																												
<table border="1"> <thead> <tr> <th colspan="3">Order Number</th> <th>User</th> <th>Order Time</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td colspan="3">67596023e46aa</td> <td>p@gmail.com</td> <td>2024-12-11 17:49:23</td> <td>\$ 165</td> </tr> <tr> <th>Item ID</th> <th>Item</th> <th>Price</th> <td colspan="3" style="text-align: right;">Update Status: <input type="button" value="Pending"/> <input type="button" value="Submit"/></td></tr> <tr> <td>20</td> <td>Useful Inkjar</td> <td>\$ 45</td> <td colspan="3"></td></tr> <tr> <td>23</td> <td>A Study In Vermillion</td> <td>\$ 120</td> <td colspan="3"></td></tr> <tr> <td colspan="3">675997f5221c9</td><td>m@gmail.com</td><td>2024-12-11 21:47:33</td><td>\$ 120</td><td colspan="2"></td></tr> <tr> <th>Item ID</th> <th>Item</th> <th>Price</th> <td colspan="3" style="text-align: right;">Update Status: <input type="button" value="Pending"/> <input type="button" value="Submit"/></td><td colspan="2"></td></tr> <tr> <td>23</td> <td>A Study In Vermillion</td> <td>\$ 120</td> <td colspan="3" rowspan="3"></td><td colspan="2" rowspan="3"></td></tr> </tbody> </table>							Order Number			User	Order Time	Total	67596023e46aa			p@gmail.com	2024-12-11 17:49:23	\$ 165	Item ID	Item	Price	Update Status: <input type="button" value="Pending"/> <input type="button" value="Submit"/>			20	Useful Inkjar	\$ 45				23	A Study In Vermillion	\$ 120				675997f5221c9			m@gmail.com	2024-12-11 21:47:33	\$ 120			Item ID	Item	Price	Update Status: <input type="button" value="Pending"/> <input type="button" value="Submit"/>					23	A Study In Vermillion	\$ 120					
Order Number			User	Order Time	Total																																																							
67596023e46aa			p@gmail.com	2024-12-11 17:49:23	\$ 165																																																							
Item ID	Item	Price	Update Status: <input type="button" value="Pending"/> <input type="button" value="Submit"/>																																																									
20	Useful Inkjar	\$ 45																																																										
23	A Study In Vermillion	\$ 120																																																										
675997f5221c9			m@gmail.com	2024-12-11 21:47:33	\$ 120																																																							
Item ID	Item	Price	Update Status: <input type="button" value="Pending"/> <input type="button" value="Submit"/>																																																									
23	A Study In Vermillion	\$ 120																																																										
Delivering Orders																																																												
<table border="1"> <thead> <tr> <th colspan="3">Order Number</th> <th>User</th> <th>Order Time</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td colspan="3">675962782e6a2</td> <td>l@gmail.com</td> <td>2024-12-11 17:59:20</td> <td>\$ 120</td> </tr> <tr> <th>Item ID</th> <th>Item</th> <th>Price</th> <td colspan="3" style="text-align: right;">Update Status: <input type="button" value="Delivering"/> <input type="button" value="Submit"/></td></tr> <tr> <td>23</td> <td>A Study In Vermillion</td> <td>120</td> <td colspan="3"></td></tr> <tr> <td colspan="3">6759628966289</td><td>l@gmail.com</td><td>2024-12-11 17:59:37</td><td>\$ 300</td><td colspan="2"></td></tr> <tr> <th>Item ID</th> <th>Item</th> <th>Price</th> <td colspan="3" style="text-align: right;">Update Status: <input type="button" value="Delivering"/> <input type="button" value="Submit"/></td><td colspan="2"></td></tr> <tr> <td>2</td> <td>Book Of Herbs</td> <td>300</td> <td colspan="3" rowspan="3"></td><td colspan="2" rowspan="3"></td></tr> </tbody> </table>								Order Number			User	Order Time	Total	675962782e6a2			l@gmail.com	2024-12-11 17:59:20	\$ 120	Item ID	Item	Price	Update Status: <input type="button" value="Delivering"/> <input type="button" value="Submit"/>			23	A Study In Vermillion	120				6759628966289			l@gmail.com	2024-12-11 17:59:37	\$ 300			Item ID	Item	Price	Update Status: <input type="button" value="Delivering"/> <input type="button" value="Submit"/>					2	Book Of Herbs	300										
Order Number			User	Order Time	Total																																																							
675962782e6a2			l@gmail.com	2024-12-11 17:59:20	\$ 120																																																							
Item ID	Item	Price	Update Status: <input type="button" value="Delivering"/> <input type="button" value="Submit"/>																																																									
23	A Study In Vermillion	120																																																										
6759628966289			l@gmail.com	2024-12-11 17:59:37	\$ 300																																																							
Item ID	Item	Price	Update Status: <input type="button" value="Delivering"/> <input type="button" value="Submit"/>																																																									
2	Book Of Herbs	300																																																										
Completed Orders																																																												
<table border="1"> <thead> <tr> <th colspan="2">Order Number</th> <th>User</th> <th>Order Time</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td colspan="2">No Completed Orders</td><td>--</td><td>--</td><td>--</td></tr> </tbody> </table>								Order Number		User	Order Time	Total	No Completed Orders		--	--	--																																											
Order Number		User	Order Time	Total																																																								
No Completed Orders		--	--	--																																																								



FAQ Page:

The screenshot shows the Inkart website's FAQ section. At the top, there is a navigation bar with the Inkart logo, a search bar, and links for Stationery, Books, Login, and Sign-Up. Below the navigation bar, the title "Frequently Asked Questions" is displayed. The FAQ is organized into four main sections, each with a question and an answer:

- What is Inkart?**
- Why can't I buy anything?**

We only allow registered users to shop. Please login to buy our products.
- Do you offer refunds?**

We do not offer refunds. However, please feel free to reach out to our staff using the order inquiry form to discuss the best solution.
- How can I track my order?**

You can track your orders through the [Order History](#) tab.

The screenshot shows the Inkart website's footer section. It features the Inkart logo on the left, followed by social media links for X and YouTube. To the right, there are three columns of links:

- Shop**
 - Products
 - Stationery
 - Books
- User Page**
 - Account
 - Sign-Up
- Contact Us**
 - FAQ
 - Customer Feedback
 - Order Inquiry

A small upward-pointing arrow icon is located in the bottom right corner of the footer area.

Testing

Website Testing

Testing is important as it allows the developer to check if the website functions as expected, thus allowing for refinements to be made to create a better user experience.

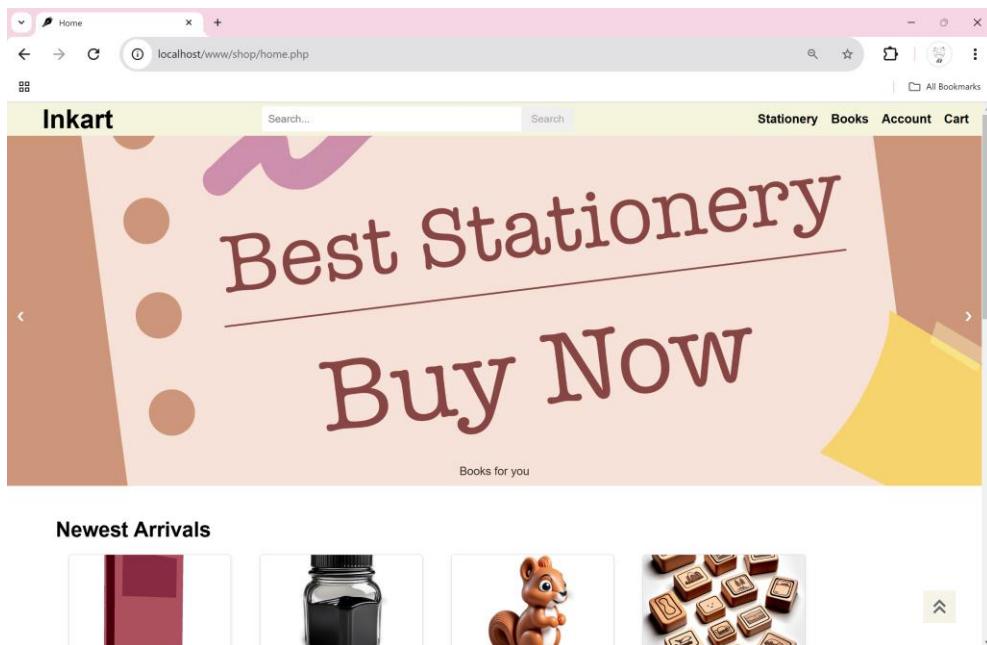
Testing Items	Expected Result	Results (Pass: ✓ / Fail: X)			
		PC		Mobile	
		Chrome	Safari	Phone	iPad
General					
Layout	All Layouts show properly	✓	✓	✓	✓
Navigation Bar	Navigation Bar links will change depending on account	✓	✓	✓	✓/X
	Navigation Bar will compress into a mobile layout when on mobile.				
Search Bar	Users can enter their input and are directed to the search page.	✓	✓	✓	✓
	The results are in order of keyword found in product name, category, then description.				
Back to Top	Sends user back to top when clicked	✓	✓	✓	✓
Footer	Will flatten on PC and fold on mobile devices.	✓	✓	✓	✓
Links	All links can direct to correct pages.	✓	✓	✓	✓
Images	All images can be shown.	✓	✓	✓	✓
Access Permissions	Users without an account cannot access the account pages and will be redirected to login.	✓	✓	✓	✓
	Only the admin account will be able to access the admin pages				
Home Page					
Carousel	Switches slides correctly	✓	✓	✓	✓
	Redirects to Promotion Page				
Newest Products	Newly added products are displayed first.	✓	✓	✓	✓
Popular products	Products with the most reviews are displayed first	✓	✓	✓	✓
Store Information (Embedded video)	It is displayed correctly.	✓	✓	X	X
	It will autoplay.				
	The video will loop.				
	It will be on mute on page reload.				
Register Page					
Data Validation	Presence checks for all fields.	✓	✓	✓	✓
	Uniqueness and format check for email.				
	Length and consistency check for password.				
Registering	User can successfully sign up.	✓	✓	✓	✓
Login Page					
Login Form	Check for email and password	✓	✓	✓	✓
	Successfully login user				

Promotion Page					
Event Banner	Correct event banner is displayed	✓	✓	✓	✓
Products	Only event products are displayed.	✓	✓	✓	✓
Product Catalogue					
Products	Products in categories are correctly displayed.	✓	✓	✓	✓
Product Page					
Product Display	Product displayed is correct.	✓	✓	✓	✓
Buy Button	It will show up as “Add to Cart” to customer accounts.	✓	✓	✓	✓
	It will show up as “Buy Now” to guest users.				
Cart					
Cart Items	Items added to the cart will show up.	✓	✓	✓	✓
	Items can be removed from the cart.				
Checkout	User will be able to buy products successfully.	✓	✓	✓	✓
	The successful order will be assigned a unique order ID.				
Order History					
Orders	Orders are correctly displayed as pending, delivering or completed.	✓	✓	✓	✓
	All past orders are shown.				
Account Page					
Account Information	Account Information is displayed correctly.	✓	✓	✓	✓
Change Information	Information can be changed by user.	✓	✓	✓	✓
	Data validation for changed information.				
Admin Page					
Toggle Button	The button will close and open as intended.	✓	✓	✓	✓
Logout Button	Logs out user as intended.	✓	✓	✓	✓
Add Products					
Add New Item	Basic data validation for item details.	✓	✓	✓	✓
	A photo can be uploaded successfully.				
	The item is successfully entered into the database.				
Delete Products					
Delete Item	Items will be deleted from the database.	✓	✓	✓	✓
Customer Orders					
Orders	Customer are correctly displayed as pending, delivering or completed.	✓	✓	✓	✓
	All past customer orders are shown.				
Update Order Status	Order status can updated to pending, delivering or completed.	✓	✓	✓	✓
FAQ					
Toggle	Answers will show up when question is clicked.	✓	✓	✓	✓

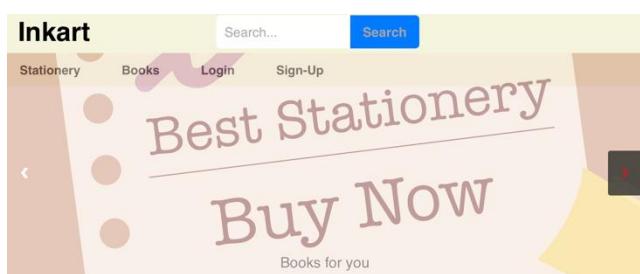
Device Compatibility

Testing was done on PC along with Chrome on iPad and mobile phone. There should be a responsive layout for devices with different screen sizes for better user experience and accessibility.

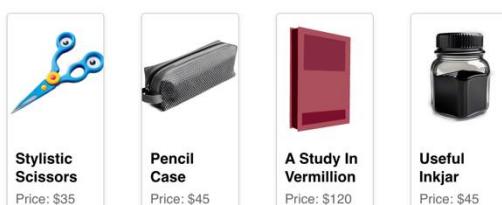
PC:



Tablet:



Newest Arrivals



Popular Products



Mobile:



Newest Arrivals

A product card for "Stylistic Scissors". It features a blue pair of scissors with cartoonish faces on the blades and a yellow button in the center. The price is listed as \$35.



The functions of the website work across all devices, and the features work well on both PC and tablet.

However, it is found that while the layout is compressed to mobile layout when on mobile device, the navigation bar is not clear, and the search bar is hidden by the content of the website. This design is different from intended, and will largely inconvenience mobile users.

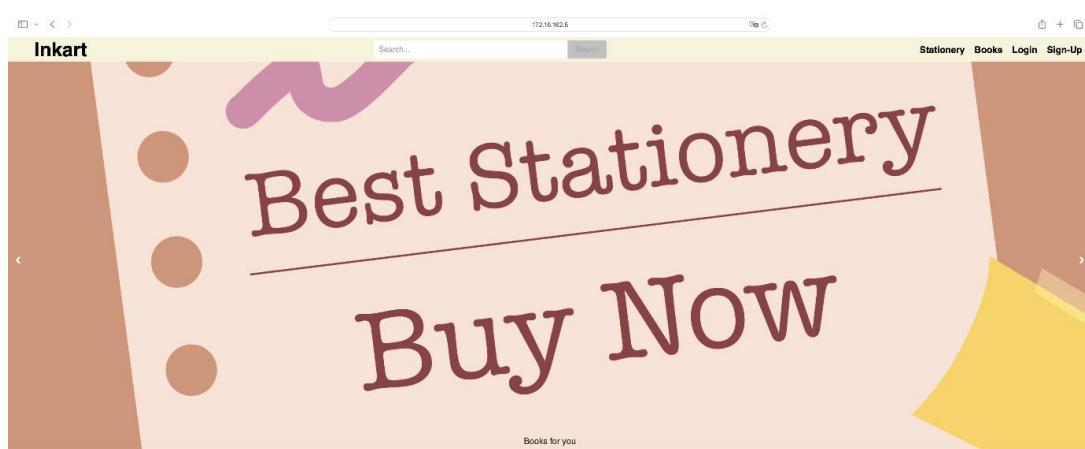
Website Compatibility

The browser market share worldwide includes 66.68% Google Chrome and 18.07% Safari. As they are the most common web browsers, testing will be conducted on these two web browsers.

Google Chrome:



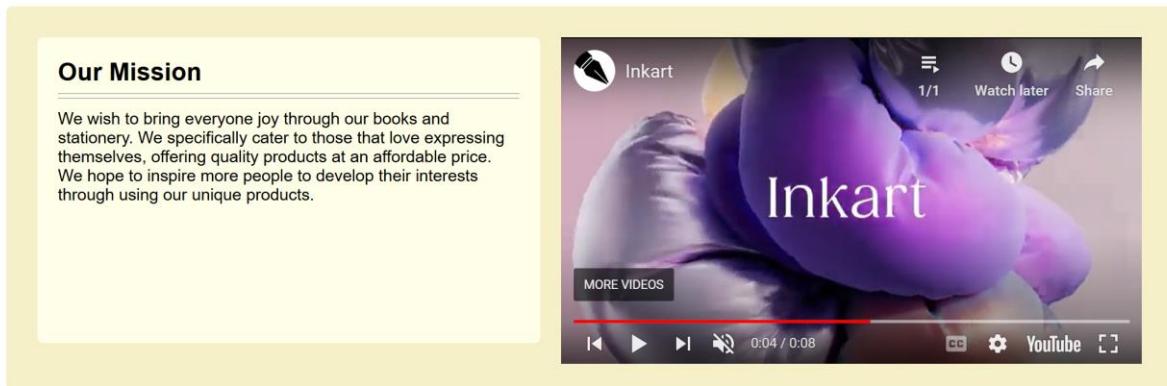
Safari:



The testing on PC showed that the website features function as intended on both Google Chrome and Safari.

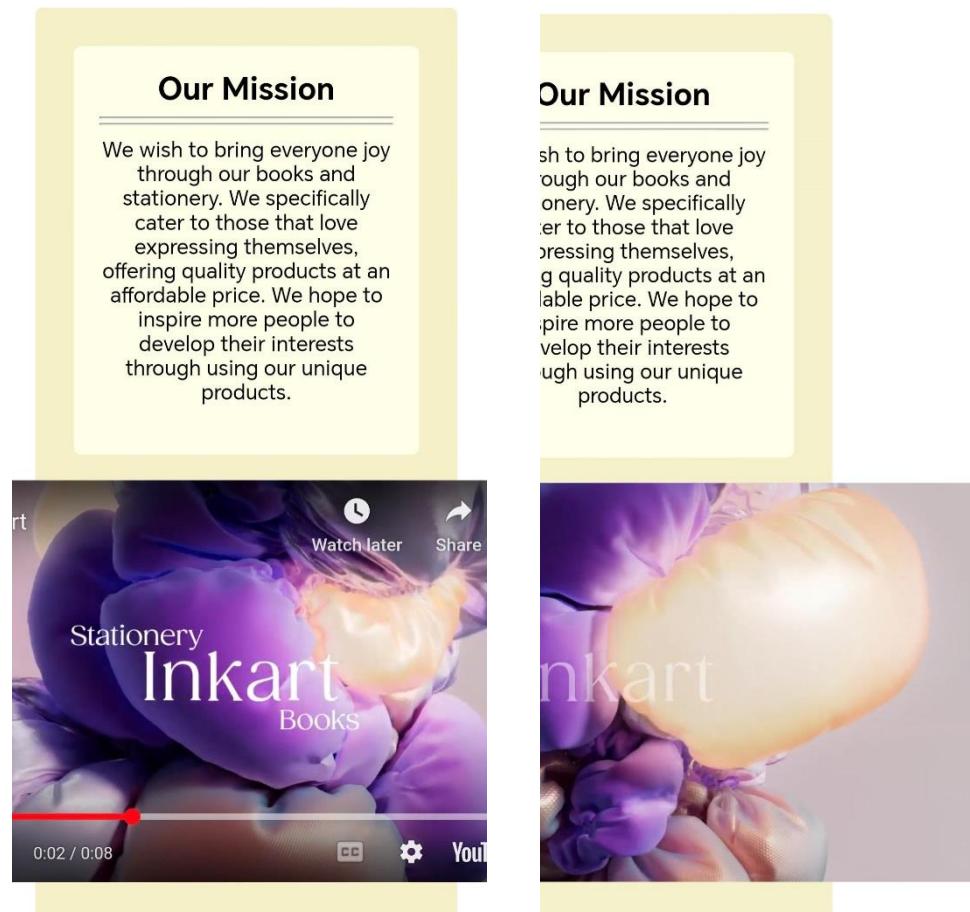
Major Change

On the home page of the website, an embedded YouTube video is included in the store information using iframe.



On PC, the layout is normal. However, it was found that on mobile, the layout is different from expected.

Mobile: (Overflow of the video frame from the border of the section)



It is found that it is due to the embedded video having a fixed height set within, causing it not to adapt to a smaller screen size. This may ruin the user experience as the website layout is difficult to use. It should be fixed as it is part of the Home Page and is often browsed by users.

```
<div class = "shop-intro">
  <div class = "intro-text">
    <h2>Our Mission</h2><hr style="margin-bottom: 3px;"><hr style="margin-bottom: 10px;">
    <p>We wish to bring everyone joy through our books and stationery. We specifically cater to those that love expressing themselves,<br>
    <br>
  </div>
  <iframe width="560" height="315"
    src="https://www.youtube.com/embed/AIYpcjSs3ok?autoplay=1&mute=1&loop=1&playlist=AIYpcjSs3ok"
    frameborder="0" allowfullscreen>
  </iframe>
</div>
</div>
```

}

Embedded Video

To solve the problem and improve the page, the HTML and CSS code is edited. Originally, the store information will change the layout of the text and video to side-by-side in PC to top-and-bottom in tablet and mobile.

```
<iframe id="embedvideoPC"
  width="560" height="315"
  src="https://www.youtube.com/embed/AIYpcjSs3ok?autoplay=1&mute=1&loop=1&playlist=AIYpcjSs3ok"
  frameborder="0" allowfullscreen>
</iframe>
<iframe id="embedvideoMobile"
  width="310" height="175"
  src="https://www.youtube.com/embed/AIYpcjSs3ok?autoplay=1&mute=1&loop=1&playlist=AIYpcjSs3ok"
  frameborder="0" allowfullscreen>
</iframe>
```

A duplicate of the embedded video with a different size is included in the HTML. An id is added to each of the embedded videos to differentiate them in CSS.

Original CSS code

```
iframe {
  max-width: auto;
}

@media (max-width: 768px) {
  .shop-intro {
    flex-direction: column;
    align-items: center;
  }

  .intro-text {
    margin-right: 0;
    text-align: center;
  }
}
```

Changed CSS code

```
#embedvideoMobile{
  display: none !important;
}
@media (max-width: 768px) {
  .shop-intro {
    flex-direction: column;
    align-items: center;
  }

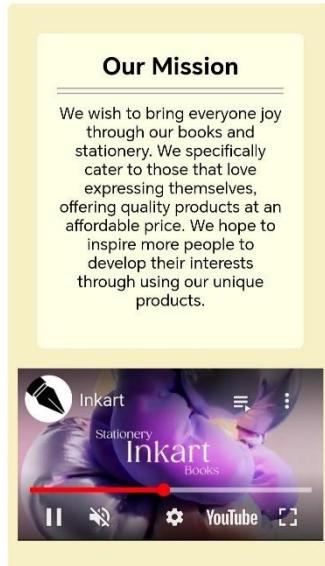
  .intro-text {
    margin-right: 0;
    text-align: center;
  }

  #embedvideoPC{
    display: none !important;
  }

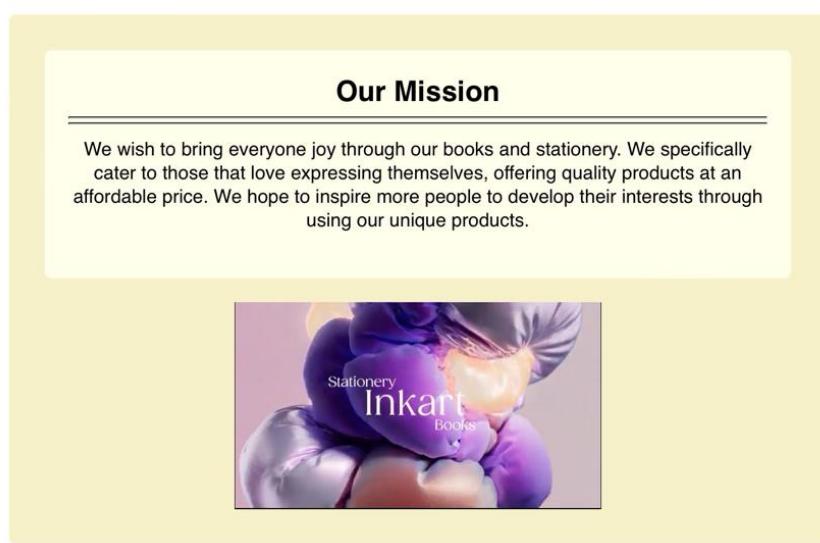
  #embedvideoMobile{
    display: flex !important;
  }
}
```

- The mobile version of the video is set to `display: none` to hide it.
- `!important` rule is used to override all previous styling rules of the element.
- It is set that when the screen size is equal to or less than 768px, aside from the original code for responsive design, it will also hide the PC version of the video and show the mobile version with a smaller size.

Mobile Layout after change



Tablet Layout after change



The issue of the video overflowing on mobile was fixed. However, it was discovered that it affected tablet layout as well.

```
#embedvideoMobile{
  display: none !important;
}

@media (max-width: 768px) {
  .shop-intro {
    flex-direction: column;
    align-items: center;
  }

  .intro-text {
    margin-right: 0;
    text-align: center;
  }
}

@media (max-width: 555px){

  #embedvideoPC{
    display: none !important;
  }

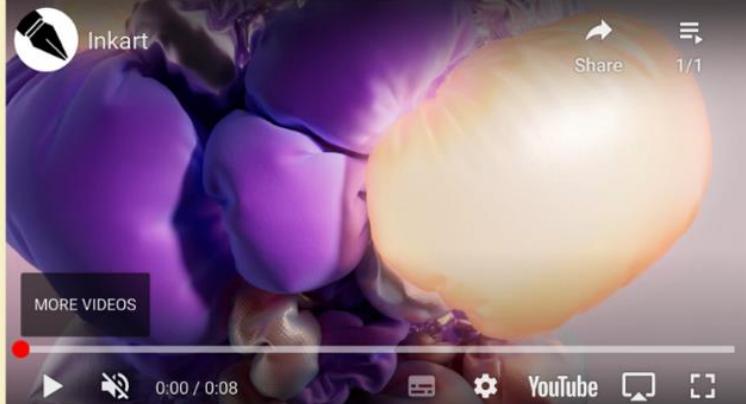
  #embedvideoMobile{
    display: flex !important;
  }
}
```

An additional media rule was inserted to ensure that only the mobile layout will be changed.

Tablet Layout (Horizontal)

Our Mission

We wish to bring everyone joy through our books and stationery. We specifically cater to those that love expressing themselves, offering quality products at an affordable price. We hope to inspire more people to develop their interests through using our unique products.



Tablet Layout (Vertical)

Our Mission

We wish to bring everyone joy through our books and stationery. We specifically cater to those that love expressing themselves, offering quality products at an affordable price. We hope to inspire more people to develop their interests through using our unique products.



Evaluation

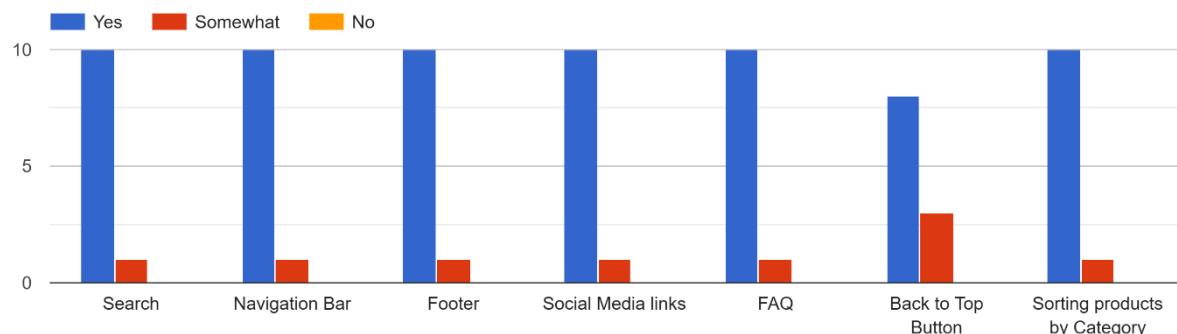
Feedback Collection

In order to evaluate the website, an online questionnaire is designed to collect feedback from users. The questionnaire is made with Google Forms, and includes 4 sections which are about Guest Pages, Customer Pages, Staff Pages and Overall.

Guest Pages

Q1:

Are the Guest Page Functions Useful?

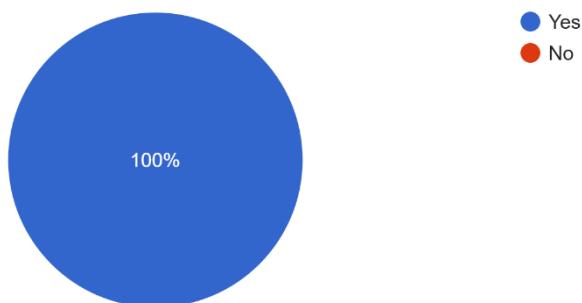


The guest pages are mostly determined to be useful. Some users think that the Back-to-Top button is relatively less useful than the other features of the Guest Pages.

Q2:

Is the process of registering and logging in smooth?

11 responses



The general process of registering and logging in is deemed to be smooth by all users.

Q3:

Is there anything you like / dislike about the guest pages?

11 responses

the banner image is nice

That's fine

Simple, direct and very responsive to users' request.

Extremely easy to navigate. the back to top button could be a little faster

I love FAQ

Design is clean, UI is simple and user friendly.

The layout looks very smooth and user-friendly

N/A

Nothing

Like the review functions

No

From the responses, the guest pages are generally well-perceived by users.

Some features and functions users like of the website in particular:

- Banner Image
- Read Product Reviews
- FAQ
- Simple and user-friendly layout
- Easy navigation

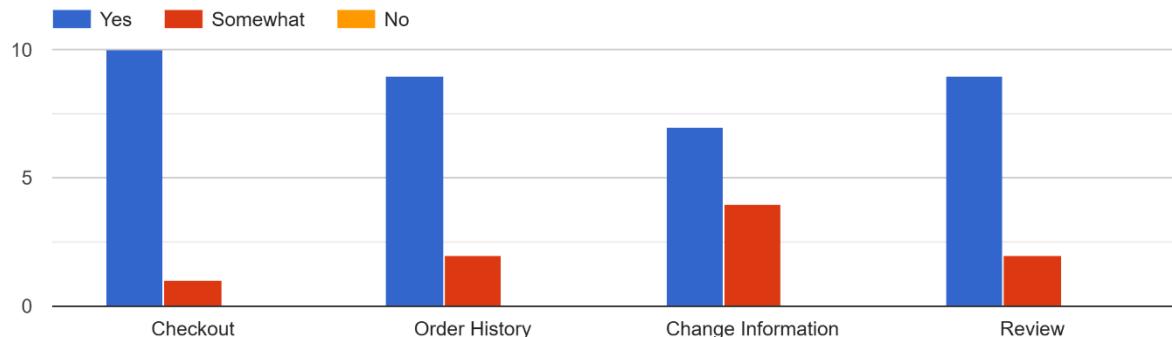
Some features that users think can improve:

- Back-to-Top Button can be faster

Customer Pages

Q4:

Are the customer page functions useful?



The customer page functions are mostly deemed somewhat useful to useful. In particular, the checkout is deemed useful while the change information function is the least useful.

Q5:

Is there anything you like/dislike about the customer pages?

11 responses

no

Order history. The separate between pending orders delivering orders and past orders. The account page, updating account details can be more better

All processes are well organized.

when items are added to cart they could put a red dot at the cart icon and not immediately redirect to my cart.

I love review and layout

Simple design.it looks clean.

No

The ui should be better and items in the order history should be clickable

None

The order tracking page is very clear and organised

I can update password

From the responses, the staff pages are generally well-perceived by users with some functions needing improvement.

Some features and functions users like of the customer pages in particular:

- Reviewing
- Update password
- Order History is clear and organised
- Clean and Simple Layout

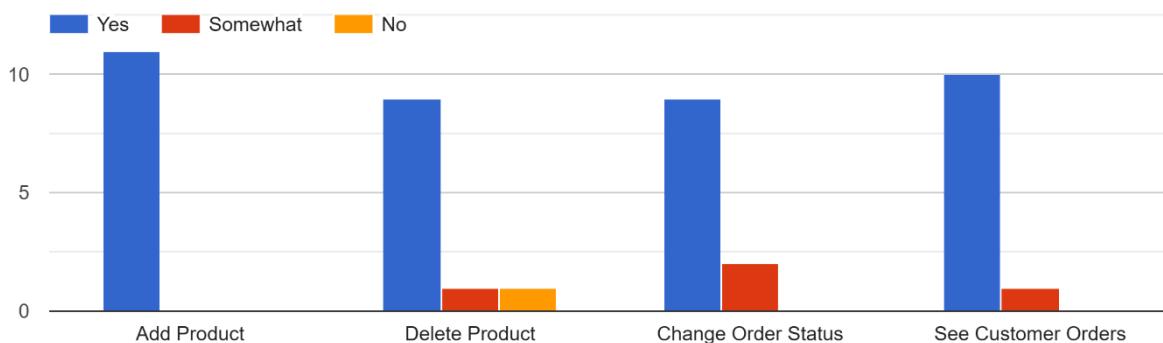
Some features that users think can improve:

- User Interface
- Each order should be clickable in Order History
- Products that are added to Cart should be indicated in the product catalogue
- Account Page
- Updating Account Details

Staff Pages

Q6:

Are the staff page functions useful?



The Add Product function is determined to be useful by all users. However, the Delete Product function is decided to be not useful by some users.

Q7:

Is there anything you like/ dislike about the staff pages?

9 responses

no

The change status function is great.

Well performed and no mess stuff in the screen.

not really

Layout too cool and clean, simple and beautiful

Practical. Easy to navigate. Intuitive user interface

/

The products in viewing customer orders should be clickable

Some more colors

From the responses, the staff pages are generally well-perceived by users with some functions needing improvement.

Some features and functions users like of the staff pages in particular:

- Change Status
- Simple and Clean Layout
- Practical and Intuitive User Interface

Some features that users think can improve:

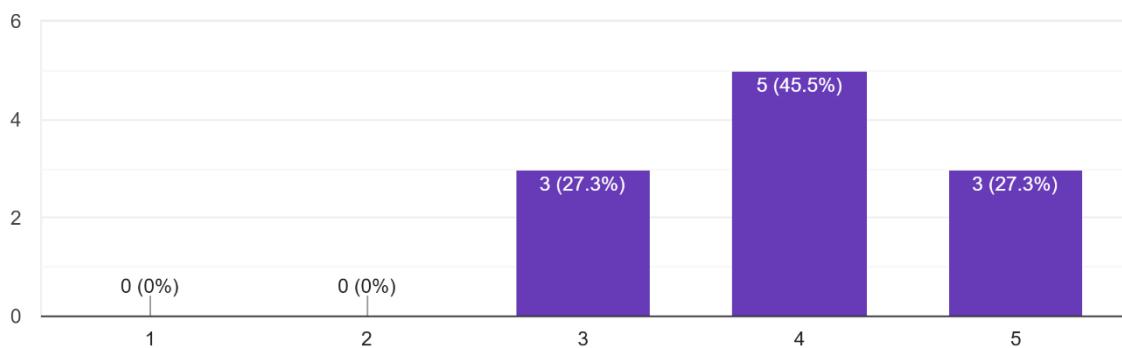
- Customer Orders should be clickable
- More colours in the staff pages

General

Q8:

Do you think the website has achieved accessibility? (etc high contrast colours, flexible according to device)

11 responses

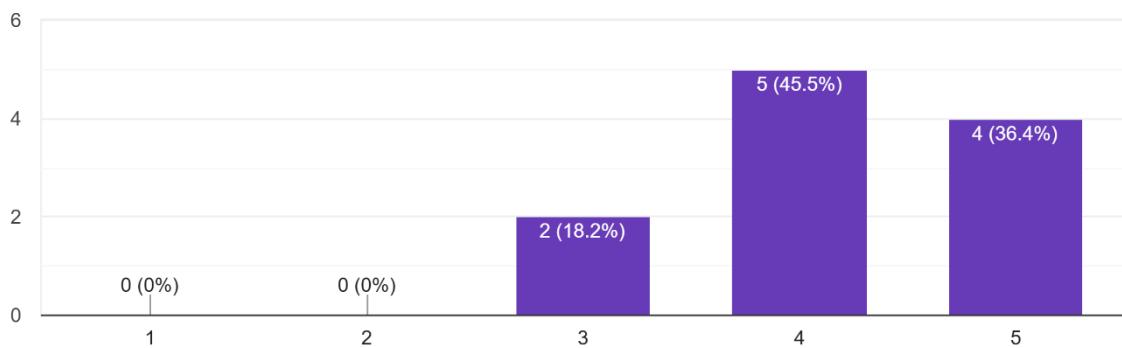


Users generally think that the website does a suitable job at achieving accessibility. However, it can be improved more as around 30% of users think that it is only average in accessibility. This shows that the website can be difficult to use for some users.

Q9:

Do you think the website has achieved audience awareness? (etc cater to user needs, provide different services for different users)

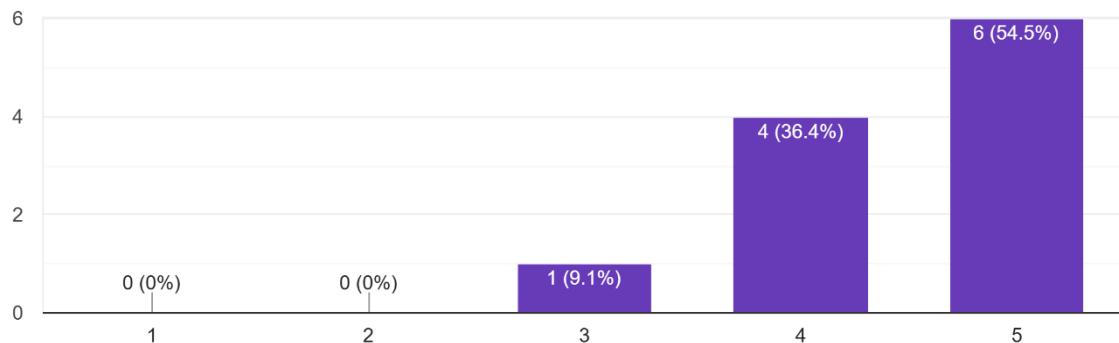
11 responses



Users generally think that the website does a suitable to good job at achieving audience awareness. This shows that the website can cater to the needs of different users.

Q10:

Do you think the website has achieved user-friendliness? (etc clear layout, easy navigation)
11 responses



The website is deemed to have mostly achieved user-friendliness, as more than half of the surveyed users agree that the website has achieved user-friendliness. This shows that the website has both clear layouts and easy navigation.

Q11:

What do you like about the website?

11 responses

looks simple

The linking to YouTube and X

Well design and no messy

it's extremely easy to navigate and has a good harmony of colors and UI design

Layout so simple and clear and beautiful

clean n simple, easy to use

Graphics and layout

You can browse the products based on category

The graphics

It is very clear and organised.

Very big banner

The features and functions that users enjoy about the website are:

- Social Media Links
- Well-designed and simple layout
- Easy navigation
- Banner and graphics
- Filtering function

Q12:

How do you think the website can improve?

11 responses

nothing special

CSS

May add some loyal program for returned customers.

can have a faster back to top button but that's me being picky

More product, the footer need to fixed, need forget password, button not obvious for order and shopping cart, update submit button so many, dark mode, translate, animation banner, no filter for product such as price range,

can include different languages,

Font (too plain)

The layout should be better and the mobile layout should be more mobile friendly

More colors

None

Can sell cow delighted

The features and functions that users think can improve are:

- Faster Back-to-Top Button
- User update information form is confusing
- CSS (More colours, Clearer indication of buttons)
- Larger Variety of Product
- Multimedia elements such as an animated banner
- Extra functions such as loyalty program, forget password, filtering for product price
- Accessibility options such as dark mode, translation

Pros of the website

1. Clear Navigation

The footer and navigation bar are clear to use with links to different websites. This makes it easy for users to navigate the website and locate different pages. The overall web structure is also logical, so users can browse and buy from the website intuitively.

2. Simple to Use

Most of the functions on the website are very simple. It is very intuitive to use the website for users, making it easy to use the website functions.

3. Eye-catching Graphics

The graphics, particularly banner graphics and embedded video is attractive to users. The usage of attractive multimedia elements in the website can enhance the user experience as well as attract the user to further navigate the website.

4. Neat Layout

The layout is neat and simple. As it makes use of white space, distinctive sections, and multigrid layouts, it is easy for a human eye to scan through the website. Users can thus comfortably look through the contents of the website with ease, enhancing their user experience.

Cons of the website

1. Only one instance of a product can be added to the Shopping Cart.

The basic functions of the Shopping do not include adding one product multiple times to the same order. This may cause inconvenience if the customer wishes to buy multiple of the same item as they can only buy using separate orders.

2. Design of the User Interface is plain

While the layout of the website is easy to navigate, the design often makes use of simple HTML design such as `<hr>` (horizontal line without formatting) or pre-set headings such as `<h1>`, `<h2>` etc. This can make the overall CSS styling seem plain to users. The colours used in the website is also simple overall, so it does not stand out much.

3. Accessibility for other devices is lacking

The website is designed with PC in mind first, so the responsive design for mobile is lacking compared to the PC layout. Some items are overflowing while others are not centered on the website, causing the user experience to be uncomfortable when browsing on mobile.

Further Improvements

Here are some ways the website can be further improved.

1. Shopping Cart

The shopping cart can be improved by allowing customers to adjust the amount of items to purchase in their cart. This can be achieved by changing the current use of sessions to using a SQL statement to retrieve and store the cart items in a database. An interactive button can be added to the cart, allowing users to add or decrease the amount of items, which will then be calculated and recorded in the database.

2. User Interface

The user interface can be further improved by making it more interesting for users to browse on the website. More CSS coding can enhance the basic HTML formatting used as well as add more colours to make users more engaged with the website.

3. Mobile Layout

The mobile layout can be refined with further changes made to the CSS. Items should fit comfortably on the screen and not overflow. A hamburger menu can be used on mobile instead of a flat navigation bar to better fit the mobile layout.

4. Multimedia Elements

Some more multimedia elements such as sound for checkout or animation in promotion banner can be added to enhance the attractiveness of the website. Adding more forms of multimedia element can make the website content more engaging and easier to understand.

5. Security

Currently, the data from users and orders of users are stored in the database. While prepared statements are used to prevent SQL injection, the stored passwords can have increased security using the `password_hash()` function to encrypt passwords.

Reference

Coding References:

w3schools Carousel Tutorial

https://www.w3schools.com/howto/howto_js_slideshow.asp

Icons used in website:

Uxwing.com

<https://uxwing.com/>

Google Fonts Icons

<https://fonts.google.com/icons>

Browser Market Share Data:

StatCounter Global Stats

<https://gs.statcounter.com/browser-market-share>

Appendix

Account Information

Admin email: admin
Admin password: 123

Customer email: 1
Customer password: 1

Social Media Links

X (formerly Twitter) Account
<https://x.com/InkartStore>

YouTube Account
<https://youtube.com/@inkart-store-online>

Customer Forms

Customer Feedback Form
<https://forms.gle/FgY8dcZ2pVWtFGBRA>

Order Complaint Form
<https://forms.gle/UN6gWUrK2zSKQLys7>

Evaluation Form

<https://forms.gle/ipVh1WyepYh2bYze9>