

**Informatics Institute of Technology**  
**Department of Computing**

BSc (Hons) Artificial Intelligence and Data Science

**Module: CM1605 Web Technology**

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**Group Coursework Report**

Tutorial Group : Group B

Coursework Group No : 03

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We used consistent sans-serif fonts with fixed sizes for body text and varied sizes for headings, ensuring clarity. The 'lang' attribute "en" aids screen readers. Proper headings, unique page titles, meta keywords, and @media queries optimize navigation and readability.

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### **3. Introduction**

Welcome to CMS Bakery, where we've crafted an interactive and user-friendly web application to cater to the growing demand for premium bakery services. Our intuitive interface and engaging features ensure that every visit is a delightful experience, offering tools to enhance your bakery journey.

Our dedicated team members have contributed significantly to the project:

- ♣ Chanmini Weerakoon\_2410210: Student role 1
  - Presentation Page
  - Sign-up Page
  - Gallery Page
  - Editor's Page
  - XML for Review
- ♣ Mathusha Kannathasan\_2410212: Student role 2
  - Quiz Page
  - Home Page includes Query Form
  - Editor's Page
  - XML for Review
  - Additional Work: Vacancy Form Page  
About CMS  
Order & Delivery Procedures Page  
FAQ Page
- ♣ Shaithra Vilvarashah\_2410211: Student role 3
  - Products Page
  - Product Details Page
  - Cart Page
  - Checkout Page
  - AboutUs Page
  - Editor's Page
  - XML for Review

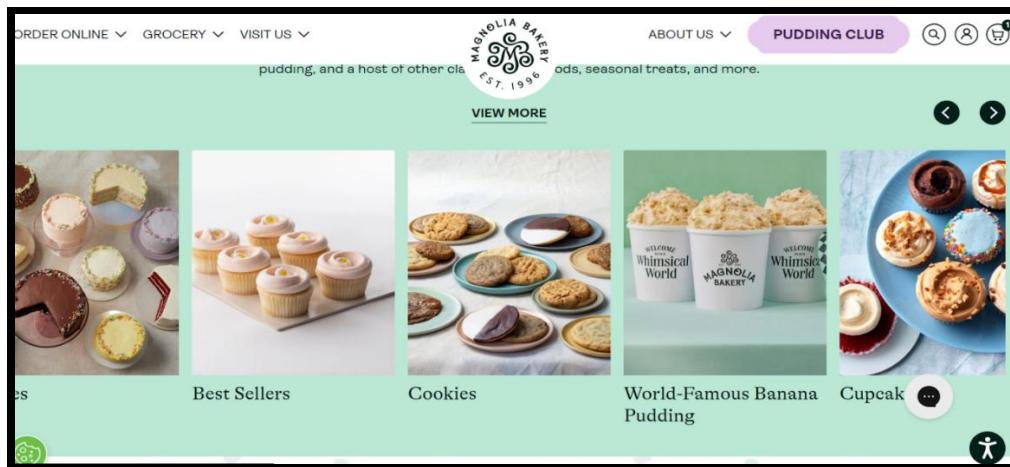
This report provides a detailed description of the front-end design's technical features and offers a critical analysis of our design choices, including color and font, and their impact on user experience.

## **4. Research on existing systems**

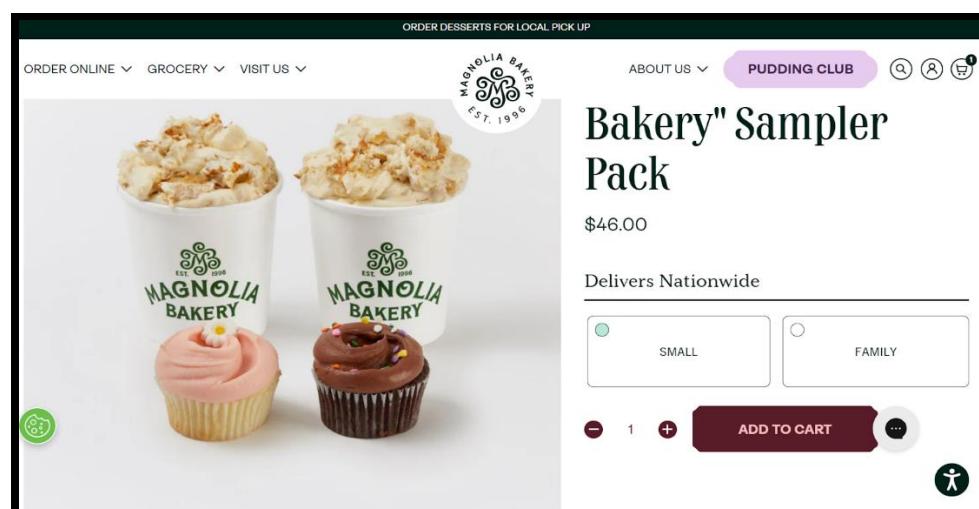
Several popular online bakery web applications, such as **Magnolia Bakery**, **Milk Bar**, and **Carlos Bakery**, offer a variety of features catering to different customer needs. These platforms often include options for nationwide shipping and local pickup, ensuring that customers can access their favorite treats regardless of location.

### **a. Magnolia Bakery**

Highlighting popular and seasonal products attracts customers. Detailed descriptions and allergen info build trust. User-friendly interfaces, secure payments, and various shipping options enhance online bakery customer experience.



*Figure 1: Magnolia Bakery Home page*



*Figure 2: Magnolia Bakery Products*

## b. Milk Bar

Milk Bar leads online bakeries with nationwide shipping, local pickup, popular products, detailed descriptions, allergen info, user-friendly interface, and secure payments, enhancing satisfaction and establishing industry leadership.

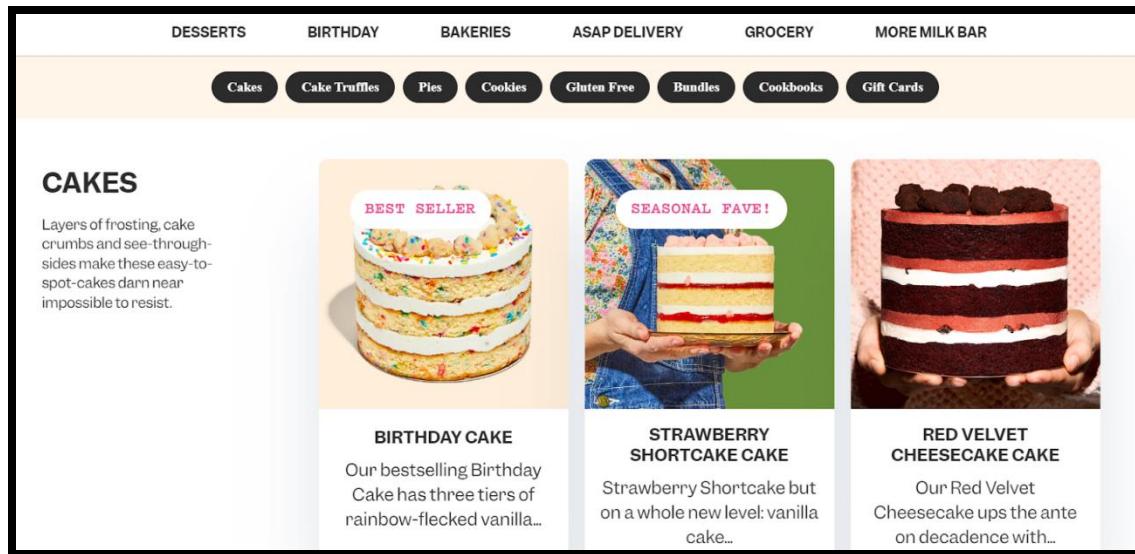


Figure 3: Milk Bar Home page

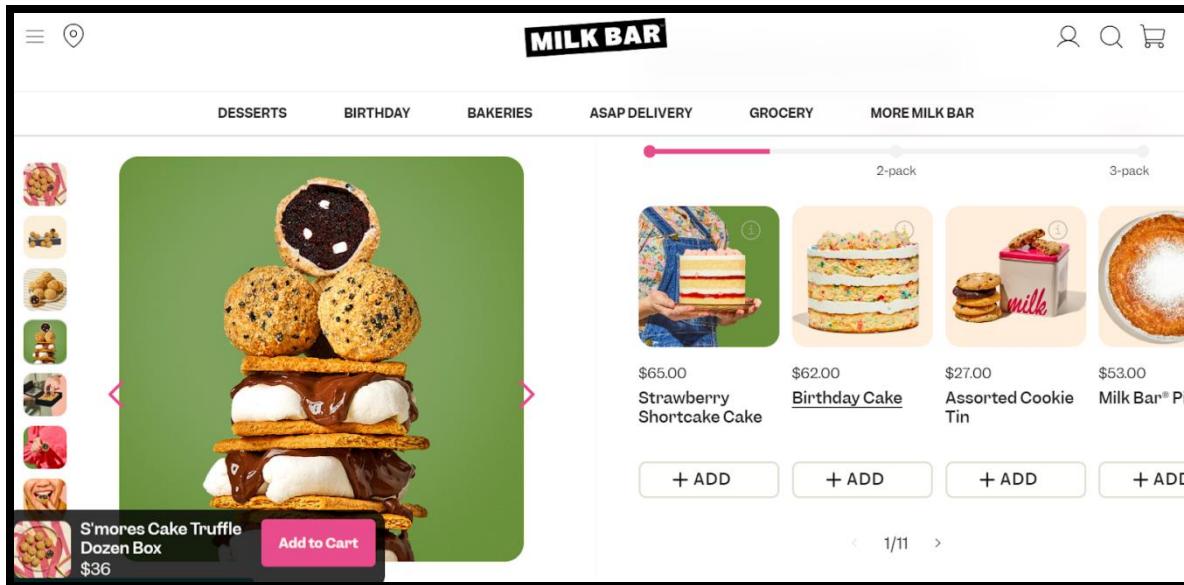


Figure 4: Milk Bar Products

## **5. Technical Discussion**

### **a. Student 1**

#### **Presentation page**

```
<body>
  <div class="container">
    <div class="box box1">
      <h1>WELCOME TO CMS!</h1>
    </div>
    <div class="box">
      <p>Meet the Team:</p>
      <div class="group-members">
        <p>Mathusha Kannathasan</p>
        <p>Shaithra Vilvarasha</p>
        <p>Chanmini Weerakoon</p>
      </div>
    </div>
  </div>

  <footer class="footer">
    © 2024 CMS Bakery. All rights reserved.
    Edited By: <a href="CMSCHANMINI.html">Chanmini_2410210_20232676</a>
  </footer>
</body>
```

*Figure 5: Presentation Html*

This HTML code builds a web page layout containing a welcome header and a section naming the team members.

```
<style>
  * {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
  }

  body {
    font-family: Georgia, 'Times New Roman', Times, serif;
    background-image: url("presentation2.jpg");
    background-size: cover;
    background-position: center;
    background-attachment: fixed;
    min-height: 100vh;
    display: flex;
    flex-direction: column;
    justify-content: space-between;
    color: white;
  }

  .container {
    flex-grow: 1;
    display: flex;
    flex-direction: column;
    justify-content: center;
    align-items: center;
    padding: 20px;
  }
</style>
```

*Figure 6: Presentation css1*

```
.box {
  max-width: 100%;
  width: 90%;
  padding: 30px;
  margin: 20px 0;
  border-radius: 20px;
  background-color: rgba(0, 0, 0, 0.6);
  backdrop-filter: blur(10px);
  box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
  transition: transform 0.3s ease;
}

.box:hover {
  transform: translateY(-5px);
}

.box1 h1 {
  font-size: 2.5rem;
  margin-bottom: 20px;
  text-shadow: 2px 2px 4px rgba(0, 0, 0, 0.5);
}

.box p {
  font-size: 1.2rem;
  margin-bottom: 15px;
}

.group-members {
  font-size: 1.1rem;
}
```

*Figure 7: Presentation css2*

```

.group-members p {
    margin: 5px 0;
}

.footer {
    background-color: #rgba(0, 0, 0, 0.8);
    color: white;
    text-align: center;
    padding: 10px;
    width: 100%;
    font-size: 0.9rem;
}

.footer a {
    color: #ffd700;
    text-decoration: none;
    transition: color 0.3s ease;
}

.footer a:hover {
    color: #ffff00;
}

@media (max-width: 600px) {
    .box1 h1 {
        font-size: 2rem;
    }

    .box p, .group-members {
        font-size: 1rem;
    }
}

```

*Figure 8: Presentation css3*

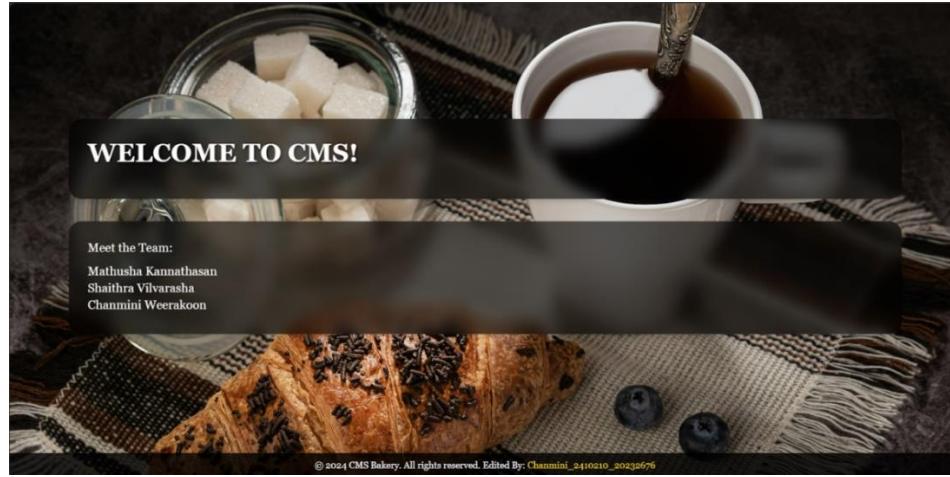
This webpage's responsive layout, full-screen backdrop, centered content, and interactive components like box hover effects are all styled with this CSS code. Finally, as the requirement, add 5 seconds gap to show the Home Page has done by JavaScript validation.

```

<script>
    setTimeout(() => {
        window.location.href = 'CMSHOME.html';
    }, 5000);
</script>

```

*Figure 9: Presentation JS*



*Figure 10: Presentation page*

## Sign Up Form

```

1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <meta name="viewport" content="width=device-width, initial-scale=1.0">
6     <title>Sign Up | CMS</title>
7     <link rel="stylesheet" href="signup.css">
8     <script src="TEXTOPARAMETRIZATION.js" defer></script>
9     <link rel="icon" type="image/x-icon" href="logo.png">
10   </head>
11   <body>
12     <video class="video-background" autoplay loop muted>
13       <source src="Signup_bg.mp4" type="video/mp4">
14       <track kind="captions" src="video-captions.vtt" srclang="en" label="English">
15     </video>
16     <div class="content-wrapper">
17       <div class="wrapper">
18         <form actions="" id="signupForm" method="post">
19           <h3>Sign Up</h3>
20           <div class="input-box">
21             <label for="Name">Name</label>
22             <input type="text" id="Name" name="name">
23           </div>
24           <div class="input-box">
25             <label for="Age">Age</label>
26             <input type="number" id="Age" name="age">
27           </div>
28           <div class="input-box">
29             <label for="Gender">Gender</label>
30             <select id="Gender" name="gender">
31               <option value="" disabled selected>Select gender</option>
32               <option value="Male">Male</option>
33               <option value="Female">Female</option>
34               <option value="Rather Not Say">Rather not say</option>
35             </select>
36           </div>
37         </form>
38       </div>
39     </div>
40   </body>
41 </html>

```

*Figure 11: Sign Up Html1*

```

</div>
<div class="input-box">
  <label for="Occupation">Occupation</label>
  <input type="text" id="Occupation" name="occupation">
</div>
<div class="input-box">
  <label for="Email">Email</label>
  <input type="email" id="Email" name="Email">
</div>
<div class="input-box">
  <label for="password">Password</label>
  <input type="password" id="password" name="password">
</div>
<div class="input-box">
  <label for="Choice">Category of choice </label>
  <select id="Choice" name="choice">
    <option value="" disabled selected>Select Choice</option>
    <option value="Cakes">Cakes</option>
    <option value="Cupcakes">Cupcakes</option>
    <option value="Beverages">Beverages</option>
    <option value="Donuts">Donuts</option>
    <option value="Macaroons">Macaroons</option>
    <option value="Brownies">Brownies</option>
  </select>
</div>
<button type="submit" class="wrapper button" id="button" name="button">Sign Up</button>
<button type="reset" class="wrapper Rbutton" name="Rbutton">Reset</button>
<div class="login">
  <p>Already have an account? <a href="#" aria-label="Log in to your account">Log in</a></p>

```

*Figure 12: Sign Up Html2*

```

    </div>
  </form>
</div>
<div class="UserMessage" id="UserMessage" role="alert" aria-live="assertive" style="display: none;">
  Thank you for signing up! The recommended results will be shown shortly.
</div>
<div>
  <div>&copy; 2024 CMS Bakery. All rights reserved.</div>
  <p>Edited By: <a href="CMSCHANMINI.html">chanmini_2410210_20232676</a></p>
</div>
<script src="signUp.js"></script>
</body>
</html>

```

*Figure 13: Sign Up Html3*

The form collects user details with fields for name, age, gender, occupation, email, and password, including submit and reset buttons and a login link.

```

* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}

body {
  display: flex;
  flex-direction: column;
  min-height: 100vh;
  font-family: Candara, serif;
  background: no-repeat;
  background-size: cover;
  background-position: center;
  color: #f3e5e5;
}

.video-background {
  position: fixed;
  top: 0;
  left: 0;
  width: 100%;
  height: 100%;
  object-fit: cover;
  z-index: -1;
}

.content-wrapper {
  flex: 1;
  display: flex;
  flex-direction: column;
  justify-content: center;
  align-items: center;
  padding: 20px;
}

```

```

.wrapper {
  width: 600px;
  background: #rgba(0, 0, 0, 0.7);
  border-radius: 40px;
  padding: 30px 20px;
  border: solid #rgba(255,255,255,.2);
  backdrop-filter: blur(30px);
  margin-bottom: 20px;
}

.wrapper h1 {
  font-size: 40px;
  text-align: center;
  color: #b0acac;
  padding: 20px 45px 20px 30px;
}

.input-box {
  margin-bottom: 20px;
}

.input-box label {
  display: block;
  margin-bottom: 5px;
  color: #f3e5e5;
}

```

*Figure 14: Sign Up css1*

*Figure 15: Sign Up css2*

```

.input-box input,
.input-box select {
    width: 100%;
    height: 40px;
    background: transparent;
    border: 1px solid #rgba(158, 143, 143, 0.2);
    border-radius: 30px;
    font-size: 16px;
    color: #d6d4d4;
    padding: 0 15px;
}

.input-box input:focus,
.input-box select:focus {
    outline: none;
    border-color: #3970f0;
}

.input-box select {
    appearance: none;
    background-image: url('data:image/svg+xml;utf8,<svg fill="#f3e5e5" height="24" viewBox="0 0 24 24" width="24" xmlns="http://www.w3.org/2000/svg"><path d="M7 10l5 5
}

```

*Figure 16: Sign Up css3*

```

.wrapper .button,
.wrapper .Rbutton {
    width: 100%;
    padding: 10px 20px;
    border: none;
    outline: none;
    margin: 10px 0;
    border-radius: 60px;
    cursor: pointer;
    text-align: center;
    font-size: 16px;
    color: #dddddd;
    transition-duration: 0.4s;
}

.wrapper .button {
    background: #041231;
}

.wrapper .Rbutton {
    background: #350707;
}

button:hover {
    opacity: 0.8;
}

.wrapper .Login {
    font-size: 14.5px;
    text-align: center;
    margin-top: 20px;
}

```

```

.Login p a {
    color: #3970f0;
    text-decoration: none;
    font-weight: 600;
}

.Login p a:hover {
    text-decoration: underline;
}

.UserMessage {
    color: white;
    font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
    font-size: 30px;
    text-align: center;
    background: #rgba(0, 0, 0, 0.7);
    padding: 20px;
    border-radius: 10px;
    margin-top: 20px;
}

.footer {
    background-color: #rgba(0, 0, 0, 0.7);
    text-align: center;
    padding: 10px;
    width: 100%;
    color: #f3e5e5;
}

.footer a {
    color: #3970f0;
    text-decoration: none;
}

```

*Figure 17: Sign Up css4*

*Figure 18: Sign Up css5*

```

.footer a:hover {
    text-decoration: underline;
}

.error {
    border-color: #ff0000 !important;
}

```

*Figure 19: Sign Up css6*

```

document.addEventListener('DOMContentLoaded', function () {
  const form = document.getElementById('signupForm');
  const userMessage = document.getElementById('UserMessage');
  const inputs = form.querySelectorAll('input, select');

  // Function to validate email
  function isValidEmail(email) {
    const emailRegex = /^[^@\s]+@[^\s]+\.[^\s]+$/;
    return emailRegex.test(email);
  }

  // Function to validate password strength
  function isStrongPassword(password) {
    return password.length >= 8 && /[A-Z]/.test(password) && /[a-z]/.test(password) && /[0-9]/.test(password);
  }

  form.addEventListener('submit', function (event) {
    event.preventDefault();

    let isValid = true;

    inputs.forEach(function (input) {
      if (!input.value.trim()) {
        isValid = false;
        input.classList.add('error');
        input.setAttribute('aria-invalid', 'true');
      } else {
        input.classList.remove('error');
        input.removeAttribute('aria-invalid');
      }
    });

    // Specific validation for email and password
    if (input.type === 'email' && !isValidEmail(input.value)) {
      isValid = false;
      input.classList.add('error');
    }
  });
}

```

*Figure 20: Sign Up JS1*

```

        input.setAttribute('aria-invalid', 'true');
    }
    if (input.type === 'password' && !isstrongPassword(input.value)) {
        isValid = false;
        input.classList.add('error');
        input.setAttribute('aria-invalid', 'true');
    }
});

if (isValid) {
    userMessage.style.display = 'block';
    userMessage.textContent = 'Thank you for signing up! The recommended results will be shown shortly.';

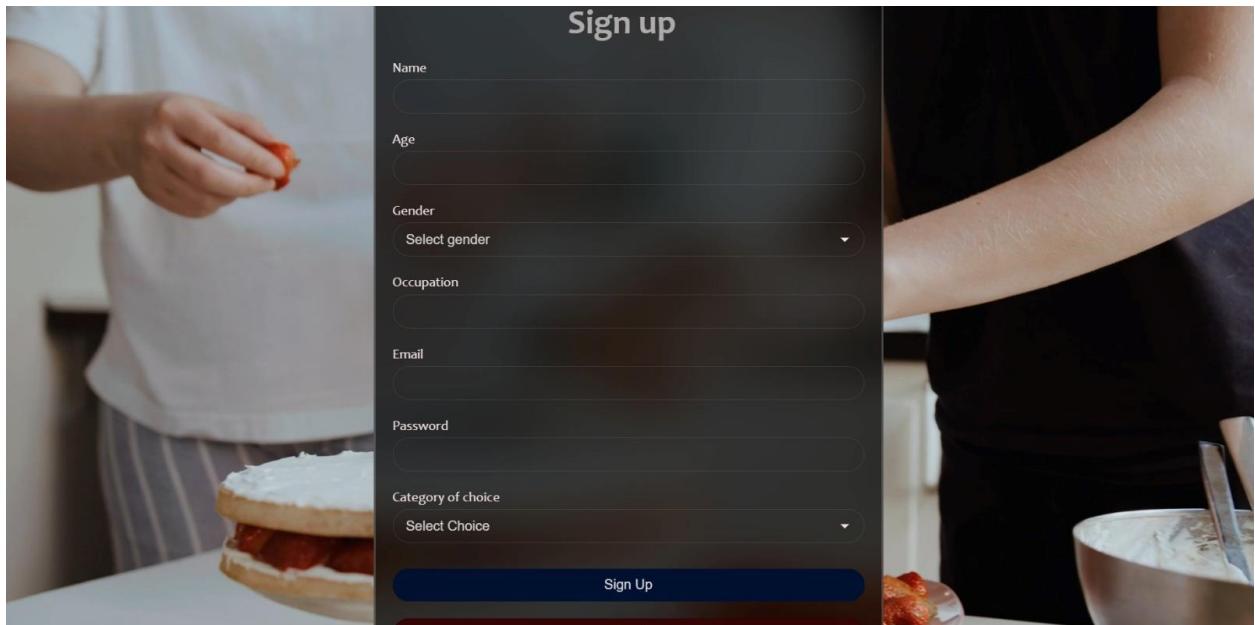
    setTimeout(function () {
        userMessage.style.display = 'none';
        form.submit();
    }, 2000);
} else {
    alert('Please fill in all fields correctly.');
}

// Add focus and blur event listeners for better keyboard navigation
inputs.forEach(input => {
    input.addEventListener('focus', function() {
        this.style.boxShadow = '0 0 5px #3970f0';
    });
    input.addEventListener('blur', function() {
        this.style.boxShadow = 'none';
    });
});
}
);

```

*Figure 21: Sign Up JS2*

JavaScript verifies all fields; it also displays a message, and improves user experience by adding focus indicators.



*Figure 22: Sign Up page*

## Gallery page

```
<div class="container_1"></div>
<div class="container_2"></div>
```

Figure 23: Gallery page Html

On the gallery page, the container\_1, and container\_2 div arrange various content kinds to improve management and differentiation.

```
body {
    font-family: Candara, serif;
}

.container_1 {
    display: flex;
    width: 100%;
    margin-top: 140px;
    box-sizing: border-box;
    height: 80vh;
}
    position: center;
}

.container_2 {
    display: flex;
    width: 100%;
    margin-top: 50px ;
    margin-bottom: 50px;
    border-color: ■rgb(199, 188, 140);
    box-sizing: border-box;
    height: 80vh;
}
    position: relative;
}
```

Figure 24: Gallery page css1

```

.box {
    flex: 1;
    overflow: hidden;
    transition: .5s;
    margin: 0 0%;
    box-shadow: 0 20px 30px □rgba(0,0,0,.1);
    position: relative;
    background-color: white(167, 136, 94);
}

.box > img {
    width: 100%;
    height: calc(100% - 10vh);
    object-fit: cover;
    transition: .5s;
}

.box > span {
    font-size: 3.8vh;
    display: block;
    text-align: center;
    height: 10vh;
    line-height: 2.6;
}

.box:hover { flex: 1 1 50%; }

.box:hover > img {
    width: 100%;
    height: 100%;
}

.hvr {
    position: absolute;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);
    background-color: ■rgba(255, 255, 255, 0.8);
    padding: 20px;
    border-radius: 10px;
    text-align: center;
    transition: opacity 0.5s;
    opacity: 0;
}

.box:hover .hvr {
    opacity: 1;
}

.box {
    flex: 1;
    overflow: hidden;
    transition: .5s;
    margin: 0 2%;
    box-shadow: 0 20px 30px □rgba(0,0,0,.1);
    position: relative;
}

.box > img {
    width: 200%;
    height: calc(100% - 10vh);
    object-fit: cover;
    transition: .5s;
}

```

Figure 25: Gallery page css2

Figure 26: Gallery page css3

```

.box > span {
    font-size: 3.8vh;
    display: block;
    text-align: center;
    height: 10vh;
    line-height: 2.6;
}

.box:hover { flex: 1 1 50%; }

.box:hover > img {
    width: 100%;
    height: 100%;
}

.hvr {
    position: absolute;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);
    background-color: ■rgba(255, 255, 255, 0.8);
    padding: 20px;
    border-radius: 10px;
    text-align: center;
    transition: opacity 0.5s;
    opacity: 0;
}

.box:hover .hvr {
    opacity: 1;
}

```

Figure 27: Gallery page css4

For a unified, interactive experience, centered text overlays are revealed when “. Box” elements expand on hover.

```
window.onload = function() {
    let testimonials_1 = [
        { image: "gal-1.jpg", title: "LIFE", name: "No one can understand the truth until he drinks of coffee's frothy goodness.", text: "Sheik Abd-al-Kabir" },
        { image: "gal-2.jpg", title: "IS", name: "If it wasn't for coffee, I'd have no discernible personality at all.", text: "David Letterman" },
        { image: "gal-3.jpg", title: "TOO", name: "Spread your wings and enjoy your failures", text: "Themiya Jayaratne" },
        { image: "gal-4.jpg", title: "SHORT", name: "Every layer speaks buttery volumes.", text: "" }
    ];

    let testimonials_2 = [
        { image: "gal-5.jpg", title: "TO", name: "Even bad coffee is better than no coffee at all.", text: "David Lynch" },
        { image: "gal-6.jpg", title: "DRINK", name: "Revitalize your senses, one sip at a time", text: "" },
        { image: "gal-7.jpg", title: "BAD", name: "Coffee is a language in itself.", text: "Jackie Chan" },
        { image: "gal-8.jpg", title: "COFFEE", name: "Adventure in life is good. Consistency in coffee even better.", text: "Justina Headley" }
    ];

    let container_1 = document.querySelector('.container_1');
    let container_2 = document.querySelector('.container_2');

    testimonials_1.forEach(function(testimonial) {
        const box = createTestimonialBox1(testimonial);
        container_1.appendChild(box);
    });

    testimonials_2.forEach(function(testimonial) {
        const box = createTestimonialBox2(testimonial);
        container_2.appendChild(box);
    });

    function createTestimonialBox1(testimonial) {
        const box = document.createElement('div');
        box.classList.add('box');

        const image = document.createElement('img');
        image.src = testimonial.image;
        image.alt = testimonial.gal;

        const span = document.createElement('span');
        span.textContent = testimonial.title;

        const hvrDiv = document.createElement('div');
        hvrDiv.classList.add('hvr');

        const h1 = document.createElement('h1');
        h1.textContent = testimonial.name;

        const p = document.createElement('p');
        p.textContent = testimonial.text;

        hvrDiv.appendChild(h1);
        hvrDiv.appendChild(p);

        box.appendChild(image);
        box.appendChild(span);
        box.appendChild(hvrDiv);

        return box;
    }

    function createTestimonialBox2(testimonial) {
        const box = document.createElement('div');
        box.classList.add('box');

        const image = document.createElement('img');
        image.src = testimonial.image;
        image.alt = testimonial.gal;

        const span = document.createElement('span');
        span.textContent = testimonial.title;
```

*Figure 28: Gallery page JS1*

```
const span = document.createElement('span');
span.textContent = testimonial.title;

const hvrDiv = document.createElement('div');
hvrDiv.classList.add('hvr');

const h1 = document.createElement('h1');
h1.textContent = testimonial.name;

const p = document.createElement('p');
p.textContent = testimonial.text;

hvrDiv.appendChild(h1);
hvrDiv.appendChild(p);

box.appendChild(image);
box.appendChild(span);
box.appendChild(hvrDiv);

return box;
}

function createTestimonialBox2(testimonial) {
    const box = document.createElement('div');
    box.classList.add('box');

    const image = document.createElement('img');
    image.src = testimonial.image;
    image.alt = testimonial.gal;

    const span = document.createElement('span');
    span.textContent = testimonial.title;
```

*Figure 29: Gallery page JS2*

```

const hvrDiv = document.createElement('div');
hvrDiv.classList.add('hvr');

const h1 = document.createElement('h1');
h1.textContent = testimonial.name;

const p = document.createElement('p');
p.textContent = testimonial.text;

hvrDiv.appendChild(h1);
hvrDiv.appendChild(p);

box.appendChild(span);
box.appendChild(image);
box.appendChild(hvrDiv);

return box;
}

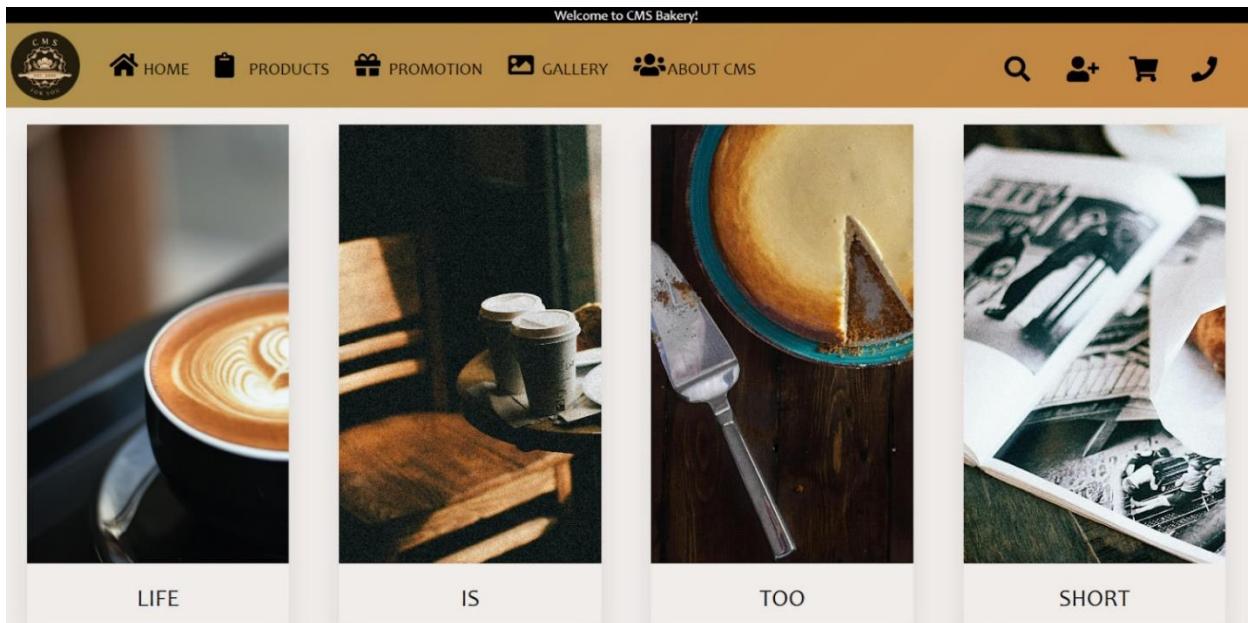
};

}

```

*Figure 30: Gallery page JS3*

Upon window load, the script dynamically generates testimonial boxes for `container\_1` and `container\_2`. Testimonials are inserted into each container after being taken from arrays. The `createTestimonialBox1` and `createTestimonialBox2` functions ensure that testimonials are properly arranged by adding an overlay, name, text, image, and title.



*Figure 31: Gallery page*

## b. Student 2

### Home page

The Home page utilizes HTML for layout with navigation, main content, and footer sections, complemented by CSS for visual design. JavaScript enhances user experience through dynamic content updates and client-side validation.

```
// Wait for the DOM to be fully loaded before running the script
document.addEventListener("DOMContentLoaded", function() {
  const topBarTextElement = document.querySelector("#topBarText");
  const topBarTexts = ["Welcome to CMS Bakery!", "Explore our tasty treats!", "Quality baked goods for you", "Visit us for fresh delights!"];
  let topBarIndex = 0;
  // Function to change the top bar text, background image, and animated text
  function changeTopBarTextAndImage() {
    // Change top bar text
    topBarTextElement.textContent = topBarTexts[topBarIndex];
    topBarIndex = (topBarIndex + 1) % topBarTexts.length;
    setTimeout(changeTopBarTextAndImage, 10000); // Repeat every 10 seconds
  }
  // Initial setup to start the animation cycle
  changeTopBarTextAndImage();
});
```

Figure 32: Home page JS1

### Quiz page

The Quiz functionality relies on HTML for structuring the interface and JavaScript for interactivity, handling question rendering, input validation, and scoring. Custom modal dialogs or alerts provide feedback and results, utilizing DOM manipulation.

```
// Function to show the quiz pop-up after 30 seconds
function showQuizPopup() {
  setTimeout(function() {
    // Show the quiz pop-up modal
    $('#quizPopup').fadeIn();
  }, 30000); // 30 seconds delay
}

// Call the function to show the quiz pop-up after 30 seconds
showQuizPopup();

// Close the quiz pop-up when clicking the close button
$('.close').click(function() {
  $('#quizPopup').fadeOut();
});

// Handle the quiz button click event
$('#quizButton').click(function() {
  // Redirect or handle the quiz start action here
  window.location.href = 'CMSDISCOUNTQUIZ.html'; // Example: Redirect to the quiz page
});
```

Figure 33: QuizPopup JS

```

<!--Quiz results revealing portion-->
<div class="mainContent">
    <h1>Welcome to Our Quiz!</h1>
    <div id="quiz-results"></div>
</div>

```

*Figure 34: QuizPage Html*

```

// Array containing quiz questions and answers
let quiz = [
    { question: "In which year was CMS Bakery founded? (a) 1995 (b) 2000 (c) 2010 (d) 2015", answer: "b" },
    { question: "Where was the original location of CMS Bakery? (a) Colombo (b) Kandy (c) Galle (d) Jaffna", answer: "a" },
    { question: "What is the primary ingredient in macarons? (a) Flour (b) Almond flour (c) Coconut flour (d) Cornmeal", answer: "b" },
    { question: "Which two flavors are classic choices for macarons at CMS Bakery? (a) Vanilla and Chocolate (b) Strawberry and Lemon (c) Pistachio and Rose (d) Coffee and Caramel", answer: "c" },
    { question: "Which of the following is a popular pastry sold at CMS Bakery? (a) Croissant (b) Bagel (c) Muffin (d) Doughnut", answer: "a" },
    { question: "What is a key feature of CMS Bakery's pastries? (a) They are gluten-free (b) They are made with local ingredients (c) They are vegan (d) They contain no sugar", answer: "b" },
    { question: "Which of these cocktails is a specialty at CMS Bakery? (a) Mojito (b) Margarita (c) Piña Colada (d) Sangria", answer: "d" },
    { question: "What ingredient is commonly used in CMS Bakery's signature cocktail? (a) Rum (b) Whiskey (c) vodka (d) Gin", answer: "a" },
    { question: "What is the most popular cake flavor at CMS Bakery? (a) Vanilla (b) Chocolate (c) Red Velvet (d) Carrot", answer: "b" },
    { question: "Which occasion is CMS Bakery's custom cakes most popular for? (a) Birthdays (b) Weddings (c) Anniversaries (d) Graduation", answer: "b" },
    { question: "What frosting flavor is a customer favorite for cupcakes at CMS Bakery? (a) Chocolate ganache (b) Buttercream (c) Cream cheese (d) Whipped cream", answer: "b" },
    { question: "Which unique cupcake flavor can you find at CMS Bakery? (a) Matcha (b) Blueberry (c) Lemon poppy seed (d) Pumpkin spice", answer: "a" },
    { question: "What type of brownie is CMS Bakery famous for? (a) Fudge brownie (b) Blondie (c) Nut brownie (d) Gluten-free brownie", answer: "a" },
    { question: "Which additional ingredient does CMS Bakery often use in their brownies? (a) Walnuts (b) Almonds (c) Hazelnuts (d) Pecans", answer: "a" },
    { question: "When did CMS Bakery first open a branch in Sri Lanka? (a) 2005 (b) 2010 (c) 2015 (d) 2020", answer: "c" },
    { question: "Which city in Sri Lanka is CMS Bakery most popular in? (a) Colombo (b) Kandy (c) Galle (d) Jaffna", answer: "a" },
    { question: "Which product is CMS Bakery known for introducing to the Sri Lankan market? (a) Gluten-free bread (b) Vegan pastries (c) Macarons (d) Artisanal chocolates", answer: "c" },
    { question: "What is CMS Bakery's philosophy when it comes to ingredient sourcing? (a) Only organic ingredients (b) Locally sourced ingredients (c) Imported ingredients (d) Seasonal ingredients", answer: "b" },
    { question: "Which holiday sees the highest sales for CMS Bakery? (a) Christmas (b) New Year (c) Easter (d) Valentine's Day", answer: "a" },
    { question: "What is a unique feature of CMS Bakery's customer service in Sri Lanka? (a) Home delivery (b) Personalized cakes (c) On-site baking classes (d) Loyalty program", answer: "b" }
];
// Initialize the score and an array to track asked questions
let score = 0;
let askedQuestions = [] // Array to track questions that have been asked

```

*Figure 35: Quiz JS1*

```

// Function to get a random question from the quiz
function getRandomQuestion() {
    let index = Math.floor(Math.random() * quiz.length); // Get random index
    let randomQuestion = quiz[index]; // Get random question

    // Ensure the question hasn't been asked before in the current game
    while (askedQuestions.includes(randomQuestion)) {
        index = Math.floor(Math.random() * quiz.length);
        randomQuestion = quiz[index];
    }

    askedQuestions.push(randomQuestion); // Add the question to askedQuestions array
    return randomQuestion;
}

// Function to show the quiz results
function showResults(userName) {
    let resultMessage;
    let color;

    if (score > 0) {
        resultMessage = "Hello " + userName + "! You have earned " + score + " points. Please claim the points in your next purchase.";
        color = "green"; // Positive feedback color
    } else {
        resultMessage = "Hello " + userName + "! You scored " + score + " points. Better luck next time!";
        color = "red"; // Negative feedback color
    }

    // Update the text and color in the HTML element
    let quizResultsElement = document.getElementById('quiz-results');
    quizResultsElement.innerText = resultMessage;
    quizResultsElement.style.color = color;
}

```

*Figure 36: Quiz JS2*

```

// Function to start the quiz
function startQuiz() {
    alert("Welcome to CMS Quiz!"); // Welcome message
    let userName = prompt("Enter your name:"); // Prompt user for their name

    if (userName === null || userName.trim() === "") {
        alert("Please enter a valid name to start the quiz."); // check for valid name
        return;
    }

    askedQuestions = []; // Reset askedQuestions array for a new game
    score = 0; // Reset score for a new game

    alert("Participate in our exciting online quiz where correct answers earn you points towards a discount on your total bill. Each correct answer awards 2 points, with incorrect answers deducting 1 point. Test your knowledge at your convenience and start saving today!");
    alert("Starting the quiz!");

    for (let i = 0; i < 5; i++) { // Asking 5 questions
        let questionObj = getRandomQuestion(); // Get a random question
        let userAnswer = prompt(questionObj.question); // Prompt user for their answer

        if (userAnswer === null) {
            break; // Exit loop if user cancels
        }

        // Ensure the answer is a single character and in uppercase
        userAnswer = userAnswer.trim().toUpperCase();

        // Validate if userAnswer is a valid choice
        if (userAnswer !== 'A' && userAnswer !== 'B' && userAnswer !== 'C' && userAnswer !== 'D') {
            alert("Invalid answer! Please enter a valid choice (a, b, c, d).");
            i--; // Decrement i to ask the same question again
            continue;
        }

        if (userAnswer === questionObj.answer.toUpperCase()) {

```

*Figure 37: Quiz JS3*

```

// Ensure the answer is a single character and in uppercase
userAnswer = userAnswer.trim().toUpperCase();

// Validate if userAnswer is a valid choice
if (userAnswer !== 'A' && userAnswer !== 'B' && userAnswer !== 'C' && userAnswer !== 'D') {
    alert("Invalid answer! Please enter a valid choice (a, b, c, d).");
    i--; // Decrement i to ask the same question again
    continue;
}

if (userAnswer === questionObj.answer.toUpperCase()) {
    score += 2; // Add 2 points for correct answer
} else {
    score -= 1; // Subtract 1 point for wrong answer
}

showResults(userName); // Show the results to the user
}

```

*Figure 38: Quiz JS4*

```

.modal {
    display: none; /* Hidden by default */
    position: fixed; /* Stay in place */
    z-index: 1; /* Sit on top */
    left: 0;
    top: 0;
    width: 100%; /* Full width */
    height: 100%; /* Full height */
    overflow: auto; /* Enable scroll if needed */
    background-color: □rgb(0,0,0);
    background-color: □rgba(0,0,0,0.4); }

/* Modal Content/Box */
.modal-content {
    background: linear-gradient(160deg, □#C68642, □#ae924d);
    margin: 15% auto;
    padding: 20px;
    font-size: 20px;
    border: 1px solid □#888;
    width: 80%; }

.summaryHead {
    font-family: "Papyrus", fantasy;
    color: □black;
    text-decoration: underline;
    font-size: 40px;
    margin-bottom: 10px; }

/* The Close Button */
.close {
    color: □#aaa;
    float: right;
    font-size: 32px;
    font-weight: bold; }

```

*Figure 39: QuizPopup CSS1*

```

.close:hover,
.close:focus {
    color: □black;
    text-decoration: none;
    cursor: pointer; }

#quizButton {
    background-color: □black;
    color: □white;
    padding: 10px 20px;
    border: none;
    cursor: pointer; /* Cursor on hover */
    transition: background-color 0.3s ease; /* Smooth transition for background color */ }

/* Hover effect */
#quizButton:hover {
    background-color: □white;
    color: □black; }

#naviList a.active {
    font-size: 25px;
    font-weight: bold;
    text-decoration: underline;
    text-underline-offset: 5px; }

.links-container a.active {
    font-size: 25px;
    color: □white;
    font-weight: bold;
    text-decoration: underline;
    text-underline-offset: 5px; }

```

*Figure 40: Quizpopup CSS2*

## Query Form

On the Query page, HTML forms structure input fields and buttons, while JavaScript manages validation, displays pop-up summaries, and ensures data integrity before submission.

```
<section class="seventhView">
  <div class="QueryForm">
    <h2>Need Help?</h2>
    <form id="contactForm" method="post">
      <label for="name">Full Name:</label>
      <input type="text" id="name" name="name" onblur="convertToUpperCase(this)" placeholder="Enter your full name;">
      <div class="error-message" id="nameError"></div>
      <label for="email">Email:</label>
      <input type="email" id="email" name="email" placeholder="Enter your email address;">
      <div class="error-message" id="emailError"></div>
      <label for="theme">Issue Topic:</label>
      <select id="theme" name="theme">
        <option value="">Select...</option>
        <option value="menu">Menus</option>
        <option value="discount">Discount</option>
        <option value="delivery">Delivery</option>
        <option value="payment">Payment</option>
        <option value="returns">>Returns</option>
        <option value="other">Other</option>
      </select>
      <div class="error-message" id="themeError"></div>
      <label for="details">Issue Details:</label>
      <textarea id="details" name="details" rows="4" placeholder="Enter your details about the issue;"></textarea>
      <div class="error-message" id="detailsError"></div>
      <button type="reset">Reset</button>
      <button type="submit">Submit</button>
    </form>
    <div id="popupModal" class="modal">
      <div class="modal-content">
        <span class="close">&times;</span>
        <h2 class="summaryHead">Query Summary</h2>
        <div id="summaryContent"></div>
      </div>
    </div>
  </div>
</section>
```

Figure 41: Query Html

```
// Initialize validation flag
let isValid = true;

// Validate Name field
if (name === '') {
  document.getElementById('nameError').textContent = '***Name is required.';
  isValid = false;
}

// Validate Email field
if (email === '') {
  document.getElementById('emailError').textContent = '***Email is required.';
  isValid = false;
} else if (!isValidEmail(email)) {
  document.getElementById('emailError').textContent = '***Please enter a valid email address.';
  isValid = false;
}

// Validate Query Subject (Theme) field
if (theme === '') {
  document.getElementById('themeError').textContent = '***Query subject is required.';
  isValid = false;
}

// Validate Query Details field
if (details === '') {
  document.getElementById('detailsError').textContent = '***Query details are required.';
  isValid = false;
}
```

Figure 42: Query JS1

```

// If all fields are valid, format details and display summary in popup
if (isValid) {
    // Format the details with capitalized first letter
    let formattedDetails = capitalizeFirstLetter(details);
    // Create summary HTML
    let summary = `
        <strong>Name:</strong> ${capitalizeFirstLetter(name)}<br><br>
        <strong>Email:</strong> ${email}<br><br>
        <strong>Subject:</strong> ${capitalizeFirstLetter(theme)}<br><br>
        <strong>Details:</strong> ${formattedDetails}<br><br>
        <strong>We will solve your issue as soon as possible. Thank you!</strong>
    `;

    // Display the modal popup with the summary
    let modal = document.getElementById('popupModal');
    document.getElementById('summaryContent').innerHTML = summary;
    modal.style.display = 'block';

    // Debugging log to confirm modal opening
    console.log('Modal opened');

    // Close the modal when the close button is clicked
    let closeButton = modal.querySelector('.close');
    closeButton.onclick = function() {
        modal.style.display = 'none';
    };

    // Close the modal when clicking outside the modal
    window.onclick = function(event) {
        if (event.target === modal) {
            modal.style.display = 'none';
        }
    };
}

```

*Figure 43: Query JS2*

## Additional Work

For the Search functionality, HTML input elements are used for queries, and JavaScript processes input to filter results dynamically with event handling. Additional pages like FAQ, Delivery & Order Procedures, Vacancy Form, and AboutCMS follow similar principles to ensure a cohesive user experience.

```

//Search bar Function
document.addEventListener("DOMContentLoaded", function() {
    const searchButton = document.getElementById("searchButton"); // Assuming there's a search button for activation
    const searchBar = document.getElementById("searchBar");
    const searchInput = document.getElementById("searchInput");
    const searchResults = document.getElementById("searchResults");

    // Show the search bar when the search button is hovered over
    searchButton.addEventListener("mouseover", function() {
        searchBar.classList.add("active");
    });

    // Hide the search bar when the mouse leaves the search bar area
    searchBar.addEventListener("mouseleave", function() {
        searchBar.classList.remove("active");
    });

    // Implement search functionality
    searchInput.addEventListener("input", function() {
        const searchTerm = searchInput.value.toLowerCase().trim(); // Get and clean the search term
        const categoryPopups = document.querySelectorAll("#list .menu-list .category-popup"); // Select all category popups

        // Clear previous results only if there's no search term
        if (searchTerm.length === 0) {
            searchResults.innerHTML = ""; // Clear the search results
            return; // Exit the function if the search term is empty
        }

        let foundItems = [];

        // Loop through category popups
        categoryPopups.forEach(categoryPopup => {
            const categoryLink = categoryPopup.querySelector("a");
            const category = categoryLink.textContent.toLowerCase().trim().split(" "); // Split by space to get words
            const varieties = categoryPopup.querySelectorAll("ul li a");

```

Figure 44: SearchBar JS1

```

// Check if any word in the category matches the search term
let matchFound = false;
category.forEach(word => {
    if (word.startsWith(searchTerm)) {
        foundItems.push(categoryLink); // Add the category link to found items
        matchFound = true;
    }
});

if (!matchFound) {
    // Check if any variety matches the search term
    varieties.forEach(variety => {
        const varietyName = variety.textContent.toLowerCase().trim();
        const varietyWords = varietyName.split(" ");

        varietyWords.forEach(word => {
            if (word.startsWith(searchTerm)) {
                foundItems.push(variety); // Add the variety link to found items
            }
        });
    });
}

// Display search results
if (foundItems.length === 0) {
    searchResults.innerHTML = "<li>No items found. Try another search term.</li>";
} else {
    searchResults.innerHTML = ""; // Clear previous results
    foundItems.forEach(item => {
        let li = document.createElement("li");
        let link = document.createElement("a");
        link.href = item.href || "#"; // Use item.href if available, otherwise fallback to #

```

Figure 45: SearchBar JS2

```

    // Display search results
    if (foundItems.length === 0) {
        searchResults.innerHTML = "<li>No items found. Try another search term.</li>";
    } else {
        searchResults.innerHTML = ""; // Clear previous results
        foundItems.forEach(item => {
            let li = document.createElement("li");
            let link = document.createElement("a");
            link.href = item.href || "#"; // Use item.href if available, otherwise fallback to #
            link.textContent = item.textContent;
            li.appendChild(link);
            searchResults.appendChild(li);
        });
    }
});
}
);

```

*Figure 46: SearchBar JS3*

```

.search-bar {
    display: none; /* Initially hidden */
    position: absolute;
    top: calc(100% + 1px);
    right: 200px;
    width: 200px;
    height: auto;
    background-color: #white;
    opacity: 0.9;
    border: 1px solid #343434;
    padding: 10px;
    box-shadow: 0 4px 8px #rgba(0, 0, 0, 0.1);
    z-index: 1000; }

.search-bar.active {
    display: block; }

#mySearchLabel {
    font-size: 25px;
}

.search-input {
    width: calc(100% - 20px);
    padding: 8px;
    font-size: 16px;
    border: 1px solid #gray;
    border-radius: 4px;
    margin-right: 10px; }

.search-results {
    margin-top: 10px; }

.search-results li {
    list-style-type: none;
    margin-bottom: 3px; }

```

*Figure 47: SearchBar CSS1*

```

.search-results a {
    text-decoration: none;
    color: #1d0909;
    display: block;
    padding: 8px 12px;
    font-size: 18px;
    line-height: 1.5; }

.search-results a:hover {
    text-decoration: underline;
    font-weight: bold;
    font-size: 20px; }

```

*Figure 48: SearchBar CSS2*

## c. Student3

### Product page

Page will simplify browsing and purchasing. By separating products from the shopping cart, customers can easily navigate product details and manage their cart, ensuring a user-friendly shopping experience.

```

<main>
    <h2 id="heading">HI THERE WELCOME TO CMS!!!</h2>
    <div class="category-menu">
        <div id="categories-list" ></div>
    </div>
    <div id="category-details"></div>
    <div id="loader" class="loader"></div>
    <div id="products-list" class="products-grid"></div>

    <div id="root"></div>
    <div id="cart-sidebar" class="cart-sidebar">
        <h2>Your Cart</h2>
        <div id="cart-items"></div>

        <div class="cart-total">
            <span>Subtotal:</span>
            <span id="cart-subtotal"></span>
        </div>
        <div class="cart-buttons">
            <button class="sidecart" onclick="checkout()">Checkout</button>
            <button class="sidecart" onclick="continueShopping()">Continue Shopping</button>
            <button class="sidecart" onclick="viewCart()">View Cart</button>
        </div>
    </div>
    <div id="cart-overlay" class="cart-overlay" onclick="toggleCart()"></div>

</main>

```

*Figure 49: Category HTML 1*

```

// Product data
const products = {
  cakes: [
    {
      image: 'https://img.freepik.com/premium-photo/cake-tasty-sweets-modern-food-candy-cookie-fruits-strawberry-cranberry-blackberry-pieces_853115-7632.jpg',
      description: 'A rich and moist chocolate cake perfect for chocolate lovers.',
      items: [
        { id: 1, name: 'Chocolate Cake', price: 2200, image: 'https://insanelygoodrecipes.com/wp-content/uploads/2021/06/Tasty-Homemade-Chocolate-Cake.jpg' },
        { id: 2, name: 'Vanilla Cake', price: 2500, image: 'https://myfoodstory.com/wp-content/uploads/2020/09/Eggless-Vanilla-Cake-2-360x360.jpg', description: 'A classic vanilla cake that is light and fluffy.' },
        { id: 3, name: 'Black Forest', price: 3800, image: 'https://www.hola.ae/wp-content/uploads/2021/03/Black-Forest-Cake-Dubai-Keto-Desserts-UAE-Low-Carb-No-Sugar-Healthy-Delicious.jpg', description: 'A traditional Black Forest cake with layers of chocolate and cherries.' },
        { id: 4, name: 'Red Velvet Cake', price: 3200, image: 'https://img.freepik.com/premium-photo/decadent-red-velvet-cake-black-wood_756535-4971.jpg', description: 'A delicious red velvet cake with a creamy frosting.' },
        { id: 5, name: 'Butterscotch Fudge Cake', price: 3200, image: 'https://assets.winni.in/product/primary/2022/9/73528.jpeg?dpr=1&w=500', description: 'Moist Sponge Cake With Butterscotch, Butter Icing Orders accepted from 9.00 am to 10:30 pm daily. This requires 30 minutes preparation time plus delivery time.' },
        { id: 6, name: 'Oreo Cake', price: 5000, image: 'https://assets.flowersnfruits.com/uploads/product-pics/1687854586_13205.png', description: 'A delicious red velvet cake with a creamy frosting.' },
        { id: 7, name: 'Mango Mousse Cake', price: 4300, image: 'https://thumbs.dreamstime.com/b/mango-themed-mousse-cake-decorated-fruit-served-elegantly-dark-background-generated-ai-295917844.jpg', description: 'Introducing our Mango Cardamom Mousse Cake - a symphony of flavors that's sure to tantalize your taste buds! This exquisite dessert features a decadent cardamom-flavored mousse, delicately layered with luscious mango gel, vibrant mango marmalade, and light, fluffy vanilla sponge.' },
        { id: 8, name: 'Kit Kat Cake', price: 5300, image: 'https://assets.winni.in/product/primary/2022/9/74473.jpeg?dpr=1&w=500', description: 'This cake is a delightful and visually stunning dessert that combines the rich, indulgent flavors of chocolate cake with the playful crunch of Kit Kat candy bars. The defining feature of this cake is the border of Kit Kat bars that surround it. Full-size Kit Kat bars are pressed into the frosting around the entire circumference of the cake, creating a charming picket fence effect.' }
      ]
    },
    {
      Donuts: [
        {
          image: 'https://img.freepik.com/premium-photo/colorful-delicious-donuts-dark-background_5095-2454.jpg?w=360',
          items: [
            { id: 31, name: 'Glazed Donuts', price: 450, image: 'https://t4.ftcdn.net/jpg/03/10/24/37/69_WmOtCVFrjwOhIA1zb8HB4tlCBmf5BhR.webp', description: 'Classic donuts with a sweet and shiny glaze, perfect for any time of day. Ingredients like Flour, sugar, milk, eggs, butter, yeast, salt, vanilla extract, powdered sugar, water.' },
            { id: 32, name: 'Chocolate Frost Donuts', price: 400, image: 'https://img.freepik.com/premium-photo/chocolate-donut-with-sprinkles-dark-background_987694-500.jpg', description: 'Donuts topped with rich chocolate frosting, a delightful treat for chocolate'
          ]
        }
      ]
    }
  ]
};

Donuts: [
  {
    image: 'https://img.freepik.com/premium-photo/colorful-delicious-donuts-dark-background_5095-2454.jpg?w=360',
    items: [
      { id: 31, name: 'Glazed Donuts', price: 450, image: 'https://t4.ftcdn.net/jpg/03/10/24/37/69_WmOtCVFrjwOhIA1zb8HB4tlCBmf5BhR.webp', description: 'Classic donuts with a sweet and shiny glaze, perfect for any time of day. Ingredients like Flour, sugar, milk, eggs, butter, yeast, salt, vanilla extract, powdered sugar, water.' },
      { id: 32, name: 'Chocolate Frost Donuts', price: 400, image: 'https://img.freepik.com/premium-photo/chocolate-donut-with-sprinkles-dark-background_987694-500.jpg', description: 'Donuts topped with rich chocolate frosting, a delightful treat for chocolate'
    ]
  }
]

```

**Figure 50: Product Page JS 1**

```

  Beverages: [
    {
      image: 'https://t4.ftcdn.net/jpg/04/99/36/57/360_F_499365794_Wl7sPRYTFY6ip0c9CSycbpyilcGRFGQ0.jpg',
      items: [
        { id: 41, name: 'Ginger Lime drink', price: 750, image: 'https://img.freepik.com/free-photo/gin-tonic-cocktail-drink-into-glass-black-background_123827-22351.jpg', description: 'Made up with Whiskey, simple syrup, and a dash of bitters . Added ice and top up with SOZO Salted Ginger and Lime soda. Stired in a rock glass. Garnish with an orange twist . ' },
        { id: 42, name: 'Passionfruit Spritzer', price: 990, image: 'https://img.freepik.com/premium-photo/photo-passion-fruit-iced-tea-brewed-tea-flavored-with-passion-frui-front-view-clean-bg_655090-970563.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
        { id: 43, name: 'Mango Martini', price: 890, image: 'https://www.shutterstock.com/image-photo/passion-fruit-mango-juice-hurricane-600nw-2289869591.jpg', description: 'Added Gin, SOZO Mango & Passionfruit Nectar, SOZO Lime crush and Simple Syrup into a shaker. Filled with ice, shake and double strain into a martini glass. Garnish with a slice of mango.' },
        { id: 44, name: 'Green Goblin', price: 690, image: 'https://i0.wp.com/annikaeats.com/wp-content/uploads/2022/10/DSC_1056.jpg?fit=800%2C1200&ssl=1&w=640', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
        { id: 45, name: 'Blueberry Fizz', price: 890, image: 'https://t3.ftcdn.net/jpg/06/91/46/80/360_F_691468035_t6VCC5nJtAmY1zNKeIAWLPLkxr4Is.jpg', description: 'Muddle fresh blueberries into a highball glass, add mint leaves and lemon juice along with gin and stir. Add ice, and top up with SOZO Blueberry and Lime soda and give it a twirl with a bar spoon. Garnish with fresh blueberries on a skewer and mint leaf sprig' },
        { id: 46, name: 'Ginger Citrus Tango', price: 790, image: 'https://img.freepik.com/premium-photo/orange-mocktail-with-orange-fruits-hd-with-black-background_714173-13.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
        { id: 47, name: 'SOZO Roulette', price: 990, image: 'https://cdn.pixabay.com/photo/2022/06/01/08/57/cocktail-7235145_1280.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
        { id: 48, name: 'Strawberry Tea Tower', price: 1200, image: 'https://img.freepik.com/premium-photo/two-glasses-strawberry-mojito-with-strawberries-side_626849-2689.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' }
      ]
    },
    {
      Beverages: [
        {
          image: 'https://t4.ftcdn.net/jpg/04/99/36/57/360_F_499365794_Wl7sPRYTFY6ip0c9CSycbpyilcGRFGQ0.jpg',
          items: [
            { id: 41, name: 'Ginger Lime drink', price: 750, image: 'https://img.freepik.com/free-photo/gin-tonic-cocktail-drink-into-glass-black-background_123827-22351.jpg', description: 'Made up with Whiskey, simple syrup, and a dash of bitters . Added ice and top up with SOZO Salted Ginger and Lime soda. Stired in a rock glass. Garnish with an orange twist . ' },
            { id: 42, name: 'Passionfruit Spritzer', price: 990, image: 'https://img.freepik.com/premium-photo/photo-passion-fruit-iced-tea-brewed-tea-flavored-with-passion-frui-front-view-clean-bg_655090-970563.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
            { id: 43, name: 'Mango Martini', price: 890, image: 'https://www.shutterstock.com/image-photo/passion-fruit-mango-juice-hurricane-600nw-2289869591.jpg', description: 'Added Gin, SOZO Mango & Passionfruit Nectar, SOZO Lime crush and Simple Syrup into a shaker. Filled with ice, shake and double strain into a martini glass. Garnish with a slice of mango.' },
            { id: 44, name: 'Green Goblin', price: 690, image: 'https://i0.wp.com/annikaeats.com/wp-content/uploads/2022/10/DSC_1056.jpg?fit=800%2C1200&ssl=1&w=640', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
            { id: 45, name: 'Blueberry Fizz', price: 890, image: 'https://t3.ftcdn.net/jpg/06/91/46/80/360_F_691468035_t6VCC5nJtAmY1zNKeIAWLPLkxr4Is.jpg', description: 'Muddle fresh blueberries into a highball glass, add mint leaves and lemon juice along with gin and stir. Add ice, and top up with SOZO Blueberry and Lime soda and give it a twirl with a bar spoon. Garnish with fresh blueberries on a skewer and mint leaf sprig' },
            { id: 46, name: 'Ginger Citrus Tango', price: 790, image: 'https://img.freepik.com/premium-photo/orange-mocktail-with-orange-fruits-hd-with-black-background_714173-13.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
            { id: 47, name: 'SOZO Roulette', price: 990, image: 'https://cdn.pixabay.com/photo/2022/06/01/08/57/cocktail-7235145_1280.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
            { id: 48, name: 'Strawberry Tea Tower', price: 1200, image: 'https://img.freepik.com/premium-photo/two-glasses-strawberry-mojito-with-strawberries-side_626849-2689.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' }
          ]
        }
      ]
    }
  ]
};

Beverages: [
  {
    image: 'https://t4.ftcdn.net/jpg/04/99/36/57/360_F_499365794_Wl7sPRYTFY6ip0c9CSycbpyilcGRFGQ0.jpg',
    items: [
      { id: 41, name: 'Ginger Lime drink', price: 750, image: 'https://img.freepik.com/free-photo/gin-tonic-cocktail-drink-into-glass-black-background_123827-22351.jpg', description: 'Made up with Whiskey, simple syrup, and a dash of bitters . Added ice and top up with SOZO Salted Ginger and Lime soda. Stired in a rock glass. Garnish with an orange twist . ' },
      { id: 42, name: 'Passionfruit Spritzer', price: 990, image: 'https://img.freepik.com/premium-photo/photo-passion-fruit-iced-tea-brewed-tea-flavored-with-passion-frui-front-view-clean-bg_655090-970563.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
      { id: 43, name: 'Mango Martini', price: 890, image: 'https://www.shutterstock.com/image-photo/passion-fruit-mango-juice-hurricane-600nw-2289869591.jpg', description: 'Added Gin, SOZO Mango & Passionfruit Nectar, SOZO Lime crush and Simple Syrup into a shaker. Filled with ice, shake and double strain into a martini glass. Garnish with a slice of mango.' },
      { id: 44, name: 'Green Goblin', price: 690, image: 'https://i0.wp.com/annikaeats.com/wp-content/uploads/2022/10/DSC_1056.jpg?fit=800%2C1200&ssl=1&w=640', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
      { id: 45, name: 'Blueberry Fizz', price: 890, image: 'https://t3.ftcdn.net/jpg/06/91/46/80/360_F_691468035_t6VCC5nJtAmY1zNKeIAWLPLkxr4Is.jpg', description: 'Muddle fresh blueberries into a highball glass, add mint leaves and lemon juice along with gin and stir. Add ice, and top up with SOZO Blueberry and Lime soda and give it a twirl with a bar spoon. Garnish with fresh blueberries on a skewer and mint leaf sprig' },
      { id: 46, name: 'Ginger Citrus Tango', price: 790, image: 'https://img.freepik.com/premium-photo/orange-mocktail-with-orange-fruits-hd-with-black-background_714173-13.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
      { id: 47, name: 'SOZO Roulette', price: 990, image: 'https://cdn.pixabay.com/photo/2022/06/01/08/57/cocktail-7235145_1280.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' },
      { id: 48, name: 'Strawberry Tea Tower', price: 1200, image: 'https://img.freepik.com/premium-photo/two-glasses-strawberry-mojito-with-strawberries-side_626849-2689.jpg', description: 'Added Gin, SOZO Passionfruit & Narang and fresh passionfruit pulp into a wine glass. Stired the ingredients.Made up with ice and add SOZO Passionfruit Iced Teasoda. Gave a small twirl with the bar spoon and a spoon of passionfruit pulp for the garnish.' }
    ]
  }
]

```

**Figure 51: Product Page JS 2**

```

"Cup cakes": {
  image: 'https://img.freepik.com/premium-photo/chocolate-cupcakes-with-chocolate-frosting-chocolate-chips-wooden-table_646510-938.jpg',
  items: [
    { id: 71, name: 'Vanilla Cup Cake', price: 490, image: 'https://www.noracooks.com/wp-content/uploads/2022/03/sq-3.jpg', description: 'Classic fluffy yellow cupcake topped with our signature vanilla buttercream or chocolate buttercream and sprinkles.' },
    { id: 72, name: 'Rainbow Cup Cake', price: 560, image: 'https://img.freepik.com/premium-photo/rainbow-cupcake-with-lgbt-pride-theme_875825-20192.jpg', description: 'Funfetti cupcake topped with buttercream frosting and rainbow sprinkles.' },
    { id: 73, name: 'Pink Lemonade', price: 550, image: 'https://cremedelacombe.com/wp-content/uploads/2021/06/Pink-Lemonade-Cupcakes-1-1.jpg', description: 'Delicious and moist lemon cupcake topped with bright and refreshing pink lemonade buttercream, made from fresh strawberries and lemons' },
    { id: 74, name: 'Red Velvet Vixen', price: 550, image: 'https://us.123rf.com/450wm/luzazure/luzazure2308/luzazure230862283/211595492-red-velvet-cupcake-on-black-background-shallow-dof.jpg', description: 'Traditional Southern Red Velvet cupcake made with Belgian cocoa and topped with luscious cream cheese frosting' },
    { id: 75, name: 'Lemon Drop', price: 600, image: 'https://img.freepik.com/premium-photo/photo-delicious-cupcake-with-dark-background_890183-4346.jpg', description: 'Springy vanilla cupcake topped with our lemon buttercream frosting and sprinkles' },
    { id: 76, name: 'Chocolate Cup Cake', price: 650, image: 'https://i0.wp.com/www.wifemamafoodie.com/wp-content/uploads/2015/11/Salted-Chocolate-Mocha-Cupcakes-Up-Close-683x1024.jpg?resize=950%2C1425&ssl=1', description: 'A dark chocolate sponge cake topped with our signature vanilla or chocolate buttercream' },
    { id: 77, name: 'Mint Cup Cake', price: 650, image: 'https://img.freepik.com/premium-photo/green-cupcake-color-mint-cup-cake-delicious-cupcakes-dark-background-abstract-generative-ai-illustration_162695-9251.jpg', description: 'Mint Chocolate cake are filled with Mint Chocolate Ganache, and they have been a highly requested flavor!' },
  ],
},

```

**Figure 52: Product Page JS 3**

```

const categoryDetails = {
  cakes: {
    title: 'Delicious Cakes',
    description: 'Explore our range of delicious cakes, made with the finest ingredients. Perfect for every occasion, our cakes are crafted with care to bring joy to your celebrations. Whether you prefer classic flavors like chocolate and vanilla or adventurous combinations, we have the perfect cake to suit your taste and make your moments special.'
  },
  Donuts: {
    title: 'Tasty Donuts',
    description: 'Indulge in our variety of donuts, each one baked to perfection and filled with flavor. From the classic glazed and chocolate frosted to unique creations topped with sprinkles and cream, our donuts are a delightful treat for any time of the day. Enjoy the soft, fluffy texture and the rich, sweet taste in every bite.'
  },
  Beverages: {
    title: 'Refreshing Beverages',
    description: 'Quench your thirst with our selection of beverages, from classic drinks to unique concoctions. Whether you are looking for a morning pick-me-up with our freshly brewed coffee or a refreshing cool-down with our smoothies and iced teas, we have something for every palate. Discover your new favorite drink in our diverse and flavorful collection.'
  },
  Cookies: {
    title: 'Crispy Cookies',
    description: 'Our cookies are baked to a perfect crisp, offering a delightful treat for any time of day. Enjoy a wide variety of flavors, from classic chocolate chip to innovative combinations like cranberry and white chocolate. Each cookie is made with love, using high-quality ingredients to ensure a satisfying crunch and a burst of flavor in every bite.'
  },
  Macaroons: {
    title: 'Delightful Macaroons',
    description: 'Savor our delicate macaroons, available in a variety of flavors to please your palate. These exquisite treats are crafted with precision, featuring a crisp exterior and a soft, chewy interior. With flavors ranging from traditional vanilla and pistachio to exotic fruit infusions, our macaroons are perfect for indulging yourself or impressing your guests.'
  },
}

```

**Figure 53: Product Page JS 4**

```

// Display categories
function showCategories() {
  const categoriesList = document.getElementById('categories-list');
  categoriesList.innerHTML = '';

  const categoryList = document.createElement('div');
  categoryList.className = 'category-list';

  // Duplicate the categories to create a circular loop
  const categories = Object.keys(products);
  const duplicatedCategories = [...categories, ...categories, ...categories];

  duplicatedCategories.forEach(category => {
    const categoryDiv = document.createElement('div');
    categoryDiv.className = 'category';
    categoryDiv.innerHTML =
      `<a href="#" onclick="showCategory('${category}', this)">
        
        </a>
        <p><a href="#" onclick="showCategory('${category}', this)">${category.charAt(0).toUpperCase() + category.slice(1)}</a></p>
      `;
    categoryList.appendChild(categoryDiv);
  });

  categoriesList.appendChild(categoryList);
}

```

*Figure 54: Product Page JS 5*

- **Product Listings:** Users can view products, including information on prices and availability. With cart buttons to add items.
- **Side Cart:** The cart, managed on the right side, provides a view of selected products, with options to remove or change quantities.

## Cart page

Items are added to cart when the "Cart" button clicked.

Users can eliminate products with the remove button.

```

<main>
  <h2>Your Cart</h2>
  <table id="cart-table">
    <thead>
      <tr>
        <th>Image</th>
        <th>Name</th>
        <th>Price</th>
        <th>Quantity</th>
        <th>Total</th>
        <th>Action</th>
      </tr>
    </thead>
    <tbody>
      <!-- Cart items will be loaded here -->
    </tbody>
  </table>

  <div class="cart-buttons">
    <button onclick="checkout()">Checkout</button>
  </div>
</main>

```

*Figure 55: Cart HTML 1*

```

cartTableBody.innerHTML = '';
let subtotal = 0;

cart.forEach(item => {
    console.log('Item:', item);

    if (typeof item.price !== 'number') {
        console.error('Invalid price:', item.price);
        return;
    }

    const itemTotal = item.price * item.quantity;
    subtotal += itemTotal;

    const row = document.createElement('tr');
    row.innerHTML = `
        <td>
            <a href="product-details.html?category=${item.category}&id=${item.id}">
                
            </a>
        </td>
        <td>${item.name}</td>
        <td>Rs${item.price.toFixed(2)}</td>
        <td><input type="number" value="${item.quantity}" min="1" onchange="updateQuantity('${item.category}', ${itemTotal.toFixed(2)})">
        <td>Rs${itemTotal.toFixed(2)}</td>
        <td><button onclick="removeFromCart('${item.category}', ${item.id}, this)">Remove</button></td>
    `;
    cartTableBody.appendChild(row);
});


```

*Figure 56: Cart JS 2*

The code is designed to calculate and display subtotal, discount, and fixed total with discount of 1% is represented by one point.

```

const itemTotal = item.price * item.quantity;
subtotal += itemTotal;

const row = document.createElement('tr');
row.innerHTML = `
    <td>
        <a href="product-details.html?category=${item.category}&id=${item.id}">
            
        </a>
    </td>
    <td>${item.name}</td>
    <td>Rs${item.price.toFixed(2)}</td>
    <td><input type="number" value="${item.quantity}" min="1" onchange="updateQuantity('${item.category}', ${itemTotal.toFixed(2)})">
    <td>Rs${itemTotal.toFixed(2)}</td>
    <td><button onclick="removeFromCart('${item.category}', ${item.id}, this)">Remove</button></td>
    `;
    cartTableBody.appendChild(row);
`);

const points = parseInt(document.getElementById('points').value) || 0;
const discount = (points / 100) * subtotal;
const finalTotal = subtotal - discount;

subtotalElement.textContent = `Rs${subtotal.toFixed(2)}`;
discountElement.textContent = `Rs${discount.toFixed(2)}`;
finalTotalElement.textContent = `Rs${finalTotal.toFixed(2)}`;


```

*Figure 57: Cart JS 3*

## Order Placement

- **Form Validation** checks user-provided information for completeness.
- **Summary Popup**: Displays order details, including items, quantities, prices, subtotals, discounts, final totals, and delivery addresses.

```
function placeOrder() {
    const cart = JSON.parse(localStorage.getItem('cart')) || [];
    clearErrors();

    if (cart.length === 0) {
        alert('Your cart is empty. Please add items to your cart before placing an order.');
        return;
    }

    const nameElement = document.getElementById('name');
    const emailElement = document.getElementById('email');
    const addressElement = document.getElementById('address');
    const phoneElement = document.getElementById('phone');
    const pointsInputElement = document.getElementById('points');
    const paymentMethod = document.querySelector('input[name="payment"]:checked');

    const name = nameElement.value.trim();
    const email = emailElement.value.trim();
    const address = addressElement.value.trim();
    const phone = phoneElement.value.trim();
    const pointsInput = pointsInputElement.value.trim();

    if (!name || !email || !address || !paymentMethod) {
        alert('Please fill in all required fields.');
        document.getElementById('error-message').textContent = 'Please fill in all required fields.';
        document.getElementById('error-message').style.display = 'block';
        return;
    }
}
```

Figure 58: Order Displacement JS 1

```
let isValid = true;
if (name === "") {
    showError(nameElement, "Please enter the name!");
    isValid = false;
}
if (email === "") {
    showError(emailElement, "Please enter the email!");
    isValid = false;
}
if (address === "") {
    showError(addressElement, "Please enter the address!");
    isValid = false;
}
if (phone === "") {
    showError(phoneElement, "Please enter the phone number!");
    isValid = false;
}

if (!isValid) {
    return;
}

let total = 0;
let orderSummary = `Dear ${name}, you have ordered:\n`;

cart.forEach(item => {
    const itemTotal = item.price * item.quantity;
    total += itemTotal;
    orderSummary += `${item.quantity} ${item.name}(s) at Rs${item.price} each\n`;
});
```

Figure 59: Order Displacement JS 2

```

let total = 0;
let orderSummary = `Dear ${name}, you have ordered:\n`;

cart.forEach(item => {
    const itemTotal = item.price * item.quantity;
    total += itemTotal;
    orderSummary += `${item.quantity} ${item.name}(s) at Rs${item.price} each\n`;
});

const discount = (points / 100) * total;
total -= discount;

orderSummary += `Total: Rs${total.toFixed(2)} (Discount applied: Rs${discount.toFixed(2)})\n`;
orderSummary += `Payment Method: ${paymentMethod.value}`;

// Populate the popup with the order summary
document.getElementById('order-summary').textContent = orderSummary;
document.getElementById('order-summary-text').textContent = orderSummary;

// Display the popup
document.getElementById('order-popup').style.display = 'block';

```

*Figure 60: Order Displacement JS 3*

## About Us

About us having the mouse on and over effect and font change functions with student details.

```

<body>
  <main class="main-content">
    <section class="team-section">
      <h2>Meet Our Developers</h2>
      <div class="team">
        <div class="member">
          
          <div class="member-details" id="member1-details"></div>
        </div>
        <div class="member">
          
          <div class="member-details" id="member2-details"></div>
        </div>
        <div class="member">
          
          <div class="member-details" id="member3-details"></div>
        </div>
      </div>
    </section>

    <!-- Mission Statement -->
    <section class="mission-statement">
      <h3>Our Goal</h3>
      <p>Our goal is to create a seamless online shopping experience for bakery enthusiasts. We aim to provide an easy-to-use platform where users can browse, purchase, and enjoy the finest baked goods.</p>
    </section>

    <!-- Contact Information -->
    <section class="contact-info">
      <h3>Contact Us</h3>
      <p>Email: info@bakery.com | Phone: +123-456-7890</p>
    </section>
  </main>
</body>

```

*Figure 61: About Us HTML 1*

```

.member-details {
    position: absolute;
    top: 90%; /* Position below the image */
    left: 50%; /* Center horizontally */
    transform: translateX(-50%);
    text-align: center;
    background-color: #rgba(214, 176, 101, 0.9); /* Semi-transparent white background */
    border-radius: 8px;
    padding: 10px;
    display: none; /* Hidden by default */
    z-index: 0.4; /* details appear above other content.*/
    border: 1px solid black;
}

.member:hover .member-details {
    display: block; /* Show on hover */
}

.font-size-buttons {
    margin-top: 20px;
}

.font-size-buttons button {
    font-size: 1em;
    padding: 5px 10px;
    margin-right: 10px;
    cursor: pointer;
}

```

Figure 62: About Us CSS 1

```

function showDetails(memberId) {
    let details = '';

    switch(memberId) {
        case 'member1':
            details = '<strong>Chanmini Weerakoon</strong><br>Student 1';
            document.getElementById('member1-details').innerHTML = details;
            break;
        case 'member2':
            details = '<strong>Mathusha Kannathasan</strong><br>Student 2';
            document.getElementById('member2-details').innerHTML = details;
            break;
        case 'member3':
            details = '<strong>Shaithra Vilvarashah</strong><br>Student 3';
            document.getElementById('member3-details').innerHTML = details;
            break;
    }
}

function hideDetails() {
    document.getElementById('member1-details').innerHTML = '';
    document.getElementById('member2-details').innerHTML = '';
    document.getElementById('member3-details').innerHTML = '';
}

function changeFontSize(action) {
    const container = document.querySelector('.main-content');
    const style = window.getComputedStyle(container, null).getPropertyValue('font-size');
    let currentSize = parseFloat(style);

    if (action === 'increase') {
        currentSize += 2;
    } else if (action === 'decrease') {

```

Figure 63:About Us JS1

## **6. Discussion of UX/UI principles /Applications/Justifications**

### **a. Navigation Techniques**

```
<!--For topbar here the 5 different texts will change after 10s gap-->
<div class="topBar">
|   <span id="topBarText">Welcome to CMS Bakery!</span>
</div>

<!--The main navigation bar-->
<div class="secondBar">
    
    <nav>
        <ul id="naviList">
            <li><a href="CMSHOME.html" title="Home Page" id="Homepage"><i class="fa fa-home"></i>HOME</a></li>
            <li class="menu-dropdown"><a href="CMSPRODUCTS.html" title="Menu Page" id="MenuPage"><i class="fa fa-clipboard"></i>PRODUCTS</a>
                <!--The menu will dropdown the categories when hover-->
                <div class="category-popup">
                    <ul>
                        <li><a href="CMSPRODUCTS.html">Cakes</a></li>
                        <li><a href="CMSPRODUCTS.html">Donuts</a></li>
                        <li><a href="CMSPRODUCTS.html">Beverages</a></li>
                        <li><a href="CMSPRODUCTS.html">Brownies</a></li>
                        <li><a href="CMSPRODUCTS.html">Macaroons</a></li>
                        <li><a href="CMSPRODUCTS.html">Cupcakes</a></li>
                    </ul>
                </div>
            </li>
            <li><a href="CMSDISCOUNTQUIZ.html" id="discountmap" title="For discounts..." target="_blank"><i class="fa fa-gift"></i>PROMOTION</a></li>
            <li><a href="MSGALLERY.html" title="Gallery Page" id="galleryPage"><i class="fa fa-photo"></i>GALLERY</a></li>
                <!--The about cms also dropdown the list-->
            <li class="aboutus-dropdown"><a href="ABOUTCMS.html" id="AboutusSite"><i class="fa fa-users"></i>ABOUT CMS</a>
                <div class="category-popup">
```

**Figure 64: HomeNav Html1**

```
<ul id="naviList">
    <li>
        <ul>
            <li><a href="CMSORDER&DELIVERY.html">Order & Delivery</a></li>
            <li><a href="CMSVACANCY.html">Join Our Crew</a></li>
            <li><a href="CMSFAQ.html" title="For FAQs">FAQs</a></li>
            <li><a href="ABOUTCMS.html#main">Mission</a></li>
            <li><a href="ABOUTCMS.html#Mission">Vision</a></li>
            <li><a href="ABOUTCMS.html#Vision">Our Team</a></li>
            <li><a href="ABOUTCMS.html#History">History</a></li>
        </ul>
    </li>
</ul>
</nav>
<!--Right corner of the second bar-->
<div id="iconContainer">
    <a id="searchButton"><i class="fa fa-search"></i></a>
    <a href="CMSSIGNUP.html" id="loginmap" title="Membership {signup/login}" target="_blank"><i class="fa fa-user-plus"></i></a>
    <a href="CMSCART.html" id="cartmap" title="Cart"><i class="fa fa-shopping-cart"></i></a>
    <a href="#contactDetails" id="contact" title="Contact details."><i class="fa fa-phone"></i></a>
</div>
<!--Search Bar to search the products-->
<div class="search-bar" id="searchBar">
    <label id="mySearchLabel">Search<br>
    <input type="text" class="search-input" id="searchInput" placeholder="Enter your choice..." autocomplete="off">
    <ul class="search-results" id="searchResults"></ul>
    </label>
</div>
<!--This list will use in search-->
<div id="list">
    <ul class="menu-list">
        <li class="category-popup">
```

**Figure 65: HomeNav Html2**

```

    <a href="CMSPRODUCTS.html">Cakes</a>
    <ul>
        <li><a href="CMSPRODUCTDETAILS.html?category=cakes&id=1">Chocolate Cake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=cakes&id=2">Vanilla Cake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=cakes&id=3">Black Forest Cake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=cakes&id=4">Butterscotch Fudge Cake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=cakes&id=5">Red Velvet Cake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=cakes&id=6">Oreo Cake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=cakes&id=7">Mango Mousse Cake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=cakes&id=8">Kit Kat Cake</a></li>
    </ul>
</li>

<li class="category-popup">
    <a href="CMSPRODUCTS.html">Donuts</a>
    <ul>
        <li><a href="CMSPRODUCTDETAILS.html?category=Donuts&id=31">Glazed Donuts</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Donuts&id=32">Chocolate Frost Donuts</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Donuts&id=33">Boston Cream Donuts</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Donuts&id=34">Jelly Donuts</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Donuts&id=35">Cinnamon Sugar Donuts</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Donuts&id=36">Maple Bacon Donuts</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Donuts&id=37">Strawberry Frosted Donuts</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Donuts&id=38">Blueberry Donuts</a></li>
    </ul>
</li>

<li class="category-popup">
    <a href="CMSPRODUCTS.html">Beverages</a>
    <ul>

```

**Figure 66: HomeNav Html3**

```

<li class="category-popup">
    <a href="CMSPRODUCTS.html">Cupcakes</a>
    <ul>
        <li><a href="CMSPRODUCTDETAILS.html?category=Cup%20cakes&id=71">Vanilla Cupcake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Cup%20cakes&id=72">Rainbow Cupcake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Cup%20cakes&id=73">Pink Lemonade Cupcake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Cup%20cakes&id=74">Red Velvet Vixen Cupcake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Cup%20cakes&id=75">Lemon Drop Cupcake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Cup%20cakes&id=76">Chocolate Cupcake</a></li>
        <li><a href="CMSPRODUCTDETAILS.html?category=Cup%20cakes&id=77">Mint Cupcake</a></li>
    </ul>
</li>

</ul>
</div>
</div>

```

**Figure 67: HomeNav Html4**

```

.topBar {
    position: fixed;
    top: 0;
    left: 0;
    width: 100%;
    height: 20px;
    background-color: black;
    z-index: 1000;
    color: white;
    display: flex;
    align-items: center;
    justify-content: center;
    margin-bottom: 2px; }

.secondBar {
    position: fixed;
    left: 0;
    right: 0;
    top: 20px;
    width: 100%;
    height: 100px;
    background: linear-gradient(135deg, #ae924d, #c68642);
    z-index: 1000;
    display: flex;
    align-items: center; }

.secondBar img {
    margin: 10px;
    height: 80px;
    width: 80px;
    opacity: 80%;
    border-radius: 100%;
    border: black 1px solid; }

```

Figure 68: HomeNav CSS1

```

.secondBar i{
    padding: 20px;
    font-size: 30px;
    width: 30px;
    text-decoration: none;
    color: black; }

#naviList {
    list-style-type: none;
    margin: 0;
    padding: 0;
    display: flex;
    justify-content: center; }

#naviList li {
    padding: 0;
    margin: 0;
    position: relative; }

#naviList li i {
    padding-right: 10px;
    font-size: 30px; }

#naviList a {
    text-decoration: none;
    color: black;
    font-size: 20px;
    padding: 10px 5px;
    display: inline-block;
    position: relative; }

#naviList li a:hover {
    font-size: 25px;
    font-weight: bold; }

.menu-dropdown, .aboutus-dropdown {
    position: relative; }

.category-popup {
    display: none;
    position: absolute;
    top: calc(100% + 10px);
    left: 0;
    background-color: rgba(255, 255, 255, 0.9);
    border: 1px solid #ccc;
    padding: 10px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    z-index: 1000;
    min-width: 220px;
    text-align: left; }

.menu-dropdown:hover .category-popup,
.aboutus-dropdown:hover .category-popup {
    display: block;
    position: absolute;
    transition: all 0.2s ease;
    top: calc(100% + 5px); }

.category-popup ul {
    list-style-type: none;
    padding: 0;
    margin: 0; }

.category-popup li {
    margin-bottom: 5px; }

.category-popup a {
    text-decoration: none;
    color: #d0909;
    display: block;
    padding: 8px 12px;
    font-size: 16px;
    line-height: 1.5; }

.category-popup a:hover {
    font-size: 25px;
    color: black;
    text-decoration: underline; }

#naviList .category-popup a:hover {
    font-size: 25px;
    color: black;
    text-decoration: underline; }

.iconContainer {
    text-align: right;
    margin-top: 10px;
    position: absolute;
    right: 20px; }

.iconContainer i:hover {
    color: #f2026;
    font-size: 50px; }

```

Figure 69: HomeNav CSS2

Figure 70: HomeNav CSS3

Figure 71: HomeNav CSS3

```

<footer class="footer">
    <!-- Left part for opening hours & happy hours -->
    <div class="footer-left">
        <h3>Opening Hours</h3>
        <p>Monday - Friday: 6:00 A.M - 10:00 P.M</p>
        <p>Saturday - Sunday: 6:00 A.M - 11:00 P.M</p>
        <h3>Happy Hours</h3>
        <p>Monday - Sunday: 5:00 P.M - 7:00 P.M <br> You are in luck, <br>You can have that DONUTS WARMED UP! <br>Oh, happy day. Pick your happiness!</p>
        <h3>Payments Accepted</h3>
        <p>
            <i class="fab fa-cc-visa" title="VISA"></i>
            <i class="fab fa-cc-mastercard" title="MASTERCARD"></i>
            <i class="fab fa-cc-paypal" title="PAYPAL"></i>
        </p>
    </div>

    <!-- Middle part for blog and links -->
    <div class="footer-middle">
        <div class="gallery-container" id="gallery">
            <h3>BLOGS</h3>
            <div class="gallery">
                
                
                
                
                
                
            </div>
        </div>
    </div>

```

**Figure 72: HomeNav Html5**

```

<div id="questionIcon">
    <a href="#CMSHOME.html#faqbutton" title="For Query"><i class="fas fa-question"></i></a>
</div>

<!-- Copyright & Editor line -->
<div id="copy">
    &copy; 2024 CMS Bakery. All rights reserved.
    Edited By: <a href="#CMSMATHUSHA.html">Mathusha_2410212_20233136</a>
</div>
</footer>

```

**Figure 73: HomeNav Html6**

```

footer {
    background-color: #222;
    color: white;
    padding: 20px;
    box-sizing: border-box;
    width: 100%;
    height: 500px;
    display: flex;
    justify-content: space-between;
    align-items: flex-start;
    position: relative;
    margin: 0;
    padding: 0; }

.footer-left {
    width: 30%;
    margin-left: 10px; }

.footer-left h3 {
    font-size: 20px;
    margin-bottom: 10px;
    margin-top: 25px;
    font-family: Georgia, serif; }

.footer-left p {
    font-size: 18px;
    line-height: 1.6;
    margin-left: 15px;
    color: #ccc;
    margin-bottom: 0;
    font-family: "Lucida Console", monospace; }

```

```

.footer-left i {
    font-size: 25px;
    margin-right: 10px;
    padding-left: 25px;
    color: white; }

.footer-left i:hover {
    color: gray;
    font-size: 30px; }

.footer-middle {
    display: flex;
    flex-direction: column;
    align-items: center;
    text-align: center;
    width: 40%;
    font-size: 20px;
    font-family: Georgia, serif; }

.gallery-container {
    width: 50%;
    margin-bottom: 0; }

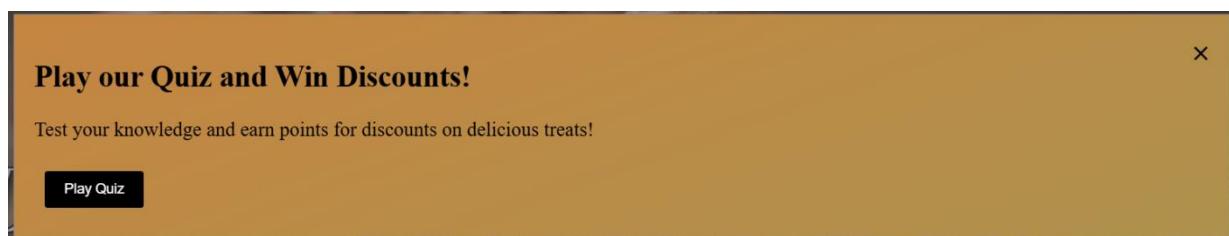
.gallery-container h3 {
    font-size: 20px;
    margin-bottom: 5px;
    | }

.gallery {
    display: grid;
    grid-template-columns: repeat(3, 1fr);
    grid-template-rows: repeat(2, auto);
    justify-content: center;
    align-items: center;
    margin: 0; }

```

*Figure 74: HomeNav CSS4*

*Figure 75: HomeNav CSS5*



*Figure 76: QuizPopup*

```

.gallery img {
    width: 85px;
    height: 85px;
    border-radius: 5px;
    object-fit: cover;
    position: relative;
    padding: 10px; }

.links-container {
    display: flex;
    flex-direction: column;
    align-items: center;
    margin-top: 10px; }

.links-container a {
    margin: 5px 0;
    font-size: 20px;
    text-decoration: none;
    color: black;
    padding-bottom: 2px;
    font-family: Georgia, serif; }

.links-container a:hover {
    color: gray;
    font-size: 23px;
    font-weight: bold; }

.footer-right {
    width: 30%;
    margin-bottom: 10px; }

.footer-right h3 {
    font-size: 20px;
    margin-bottom: 10px;
    margin-top: 25px;
    font-family: Georgia, serif; }

.footer-right p {
    font-size: 18px;
    line-height: 1.6;
    color: black;
    margin-bottom: 5px;
    font-family: "Lucida Console", monospace;
    margin-left: 5px; }

.footer-right .social-icons {
    margin-left: 12px;
    display: flex;
    justify-content: flex-start;
    align-items: center;
    gap: 10px;
    margin-top: 10px; }

.footer-right i {
    font-size: 25px;
    width: 30px;
    text-decoration: none;
    color: black;
    padding: 5px;
    margin-right: 10px; }

.footer-right i:hover {
    color: white;
    font-size: 30px; }

.footer-right a {
    font-size: 20px;
    width: 30px;
    text-decoration: none;
    color: black;
    padding: 5px;
    margin-left: 10px; }

```

Figure 77: HomeNav CSS6

Figure 78: HomeNav CSS7

```

.footer-right a:hover {
    color: #gray; }

#backToTop .fas, #questionIcon .fas {
    position: absolute;
    cursor: pointer;
    font-size: 20px;
    width: 30px;
    text-decoration: none;
    color: #white;
    display: flex;
    align-items: center;
    justify-content: center;
    border: none;
    padding: 0;
    background: none;
    border: 2px #white solid;
    border-radius: 100%; }

#questionIcon .fas {
    bottom: 40px;
    right: 20px; }

#backToTop .fas {
    bottom: 80px;
    right: 12px; }

#backToTop .fas:hover,
#questionIcon .fas:hover {
    color: #gray;
    font-size: 15px; }

```

```

#copy {
    position: absolute;
    bottom: 0;
    width: 98.6%;
    align-items: center;
    text-align: center;
    font-size: 14px;
    color: #ccc;
    padding: 10px;
    background-color: #222;
    font-family: "Lucida Console", monospace; }

#copy a {
    color: #white;
}

```

```

#copy a:hover {
    font-size: 20px;
    color: #gray;
}

```

*Figure 79: HomeNav CSS8*

*Figure 80: HomeNav CSS9*

Our website features a top navigation menu with clear labels and dropdowns for easy navigation, supported by a breadcrumb trail for location awareness and quick access. Crafted with semantic HTML `<nav>` tags and styled with CSS, the menu includes clean lines, consistent padding, and a gradient background in `#ae924d & #C68642` colors. Footer navigation mirrors this design. Interactive elements like hover effects and underlined active links enhance usability, while customized pop-ups promote special offers, ensuring a seamless user experience.

## b. Color balance/selection/consistency

We use light and dark browns, ash, white, and black for a warm atmosphere. Dark browns evoke coziness, white symbolizes cleanliness, and ash adds sophistication. Modern backgrounds, hover effects, shadows, and borders enhance appeal and usability. High-contrast icons ensure accessibility, while cohesive product page design maintains consistency.

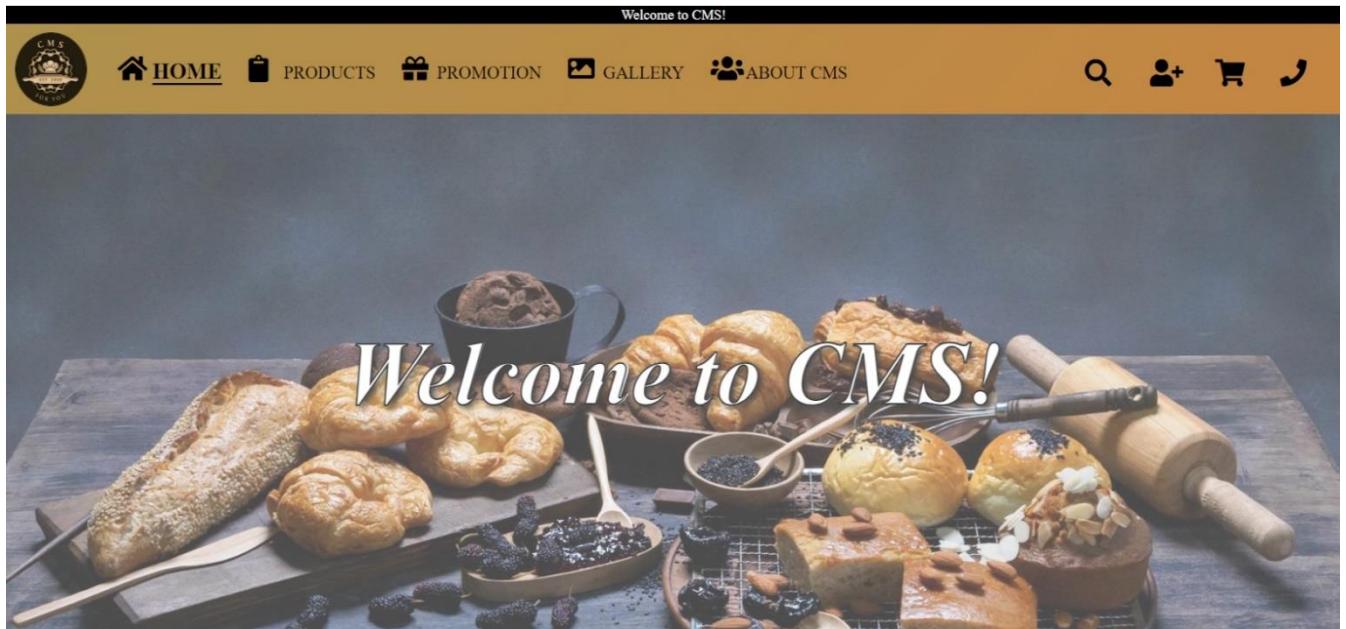


Figure 81: CMS HomeHeader

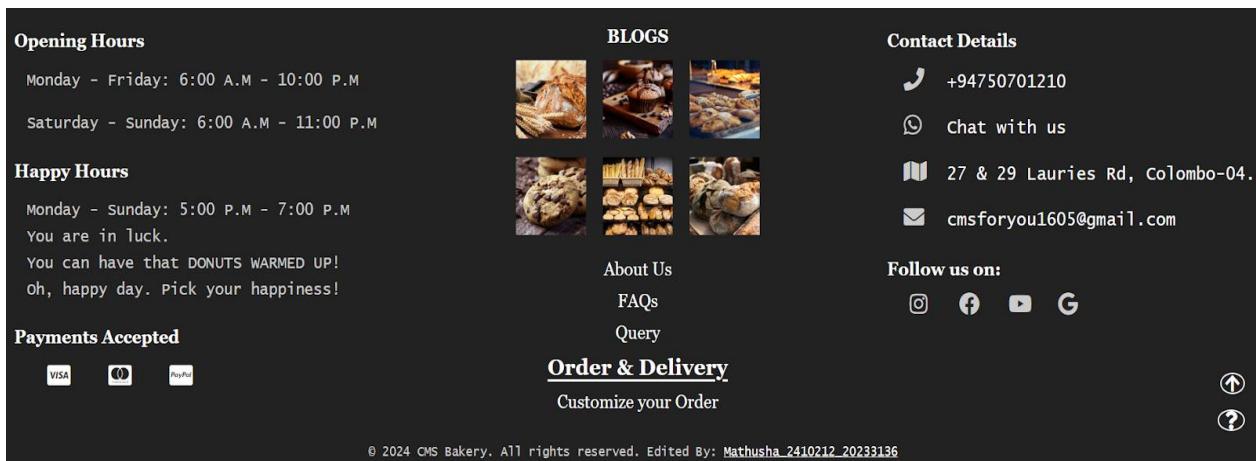


Figure 82: CMS Footer



Figure 83: CMS Logo

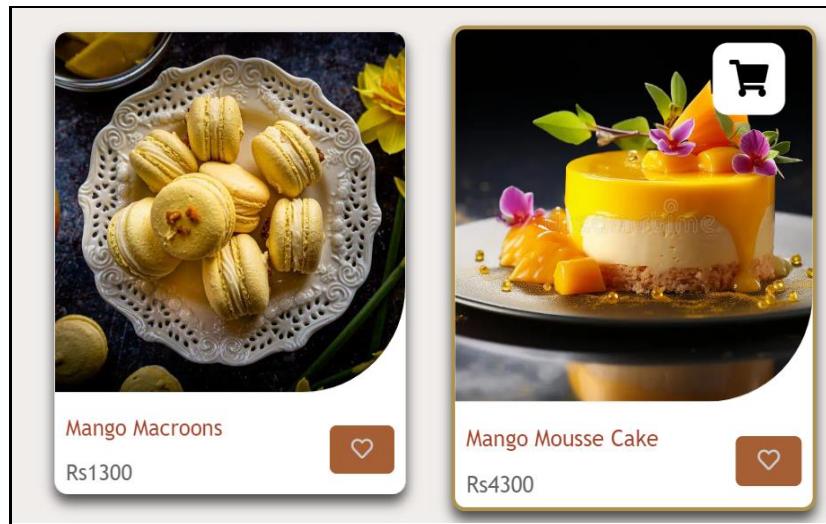


Figure 84: ProductsView

```
.product-card {
    background-color: #fff;
    border: 1px solid #ddd;
    border-radius: 10px;
    overflow: hidden;
    box-shadow: 0 6px 9px rgba(15, 13, 13, 0.74);
    transition: transform 0.2s;
    height: 331px;
    width: 260px;
    margin: 10px;
    display: flex;
    flex-direction: column;
    justify-content: space-between;
    animation: dt_fadeIn 0.7s ease forwards;
    border-bottom: 0px;
}

.product-card img {
    width: 100%;
    height: 258px;
    object-fit: cover;
    border-bottom: 1px solid #ddd;
    border-bottom-right-radius: 76px;
}
```

```
.product-card h3 {
    font-size: 1.2em;
    margin: 0.5rem 0;
    padding: 0 0.5rem;
    color: #333;
}

.product-card button {
    background-color: #a65e34;
    color: #fff;
    border: none;
    border-radius: 5px;
    padding: 0.5rem 1rem;
    cursor: pointer;
    margin: 0.5rem;
    transition: background-color 0.2s, transform 0.2s;
}

.product-card button:hover {
    background-color: #e65a00;
    transform: scale(1.05);
}

.product-card: hover {
    transform: scale(1.04);
    border: 3px solid #ae924d;
}
```

Figure 85: ProductPage CSS1

Figure 86: ProductPage CSS2

## c. Color Contrast Test

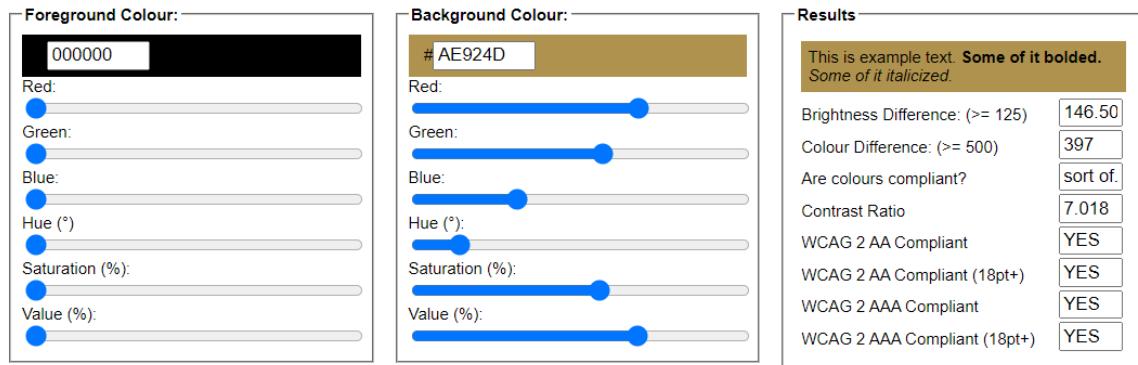


Figure 87: Secondbar CCT

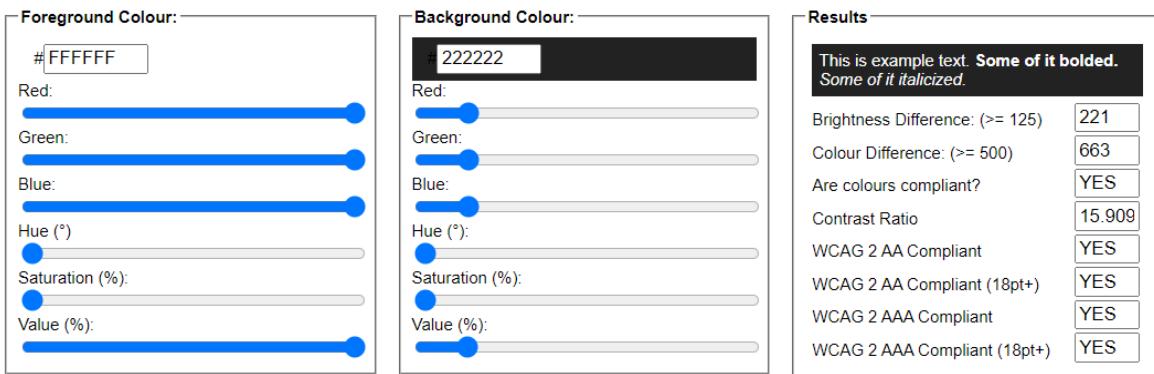


Figure 88: Footer CCT1

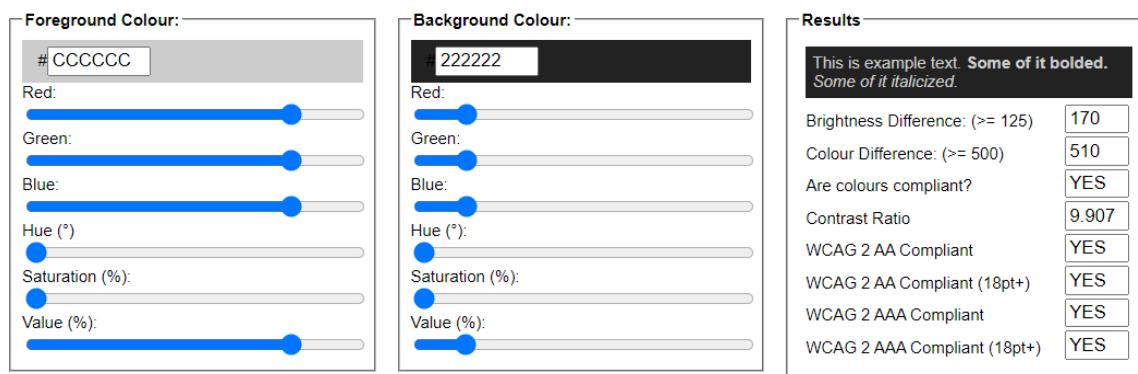


Figure 89: Footer CCT2

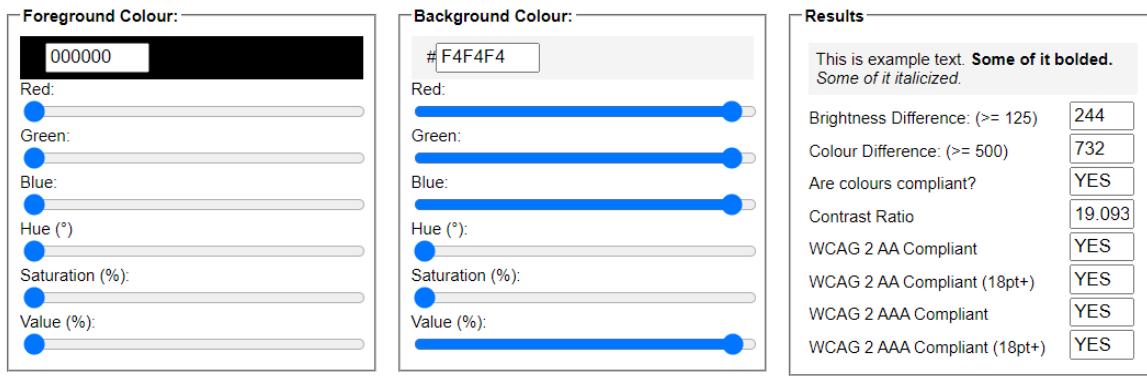


Figure 90: HomePage CCT1

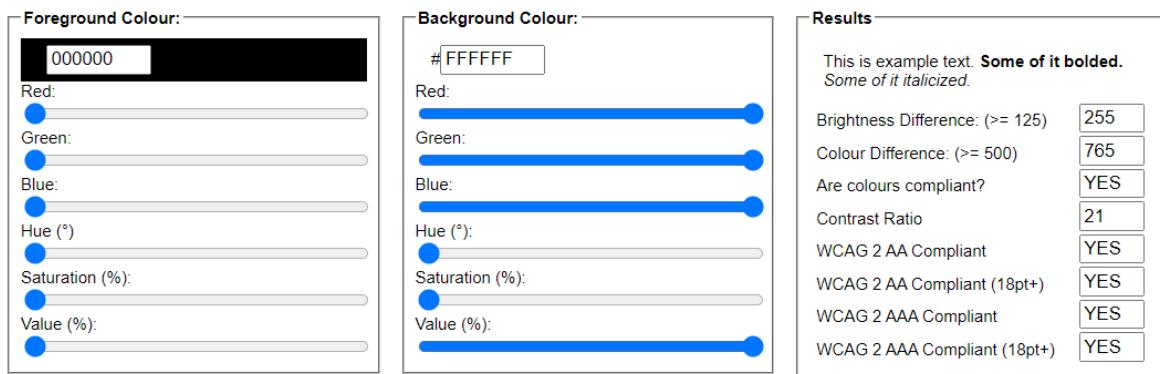


Figure 91: HomePage CCT2

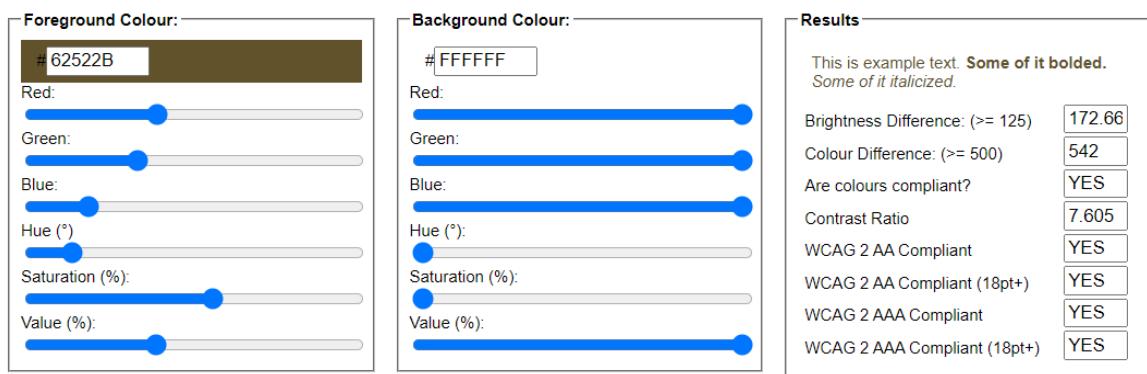


Figure 92: HomePage CCT3

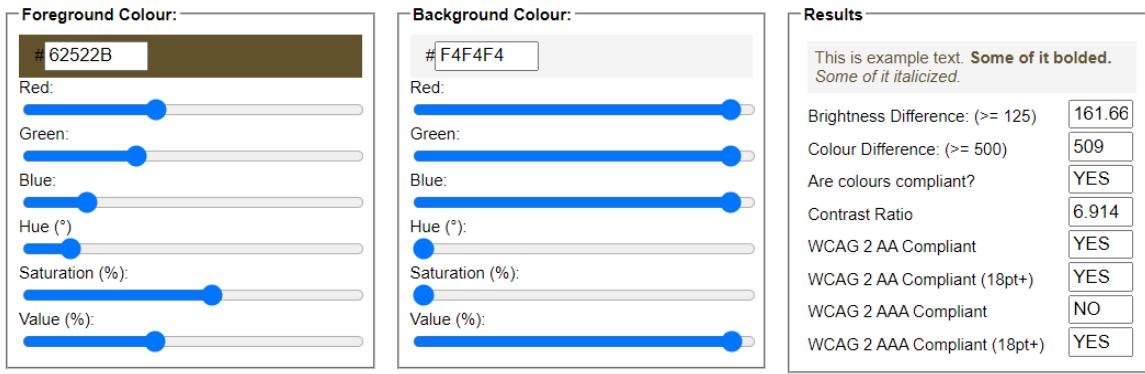


Figure 93: HomePage CCT4

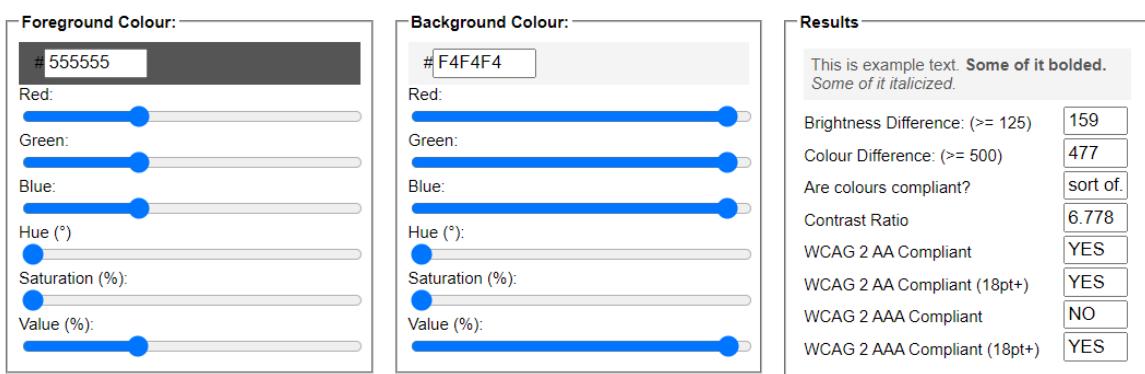


Figure 94: HomePage.Benefit CCT5

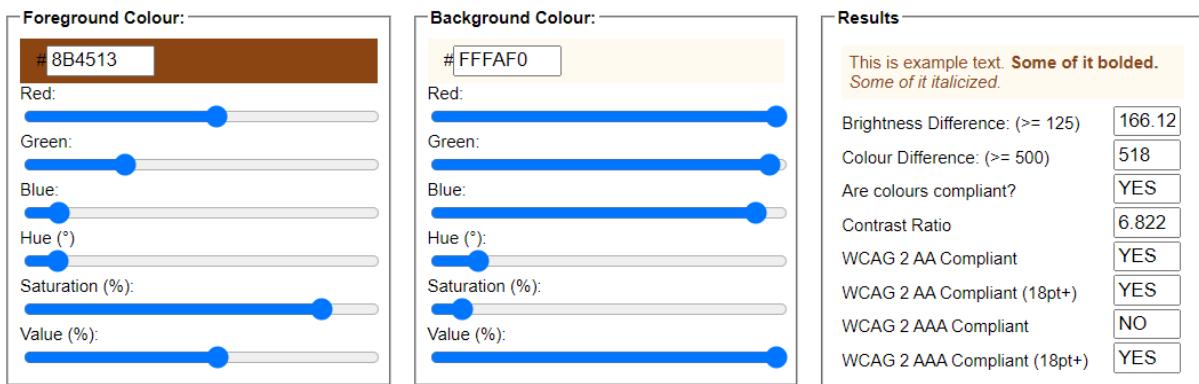


Figure 95: ProductPage BG CCT

## d. Typography / consistency

We used consistent sans-serif fonts with fixed sizes for body text and varied sizes for headings, ensuring clarity. The 'lang' attribute "en" aids screen readers. Proper headings, unique page titles, meta keywords, and @media queries optimize navigation and readability.

```
.links-container a {  
    margin: 5px 0;  
    font-size: 20px;  
    text-decoration: none;  
    color: black;  
    padding-bottom: 2px;  
    font-family: Georgia, serif;}  
  
.links-container a:hover {  
    color: gray;  
    font-size: 23px;  
    font-weight: bold;}  
  
.footer-right {  
    width: 30%;  
    margin-bottom: 10px;}  
  
.footer-right h3 {  
    font-size: 20px;  
    margin-bottom: 10px;  
    margin-top: 25px;  
    font-family: Georgia, serif;}  
  
.footer-right p {  
    font-size: 18px;  
    line-height: 1.6;  
    color: #ccc;  
    margin-bottom: 5px;  
    font-family: "Lucida Console", monospace;  
    margin-left: 5px;}
```

```
.benefit h3 {  
    font-size: 25px;  
    margin-bottom: 5px;  
    color: black;}  
  
.benefit h2 {  
    font-size: 50px;  
    margin-bottom: 15px;  
    font-family: "Papyrus", fantasy;  
    margin-top: 15px;  
    color: black;  
    text-shadow: 2px 2px 4px black;}  
  
.benefitSubHead {  
    font-size: 25px;  
    font-family: "Papyrus", fantasy;  
    text-shadow: 1px 1px 2px black;  
    line-height: 1.6;  
    margin-bottom: 5px;  
    margin-top: 5px;  
    color: black;}  
  
.benefit p {  
    font-size: 20px;  
    line-height: 1.6;  
    color: black;}
```

Figure 96: FooterText CSS

Figure 97: Home.Benefits.Text Css

```
.main {  
    margin-top: 135px;  
    padding: 10px;  
    background-color: black;  
    color: white;  
    height: 80%;  
    font-family: 'Brandon Grotesque', 'Trebuchet MS', sans-serif;  
}
```

Figure 98: Student3 CS

## **7. Accessibility**

### **a. Text Accessibility Techniques**

We used consistent sans-serif fonts, set the 'lang' attribute to "en", employed proper headings, unique page titles, meta keywords, and @media queries to ensure accessibility and device compatibility.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="description" content="CMS WEBSITE">
    <meta name="keywords" content="HTML, CSS, JavaScript">
    <meta name="author" content="Mathusha Kannathasan">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WELCOME TO CMS!!! HOME | CMS</title>
```

*Figure 99: Meta&Title usage*

```
/* Main content container */
.main-content {
  font-family: 'Brandon Grotesque', 'Trebuchet MS', sans-serif;
  color: #333;
  box-sizing: border-box;
  width: 84%;
  margin: 130px auto;
  padding: 10px;
  background-color: #fdf5e6; /* Light beige */
  border-radius: 10px;
  border: 1.3px solid #333;
  box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}

/* Page title */
h1 {
  text-align: center;
  color: #8b4513; /* Brown */
  font-size: 3.4em;
  margin-top: 12px;
  text-shadow: 0 5px 4px rgba(0, 0, 0, 0.28);
  font-weight: 400;
  text-transform: uppercase;
  line-height: 1;
}

/* Section headings */
h2 {
  color: #8b4513; /* Brown */
  font-size: 2.5em;
  margin-top: 5px;
  text-align: center;
  text-shadow: 0 5px 4px rgba(0, 0, 0, 0.28);
  text-transform: uppercase;
  line-height: 1;
}
```

*Figure 100: Proper heading usage*

```

@media (max-width: 1515px) {
    body {
        width: 100%;
    }
}

```

*Figure 101: Media usage*

## b. Image Accessibility Techniques

We used descriptive alt text, interactive videos, and animated backgrounds. Responsive design, hover effects, and animations enhance navigation, making the website visually appealing, accessible, and engaging.

### Alt feature

```

<div class="team">
    
    
    
</div>

```

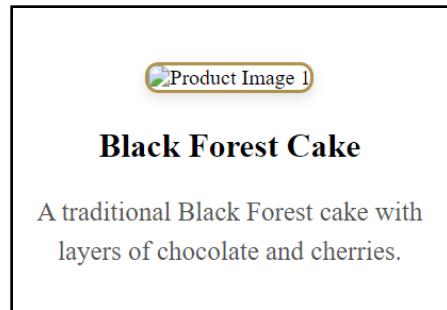
*Figure 102: AboutUS Html*

```

<!--Here the top 4 products will appear-->
<section class="fourthView">
    <h2>Our Latest Products...</h2>
    <div class="menu-items-container">
        <div class="menu-item">
            <a href="#">
            <div class="menu-item-info">
                <h3>Black Forest Cake</h3>
                <p>A traditional Black Forest cake with layers of chocolate and cherries.</p>
            </div></a>
        </div>
        <div class="menu-item">
            <a href="#">
            <div class="menu-item-info">
                <h3>Lemon Drop CupCake</h3>
                <p>Springy vanilla cupcake topped with our lemon buttercream frosting.</p>
            </div></a>
        </div>
        <div class="menu-item">
            <a href="#">
            <div class="menu-item-info">
                <h3>Chocolate CupCake</h3>
                <p>A dark chocolate sponge cake topped with our buttercream.</p>
            </div></a>
        </div>
        <div class="menu-item">
            <a href="#">
            <div class="menu-item-info">
                <h3>Vanilla CupCake</h3>
                <p>Classic fluffy cupcake topped with our buttercream and sprinkles.</p>
            </div></a>
        </div>
    </div>
</section>

```

*Figure 103: HomeTopMenu Html*



*Figure 104: Alt Usage*

### Hover effect:

```
.product-card button:hover {  
    background-color: #e65a00;  
    transform: scale(1.05);  
}  
  
.product-card:hover {  
    transform: scale(1.04);  
    border: 3px solid #ae924d;  
}
```

*Figure 105: Product Hover CSS*



*Figure 106: Hover effect for Products*

## Animation & Transition Effect

```
@keyframes scroll {
  0% {
    transform: translateX(0); /* Start scrolling from the beginning */
  }
  100% {
    transform: translateX(-100%); /* Scroll all items */
  }
}
```

Figure 107: Scroll Animation CSS



Figure 108: Scroll Animation

```
/* Animation class for details reveal */
.animate_reveal {
  animation: reveal 2s ease forwards;
}

@keyframes reveal {
  0% {
    opacity: 0;
    transform: scale(0.8);
  }
  100% {
    opacity: 1;
    transform: scale(1);
  }
}
```

Figure 109: Home.Surprise Animation CSS



*Figure 110: Home.Surprise Animation*

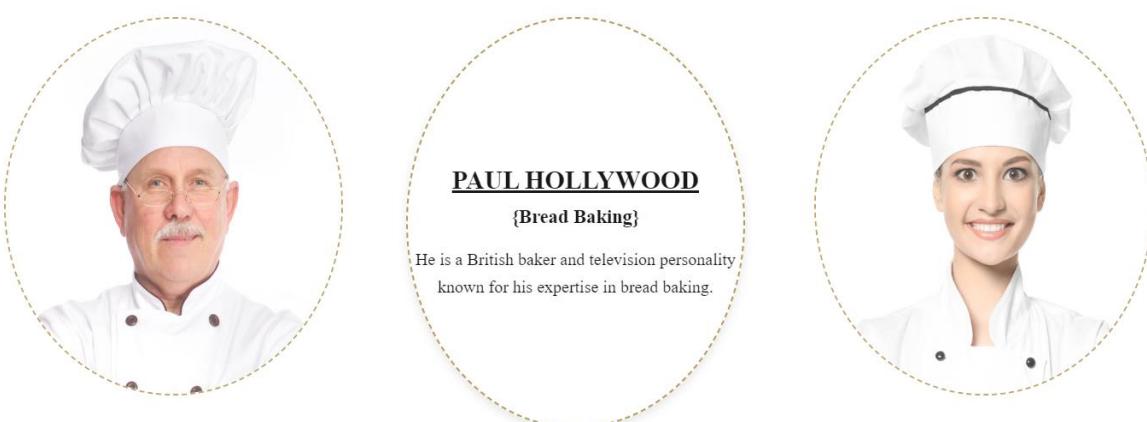
```
.flip-card {
    perspective: 1000px; /* Adds depth to the flip effect */
}

.flip-card-inner {
    position: relative;
    width: 100%;
    height: auto;
    text-align: center;
    transition: transform 0.6s;
    transform-style: preserve-3d;
}

.flip-card:hover .flip-card-inner {
    transform: rotateY(180deg);
}

.flip-card-front,
.flip-card-back {
    position: absolute;
    width: 100%;
    height: 100%;
    backface-visibility: hidden;
}
```

*Figure 111: CMS.TopChef Flip CSS*



*Figure 112: CMS.TopChef Flip*

```
.fadeIn {
    animation-name: fadeIn;
    animation-duration: 3s; }

.slideInRight {
    animation-name: slideInRight;
    animation-duration: 3s; }

.slideInLeft {
    animation-name: slideInLeft;
    animation-duration: 3s; }

@keyframes fadeIn {
    0% { opacity: 0; }
    100% { opacity: 1; } }

@keyframes slideInRight {
    0% {
        opacity: 0;
        transform: translateX(100px); }
    100% {
        opacity: 1;
        transform: translateX(0); } }

@keyframes slideInLeft {
    0% {
        opacity: 0;
        transform: translateX(-100px); }
    100% {
        opacity: 1;
        transform: translateX(0); } }
```

Figure 113: Animation for HomePage.FirstView CSS

## c. Table Accessibility Techniques

Our website uses tables to present information clearly in sections like FAQ, Order Procedures, Cart, and Checkout. We ensure accessibility with descriptive captions, `<thead>` for headers, and `<th>` for screen readers. Data is organized into rows (`<tr>`) and columns (`<td>`) to maintain a logical order.

```
<table id="cart-table">
  <thead>
    <tr>
      <th>Image</th>
      <th>Name</th>
      <th>Price</th>
      <th>Quantity</th>
      <th>Total</th>
      <th>Action</th>
    </tr>
  </thead>
  <tbody>
    <!-- Cart items will be loaded here --&gt;
  &lt;/tbody&gt;
&lt;/table&gt;</pre>
```

Figure 114: CartTable Html

```
/* Table styles */
table {
  width: 100%;
  border-collapse: collapse;
  margin-bottom: 20px;
  border-radius: 10px;
  overflow: hidden;
}

table,
th,
td {
  border: 1px solid #a6432c;
}

th,
td {
  padding: 15px;
  text-align: center;
}

th {
  background-color: #f2f2f2;
  color: #333;
}
```

Figure 115: CartTable CSS

```

function loadCart() {
    const cart = JSON.parse(localStorage.getItem('cart')) || [];
    const cartTableBody = document.querySelector('#cart-table tbody');
    const subtotalElement = document.getElementById('subtotal');
    const discountElement = document.getElementById('discount');
    const finalTotalElement = document.getElementById('final-total');
    const pointsElement = document.getElementById('points');

    cartTableBody.innerHTML = '';
    let subtotal = 0;

    cart.forEach(item => {
        console.log('Item:', item);

        if (typeof item.price !== 'number') {
            console.error('Invalid price:', item.price);
            return;
        }
        const itemTotal = item.price * item.quantity;
        subtotal += itemTotal;
        const row = document.createElement('tr');
        row.innerHTML =
            `
                <td>
                    <a href="CMSPRODUCTDETAILS.html?category=${item.category}&id=${item.id}">
                        
                    </a>
                </td>
                <td>${item.name}</td>
                <td>Rs${item.price.toFixed(2)}</td>
                <td><input type="number" value="${item.quantity}" min="1" onchange="updateQuantity('${item.category}', ${item.id}, this.value)"></td>
                <td>Rs${itemTotal.toFixed(2)}</td>
                <td><button onclick="removeFromCart('${item.category}', ${item.id}, this)">Remove</button></td>
            `;
        cartTableBody.appendChild(row);
    });
}

```

**Figure 116: LoadCartTable JS**

YOUR ORDER					
IMAGE	NAME	PRICE	QUANTITY	TOTAL	ACTION
	Chocolate Cake	Rs2200.00	<input type="text" value="5"/>	Rs11000.00	<button>Remove</button>
	Strawberry Tea Tower	Rs1200.00	<input type="text" value="1"/>	Rs1200.00	<button>Remove</button>
	Red Velvet Cake	Rs3200.00	<input type="text" value="1"/>	Rs3200.00	<button>Remove</button>
	Glazed Donuts	Rs450.00	<input type="text" value="2"/>	Rs900.00	<button>Remove</button>

**Figure 117: CartTable**

```

<table>
    <caption>Delivery Charge Details</caption>
    <tr>
        <th>Category</th>
        <th>Areas</th>
        <th>Charges</th>
    </tr>

```

*Figure 118: DeliveryTable Html*

Category	Areas	Charges
Colombo Suburbs	Bambalapitiya, Bloemendhal, Borella, Cinnamon Gardens, Dematagoda, Fort (Colombo), Grandpass, Havelock Town, Hulftsdorp, Kirulapone, Kirulapone North, Kollupitiya, Kotahena, Kohuwala, Madampitiya, Maligawatta, Maradana, Mattakkuliya, Modara, Narahenpita, Pamankada, Panchikawatte, Pettah, Slave Island, Union Place, Wellawatte	Rs. 500
Areas around Colombo	Sri Jayawardeneepura Kotte, Nawala, Nugegoda, Rajagiriya, Welikada, Dehiwala, Kalubowila, Kohuwala, Mount Lavinia, Ratmalana	Rs. 700
Colombo Outer Suburbs	Battaramulla, Homagama, Ja-Ela, Kadawatha, Kaduwela, Kandana, Katunayake, Kelaniya, Kiribathgoda, Kolonnawa, Koswatte, Kottawa, Maharagama, Malabe, Moratuwa, Oruwala, Pannipitiya, Peliyagoda, Piliyandala, Ragama, Thalawathugoda, Wattala, Wickramasinghapura	Rs. 1000

Delivery Charge Details

*Figure 119: DeliveryTable*

## d. Form Accessibility Techniques

We used clear labels, placeholders, JavaScript validation, and 'autocomplete' for efficiency. 'Fieldset' and 'legend' enhance clarity, while a custom popup shows a summary for review post-submission.

```
<form id="checkout-form">
  <div class="form-group">
    <label for="name">Name:</label>
    <input type="text" id="name" name="name" placeholder="Name">
  </div>
  <div class="form-group">
    <label for="email">Email:</label>
    <input type="email" id="email" name="email" placeholder="Email">
  </div>
  <div class="form-group">
    <label for="address">Address:</label>
    <input type="text" id="address" name="address" placeholder="Address">
  </div>
  <div class="form-group">
    <label for="phone">Phone:</label>
    <input type="tel" id="phone" name="phone" placeholder="Phone-No">
  </div>
  <div class="form-group">
    <label for="points">Points:</label>
    <input type="number" id="points" name="points" min="0" value="0">
  </div>
</form>
```

Figure 120: CheckoutForm Html

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>Sign Up | CMS</title>
7    <link rel="stylesheet" href="SignUp.css">
8    <script src="TEXTPOPANIMATION.js" defer></script>
9    <link rel="icon" type="image/x-icon" href="Logoo.png">
10   </head>
11   <body>
12     <video class="video-background" autoplay loop muted>
13       <source src="SignUp_bg2.mp4" type="video/mp4">
14       <track kind="captions" src="video-captions.vtt" srclang="en" label="English">
15     </video>
16     <div class="content-wrapper">
17       <div class="wrapper">
18         <form action="" id="signupForm" method="post">
19           <h1>Sign up:</h1>
20           <div class="input-box">
21             <label for="Name">Name:</label>
22             <input type="text" id="Name" name="Name">
23           </div>
24           <div class="input-box">
25             <label for="Age">Age:</label>
26             <input type="number" id="Age" name="Age">
27           </div>
28           <div class="input-box">
29             <label for="Gender">Gender:</label>
30             <select id="Gender" name="Gender">
31               <option value="" disabled selected>Select gender</option>
32               <option value="male">Male</option>
33               <option value="female">Female</option>
34               <option value="rather-not-say">Rather not say</option>
35             </select>

```

Figure 121: SignupForm Html

```

</div>
<div class="input-box">
    <label for="Occupation">Occupation</label>
    <input type="text" id="Occupation" name="Occupation">
</div>
<div class="input-box">
    <label for="Email">Email</label>
    <input type="email" id="Email" name="Email">
</div>
<div class="input-box">
    <label for="password">Password</label>
    <input type="password" id="password" name="password">
</div>
<div class="input-box">
    <label for="Choice">Category of choice </label>
    <select id="Choice" name="Choice">
        <option value="" disabled selected>Select Choice</option>
        <option value="Cakes">Cakes</option>
        <option value="Cupcakes">Cupcakes</option>
        <option value="Beverages">Beverages</option>
        <option value="Donuts">Donuts</option>
        <option value="Macaroons">Macaroons</option>
        <option value="Brownies">Brownies</option>
    </select>
</div>

<button type="submit" class="wrapper button" id="button" name="button">Sign Up</button>
<button type="reset" class="wrapper Rbutton" name="Rbutton">Reset</button>
<div class="Login">
    <p>Already have an account? <a href="#" aria-label="Log in to your account">Log in</a></p>

```

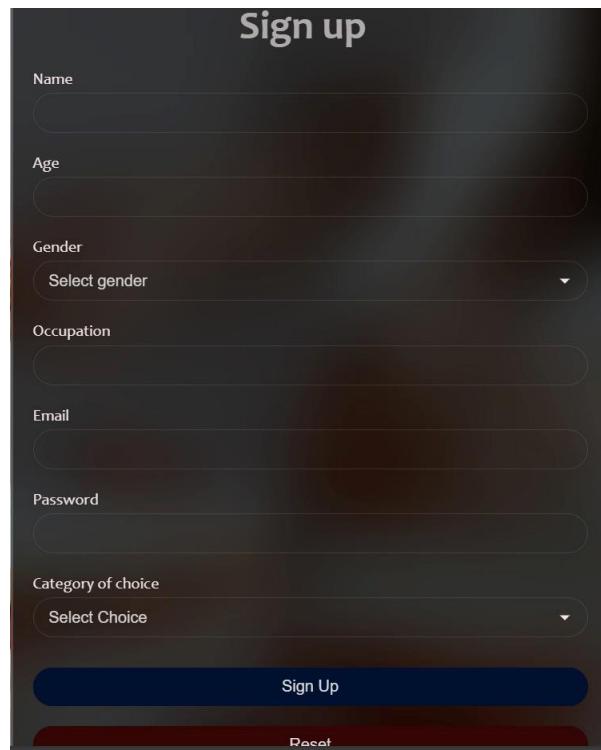
*Figure 122: Signup Html*

```

        </div>
    </form>
</div>
<div class="UserMessage" id="UserMessage" role="alert" aria-live="assertive" style="display: none;">
    Thank you for signing up! The recommended results will be shown shortly.
</div>
<footer class="footer">
    <p>© 2024 CMS Bakery. All rights reserved.</p>
    <p>Edited By: <a href="CMSCHANMINI.html">chanmini_2410210_20232676</a></p>
</footer>
<script src="signUp.js"></script>
</body>
</html>

```

*Figure 123: Signup Html*



*Figure 124: SignupPage Form*

```

document.addEventListener('DOMContentLoaded', function () {
  const form = document.getElementById('signupForm');
  const userMessage = document.getElementById('UserMessage');
  const inputs = form.querySelectorAll('input, select');

  // Function to validate email
  function isValidEmail(email) {
    const emailRegex = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
    return emailRegex.test(email);
  }

  // Function to validate password strength
  function isStrongPassword(password) {
    return password.length >= 8 && /[A-Z]/.test(password) && /[a-z]/.test(password) && /[0-9]/.test(password);
  }

  form.addEventListener('submit', function (event) {
    event.preventDefault();

    let isValid = true;

    inputs.forEach(function (input) {
      if (!input.value.trim()) [
        isValid = false;
        input.classList.add('error');
        input.setAttribute('aria-invalid', 'true');
      ] else {
        input.classList.remove('error');
        input.removeAttribute('aria-invalid');
      }

      // Specific validation for email and password
      if (input.type === 'email' && !isValidEmail(input.value)) {
        isValid = false;
        input.classList.add('error');
      }
    });
  });
}

```

*Figure 125: SignupForm JS1*

```

        input.setAttribute('aria-invalid', 'true');
    }
    if (input.type === 'password' && !isStrongPassword(input.value)) {
        isValid = false;
        input.classList.add('error');
        input.setAttribute('aria-invalid', 'true');
    }
});

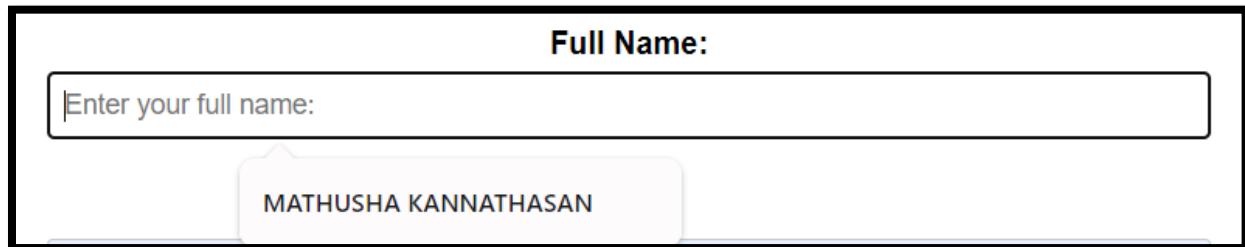
if (isValid) {
    userMessage.style.display = 'block';
    userMessage.textContent = 'Thank you for signing up! The recommended results will be shown shortly.';

    setTimeout(function () {
        userMessage.style.display = 'none';
        form.submit();
    }, 2000);
} else {
    alert('Please fill in all fields correctly.');
}

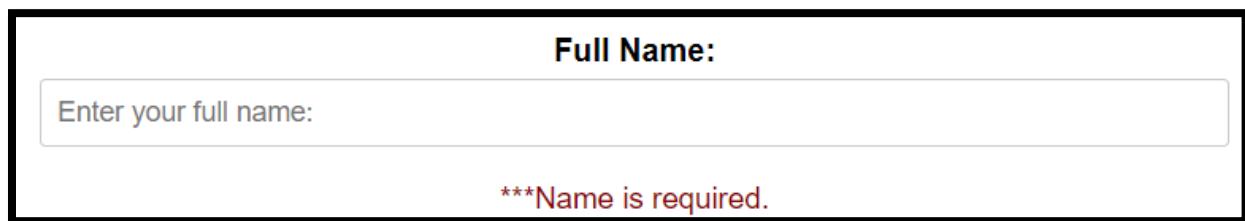
// Add focus and blur event listeners for better keyboard navigation
inputs.forEach(input => {
    input.addEventListener('focus', function() {
        this.style.boxShadow = '0 0 5px #3970f0';
    });
    input.addEventListener('blur', function() {
        this.style.boxShadow = 'none';
    });
});
}
);

```

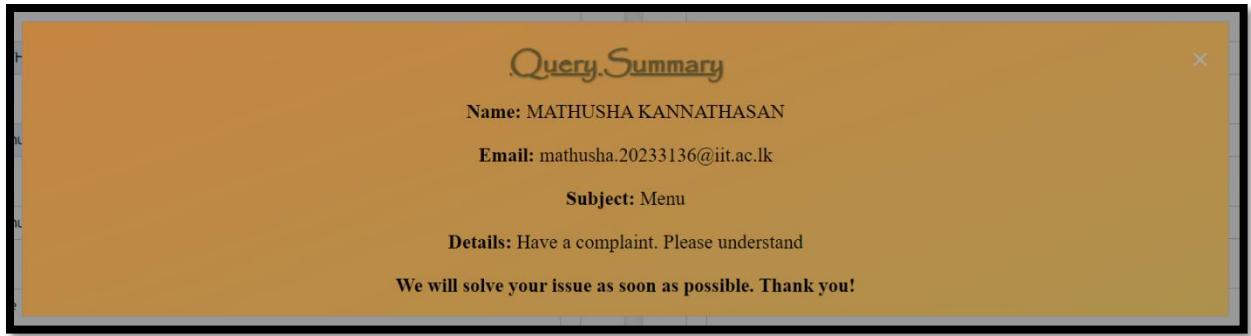
*Figure 126: SignupForm JS2*



*Figure 127: Form Autocomplete*



*Figure 128: Form IncompleteField*



*Figure 129: FormSummaryPopup*

## Need Help?

**Full Name:**  
Enter your full name:

**Email:**  
Enter your email address:

**Issue Topic:**  
Select...

**Issue Details:**  
Enter your details about the issue:

*Figure 130: QueryForm*

**Personal Information**

First Name:	Enter your first name...
Last Name:	Enter your last name...
Gender:	<input checked="" type="radio"/> Male <input type="radio"/> Female
Contact Number:	Enter your contact number...
Date of birth:	mm/dd/yyyy <input type="button" value=""/>
Email:	Enter your email...
Address:	Enter your address...
City:	Enter your city...
Zipcode:	Enter your zipcode...
Country:	Enter your country...

Figure 131: VacancyForm with legend

```
<form id="vacancyForm" method="post">
    <h1>JOIN OUR CREW!!!</h1>
    <fieldset>
        <legend>Personal Information</legend>
        <div class="form-group">
            <label for="Fname">First Name:</label>
            <input type="text" id="Fname" name="Fname" placeholder="Enter your first name...">
            <div class="error-message" id="FnameError"></div>
        </div>

        <div class="form-group">
            <label for="Lname">Last Name:</label>
            <input type="text" id="Lname" name="Lname" placeholder="Enter your last name...">
            <div class="error-message" id="LnameError"></div>
        </div>

        <div class="group">
            <div class="Genders">
                <label id="label">Gender:</label>
            </div>
            <div class="Radio">
                <input type="radio" id="Male" name="Gender">
                <label for="Male">Male</label>

                <input type="radio" id="Female" name="Gender">
                <label for="Female">Female</label>
            </div>
            <div class="error-message" id="GenderError"></div>
        </div>
    </fieldset>
</form>
```

Figure 132: VacancyForm Html

```

<div class="QueryForm">
  <h2>Need Help?</h2>
  <form id="contactForm" method="post">
    <label for="name">Full Name:</label>
    <input type="text" id="name" name="name" onblur="convertToUpperCase(this)" placeholder="Enter your full name;">
    <div class="error-message" id="nameError"></div>
    <label for="email">Email:</label>
    <input type="email" id="email" name="email" placeholder="Enter your email address;">
    <div class="error-message" id="emailError"></div>
    <label for="theme">Issue Topic:</label>
    <select id="theme" name="theme">
      <option value="">Select...</option>
      <option value="menu">Menu</option>
      <option value="discount">Discount</option>
      <option value="delivery">Delivery</option>
      <option value="payment">Payment</option>
      <option value="returns">Returns</option>
      <option value="other">Other</option>
    </select>
    <div class="error-message" id="themeError"></div>
    <label for="details">Issue Details:</label>
    <textarea id="details" name="details" rows="4" placeholder="Enter your details about the issue;"></textarea>
    <div class="error-message" id="detailsError"></div>
    <button type="reset">Reset</button>
    <button type="submit">Submit</button>
  </form>
  <div id="popupModal" class="modal">
    <div class="modal-content">
      <span class="close">&times;</span>
      <h2 class="summaryHead">Query Summary</h2>
      <div id="summaryContent"></div>
    </div>
  </div>
</div>

```

*Figure 133: QueryFormHtml*

```

// Validate Name field
if (name === '') {
  document.getElementById('nameError').textContent = '***Name is required.';
  isValid = false;
}

// Validate Email field
if (email === '') {
  document.getElementById('emailError').textContent = '***Email is required.';
  isValid = false;
} else if (!isValidEmail(email)) {
  document.getElementById('emailError').textContent = '***Please enter a valid email address.';
  isValid = false;
}

// Validate Query Subject (Theme) field
if (theme === '') {
  document.getElementById('themeError').textContent = '***Query subject is required.';
  isValid = false;
}

// Validate Query Details field
if (details === '') {
  document.getElementById('detailsError').textContent = '***Query details are required.';
  isValid = false;
}

```

*Figure 134: QueryFormValidate JS*

## 8. Accessibility Test

The screenshot shows the WAVE web accessibility evaluation tool interface. The left panel displays the 'Summary' report with the following data:

Category	Count
Errors	0
Contrast Errors	0
Alerts	0
Features	1
Structural Elements	2
ARIA	0

A message at the bottom states: "Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility." The right panel shows a preview of the CMS Bakery website's presentation page, featuring a welcome banner, team member names, and a dessert image.

Figure 135: PresentationPage AT

The screenshot shows the WAVE web accessibility evaluation tool interface. The left panel displays the 'Summary' report with the following data:

Category	Count
Errors	0
Contrast Errors	0
Alerts	12
Features	25
Structural Elements	52
ARIA	0

A message at the bottom states: "Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility."

Figure 136: HomePage AT

The screenshot shows the WAVE web accessibility evaluation tool interface. The left panel displays the 'Summary' report with the following data:

Category	Count
Errors	0
Contrast Errors	0
Alerts	1
Features	7
Structural Elements	2
ARIA	0

A message at the bottom states: "Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility."

Figure 137: SingupPage AT

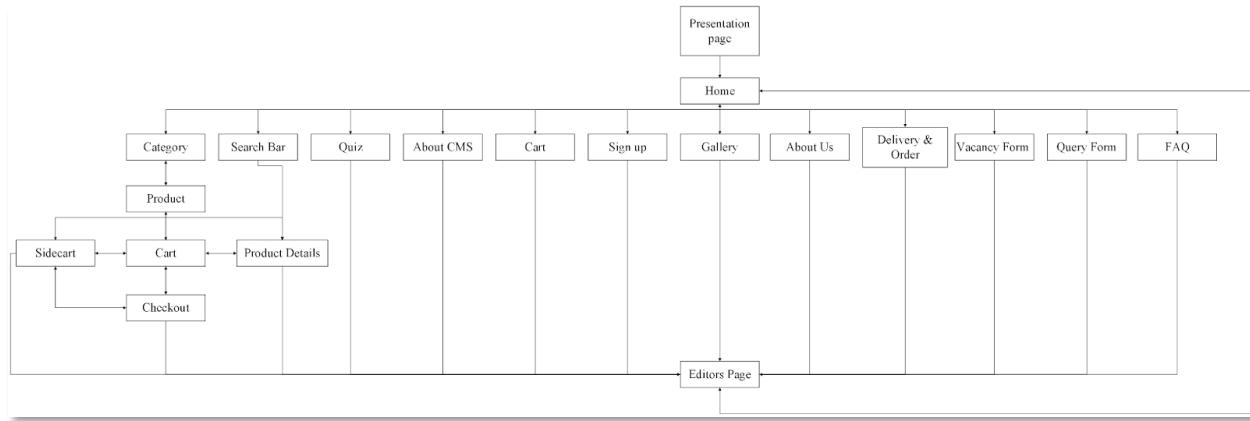
The screenshot shows the WAVE web accessibility evaluation tool interface. The left panel displays the 'Summary' report with the following data:

Category	Count
Errors	0
Contrast Errors	0
Alerts	12
Features	31
Structural Elements	20
ARIA	0

A message at the bottom states: "Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility."

Figure 138: ProductPage AT

## **9. Site Diagram**



*Figure 139: SiteDiagram*

## **10. Self-Reflection**

### **a. Student 1**

Creating the splash screen, gallery page, and sign-up page taught me a lot about security, speed optimization, and UI design. While the gallery page concentrated on responsive layouts and image optimization, the sign-up page prioritized data security and input validation. The goal of the splash screen was to make an impression that would stick. By striking a balance between technical effectiveness, aesthetics, and user experience, these initiatives improved my abilities.

### **b. Student 2**

Developing the homepage posed challenges, including adding sections like About CMS, Delivery Procedures, and FAQs, implementing form validations, and integrating a search bar. I faced difficulties with animations, transitions, and customized pop-ups for promotions. Screen size constraints and navigation planning were also tough. Despite these, we created a user-friendly, nearly flawless website using HTML, CSS, and JavaScript, gaining valuable teamwork and collaboration experience.

## c. Student 3

In this task, I focused on ensuring data accuracy by correcting duplication and errors in the products object. Additionally, I enhanced the user interface by adding text boxes above category images. My contribution involved meticulous attention to detail and a user-centric approach, resulting in a functional and visually appealing product categorization system.

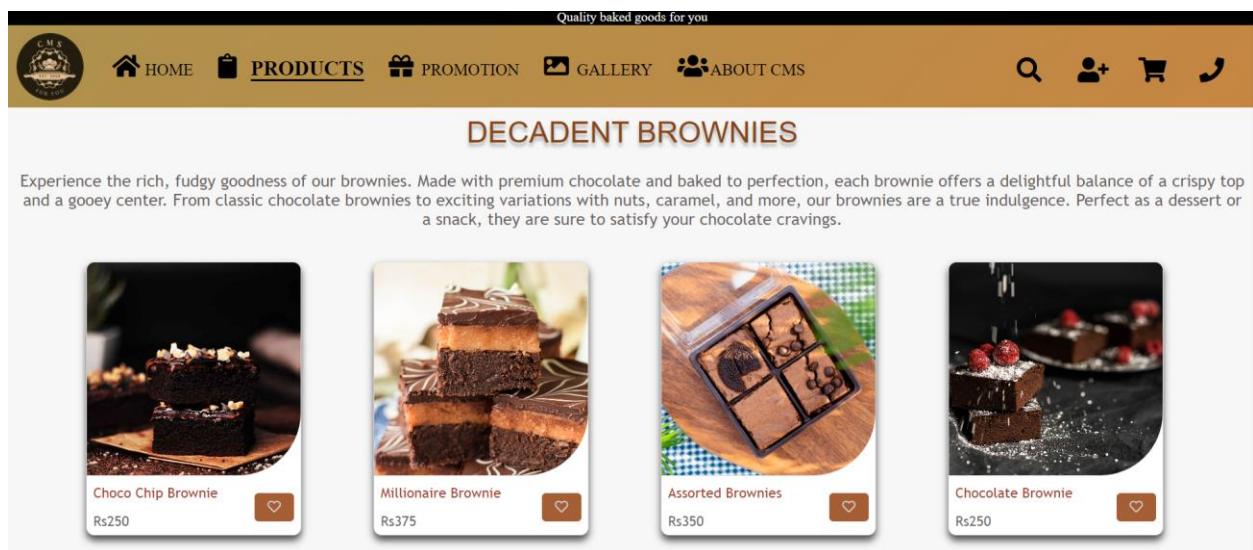
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## **12. Appendix**



*Figure 140: CategoriesView*



*Figure 141: ItemsView*