

SWEET DELIGHT BAKERY.

INTRODUCTION

"Craving a slice of heaven? Look no further! .Sweet Delight Bakery is your one -stop shop for the most delectable cakes in Mauritius .From classic to contemporary , we have something to satisfy every sweet tooth."

hp

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Screenshots and brief descriptions of the website.

1. Navigation and Layout

This section explains the structure and functionality of the navigation system and layout across the website, including responsive design features for different screen sizes.

Header & Navigation bar

- The website features a sticky header that remains at the top of the page as users scroll. The
 navigation bar includes links to different sections (Home, About Us, Products, Contact) and is
 equipped with a responsive hamburger menu for mobile devices.
- o The logo and title are clickable, allowing users to return to the homepage.
- Responsive Design: The header's responsiveness is achieved through CSS media queries and the usage of Flexbox. On smaller screens, the hamburger icon triggers the navigation menu, ensuring a user-friendly experience.

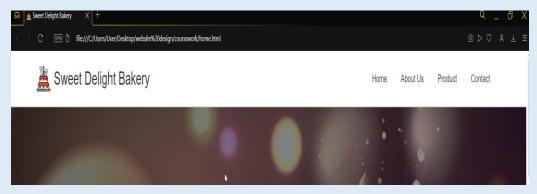


Figure 1 Header & Navbar

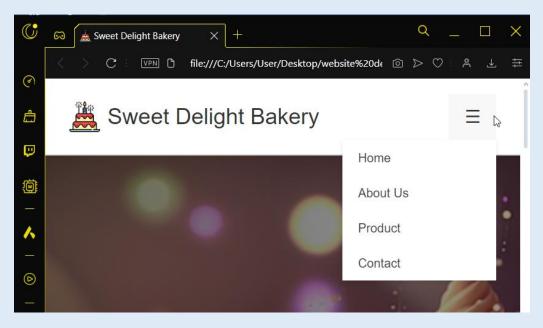


Figure 2 Hamburger for smaller screen

Figure 3 Snippet of html structure for header & Navbar

```
/* Header Styles */
header {
    background: ■#fff;
    padding: 20px 0;
    border-bottom: 2px solid ■#ddd;
    position: sticky;
    top: 0;
    z-index: 1000;

    container {
        width: 90%;
        margin: 0 auto;
        display: flex;
        justify-content: space-between;
        align-items: center;

    display: flex;
    align-items: center;

    font-size: 1.8em;
    color: ■#c87c6b;

    logo: □#c87c6b;

    logo: □#c87c6b;
}
```

Figure 4 part of css code for header

Figure 5 part of css code for navbar

Hero section

The homepage consists of a hero image and a 'Discover our offers' button. The button links to the promotions section, improving the user journey by highlighting key offerings immediately upon visiting the homepage

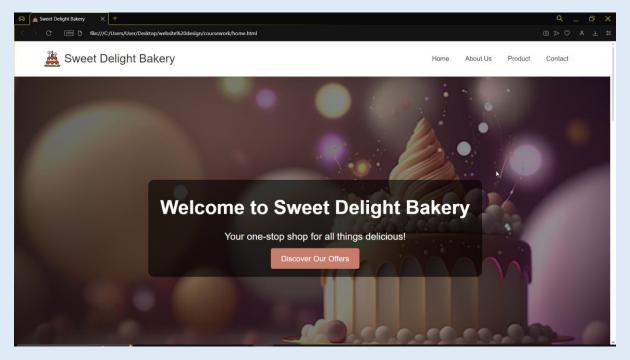


Figure 6 Hero image

Figure 7 html code for hero image

```
#hero {
                  position: relative;
                   height: 100vh;
                  width: 100vw;
                  background: linear-gradient (to \ right, \ \Box rgba(\emptyset, \ \emptyset, \ \emptyset, \ \emptyset.6), \ \Box rgba(\emptyset, \ \emptyset, \ \emptyset, \ \emptyset.4)), \ url( \ 'images/hero-bg.jpg' \ '
                  display: flex;
                   justify-content: center;
                  align-items: center;
                  color: □#fff;
.hero-content {
                text-align: center;
                   z-index: 1;
                  padding: 30px;
                  background: ☐rgba(0, 0, 0, 0.6); /* Darker overlay for better text contrast */
                  border-radius: 15px;
.hero-content h2 {
                   font-size: 3em;
                   margin-bottom: 15px;
                   font-weight: 700;
                  font-size: 1.5em;
                  margin-bottom: 20px;
```

Figure 8 part of css code for hero section

Carousel image slider

- The website features a carousel on the homepage to showcase the best-selling cakes.
- Functionality: The carousel allows users to navigate between featured items using next and previous buttons. Each image slides in and out of view with smooth transitions.
- JavaScript is used to power the carousel's functionality, providing users with a smooth experience while navigating through featured products
- Responsive: The carousel adapts to different screen sizes.

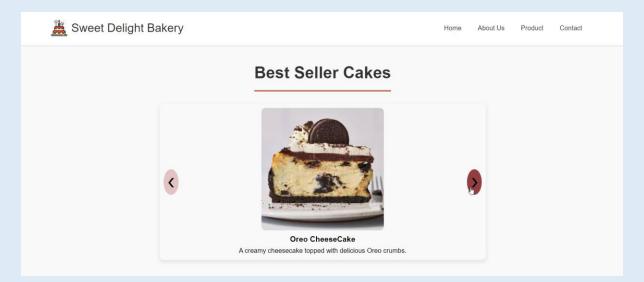


Figure 9 Carousel image slider

```
<h2>Best Seller Cakes</h2>
<div class="carousel">
       <div class="carousel-item">
           <h3>Chocolate Cake</h3>
           Rich and decadent chocolate cake topped with ganache.
       <div class="carousel-item">
           <img src="images/redvelvet.jfif" alt="Red Velvet Cake">
           <h3>Red Velvet Cake</h3>
           Classic red velvet cake with cream cheese frosting.
           <img src="images/oreo-cheesecake.jfif" alt="Oreo cheeseCake">
           <h3>0reo CheeseCake</h3>
          \langle p \rangle A creamy cheesecake topped with delicious Oreo crumbs.\langle /p \rangle
       <div class="carousel-item">
          <h3>Vegan fruitcake</h3>
           A rich and moist cake packed with assorted fruits, perfect for everyone.
       <div class="carousel-item">
           <img src="images/cupcake9.jfif" alt="Honeybee cupcake">
           <h3>Honeybee Cupcake</h3>
           Honey is the star ingredient in these cupcakes, from the batter to the buttercream.
```

Figure 10 Html code for carousel slider

```
.carousel {
   position: relative;
   overflow: hidden;
   width: 100%;
   max-width: 800px; /* Maximum width for larger screens */
   margin: auto;
   border-radius: 10px;
    box-shadow: 0 4px 10px □rgba(0, 0, 0, 0.1);
.carousel-track {
    display: flex;
    transition: transform 0.3s ease-in-out;
.carousel-item {
   min-width: 100%; /* Each item takes full width */
   box-sizing: border-box;
   padding: 10px;
.carousel-item img {
   width: 100%;
   height: auto; /* Maintain aspect ratio */
   max-width: 300px; /* Set a maximum width for images */
    border-radius: 10px;
   object-fit: cover; /* Ensure images fill the container */
.carousel-button {
   position: absolute
```

Figure 11 part of css code for carousel slider

```
document.addEventListener('DOMContentLoaded', () => {
    const track = document.querySelector('.carousel-track');
    const items = document.querySelectorAll('.carousel-item');
    const nextButton = document.querySelector('.next');
    const prevButton = document.querySelector('.prev');

let currentIndex = 0;

function updateCarousel() {
    const itemWidth = items[0].clientWidth;
    track.style.transform = `translateX(${-currentIndex * itemWidth}px)`;
}

nextButton.addEventListener('click', () => {
    currentIndex = (currentIndex + 1) % items.length;
    updateCarousel();
});

prevButton.addEventListener('click', () => {
    currentIndex = (currentIndex - 1 + items.length) % items.length;
    updateCarousel();
});

prevButton.addEventListener('click', () => {
    currentIndex = (currentIndex - 1 + items.length) % items.length;
    updateCarousel();
});
}

});

33 });
```

Figure 12 JavaScript code for carousel slider

Footer section

- This section provides quick access to social media and important links, as well as a newsletter subscription option, improving user engagement.
- Font-awesome library is used for icons of social links.

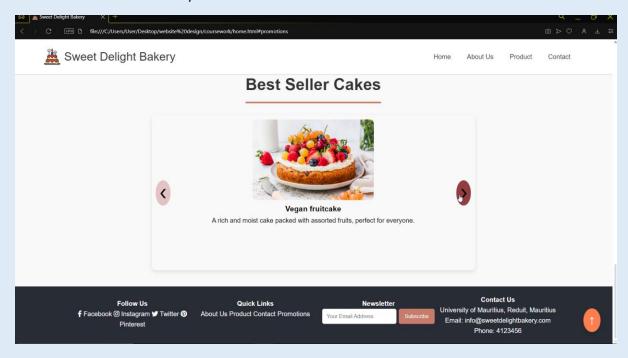


Figure 13 Footer section

```
<div class="footer-container">
        <h4>Follow Us</h4>
        <div class="social-links">
            <a href="https://www.facebook.com"><i class="fab fa-facebook-f"></i> Facebook</a>
            <a href="https://www.instagram.com"><i class="fab fa-instagram"></i> Instagram</a>
            <a href="https://twitter.com"><i class="fab fa-twitter"></i> Twitter</a>
             \verb| \  \   | \underline{ https://www.pinterest.com}| > < i \ class = "fab \ fa-pinterest" > </i> \ Pinterest </a> 
    <div class="footer-section">
     <h4>Quick tinks</h4>
        <div class="quick-links">
            <a href="about.html">About Us</a>
            <a href="product.html">Product</a>
            <a href="contact.html">Contact</a>
            <a href="#promotions">Promotions</a>
    <div class="footer-section footer-newsletter">
        <h4>Newsletter</h4>
            <input type="email" placeholder="Your Email Address" required>
            <button type="submit">Subscribe</button>
        </form>
    <div class="footer-info">
        <h4>Contact Us</h4>
```

Figure 14 html code for footer section

```
footer {
    background: □#282c34;
   color: ■#ffffff;
    padding: 20px 0;
    text-align: center;
.footer-container {
   max-width: 1200px; /* Max width for larger screens */
    margin: 0 auto;
    display: flex;
    flex-wrap: wrap;
    justify-content: space-between;
.footer-section {
    flex: 1 1 200px; /* Responsive layout */
    margin: 10px;
.footer h4 {
    color: ■#c87c6b;
                               Ι
.footer-section a {
    color: ■#ffffff;
    text-decoration: none;
    padding: 5px 0; /* Padding for touch targets */
    transition: color 0.3s; /* Smooth transitions */
```

Figure 15 Css code for footer

Scroll-to-top button

Scroll Detection: A scroll-to-top button appears when the user scrolls more than 300 pixels down the page. This button provides a quick way to return to the top of the page with a smooth scrolling effect when clicked.

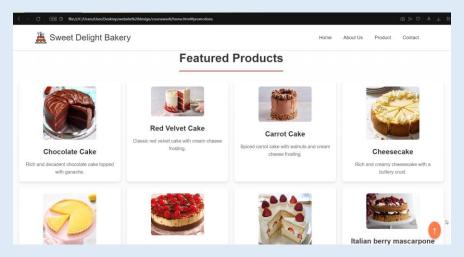


Figure 16 scroll to top button

Figure 17 html code for scroll to top button

```
.scroll-to-top {
   position: fixed;
   bottom: 30px; /* Distance from the bottom */
   right: 30px; /* Distance from the right */
   background-color: ■#ff7f50;
   color: ■white;
   padding: 10px 15px;
   border-radius: 50%;
   text-decoration: none;
    font-size: 1.5em;
   box-shadow: 0 4px 8px □rgba(0, 0, 0, 0.2);
    transition: background-color 0.3s, transform 0.3s;
   opacity: 0; /* Initially hidden */
    visibility: hidden; /* Initially hidden */
 <element class="scroll-to-top visible"> */
 Selector Specificity: (0, 2, 0)
.scroll-to-top.visible {
   opacity: 1; /* Show when visible */
    visibility: visible; /* Show when visible */
.scroll-to-top:hover {
   background-color: ■#ff6347;
   transform: scale(1.1); /* Slightly enlarge on hover */
```

Figure 18 Css code for scroll to top button

Figure 19 JavaScript code for scroll to top button

About us page

The about us page displays information about the bakery

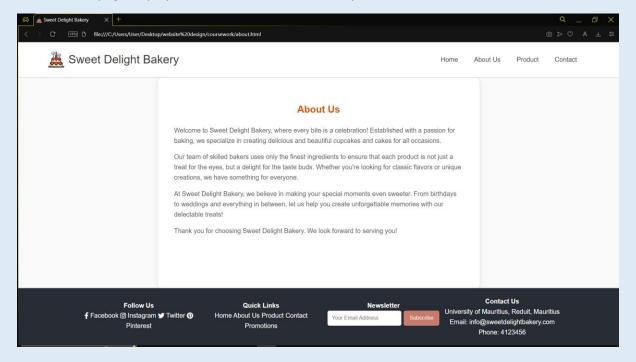


Figure 20 About us page

Product page

The product page displays different category of cakes.

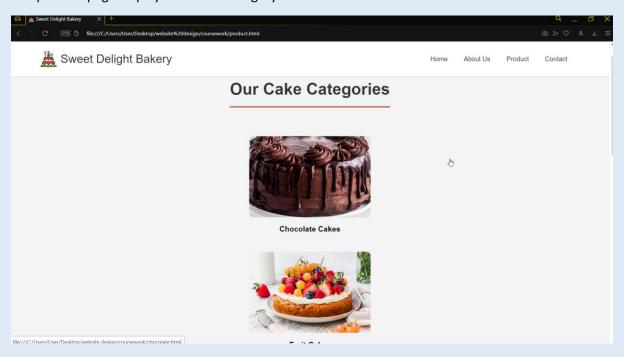


Figure 21 product page

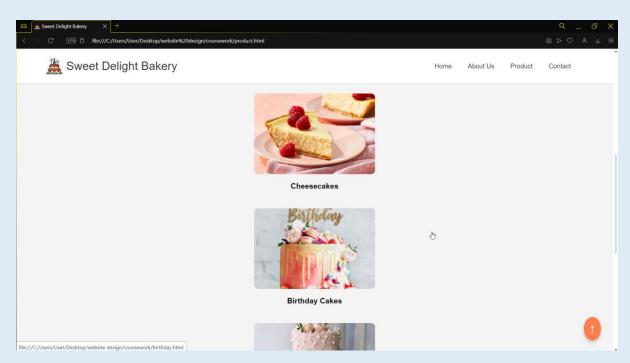


Figure 22 product page

```
◆ product.html > ♦ html > ♦ body > ♦ section.product-page
    <html lang="en">
       <img src="images/img11.jpg" alt="Chocollate Cakes" class="category-image">
                <h3>Chocolate Cakes</h3>
             <a href="fruitcake.html">
                <img src="images/vegan-fruitcake.jfif" alt="Fruit Cakes" class="category-image">
                <h3>Fruit Cakes</h3>
             <a href="cheesecake.html">
                <h3>Cheesecakes</h3>
          <img src="images/birthday2.jfif" alt="Birthday Cakes" class="category-image">
                <h3>Birthday Cakes</h3>
          <div class="category">
             <a href="wedding.html">
                <img src="images/wedding1.jfif" alt="Wedding Cakes" class="category-image">
                <h3>Wedding Cakes</h3>
```

Figure 23 html code for product page

```
# product_styles.css X
                                 wedding.html
                                                   contact.html
                                                                     JS contact_script.js
# product_styles.css > ધ .category
      .product-page {
         padding: 60px 20px; /* Padding around the section */
          text-align: center; /* Center text and images within the section */
      .product-page h2 {
          font-size: 2.5em;
          margin-bottom: 30px;
         color: □#333;
          font-weight: 700;
          border-bottom: 4px solid ■#c87c6b; /* Decorative underline */
          display: inline-block;
          padding-bottom: 10px;
      .category {
40
          margin: 40px 0; /* Space between categories */
      .category a {
          text-decoration: none;
          color: inherit;
      .category-image {
          width: 300px; /* Fixed width for consistency */
          height: 200px; /* Fixed height for consistency */
          object-fit: cover; /* Ensure the image covers the area without stretching */
          border-radius: 10px;
          margin-bottom: 15px; /* Space between image and heading */
          transition: transform 0.3s;
```

Figure 24 css code for product page

Cake category

Each cake category has its own page. (e.g chocolate.html)

- Each product category page displays items in a grid format. Users can browse through different categories of cakes and pastries with product images, descriptions, and "Add to Cart" buttons. (Add to cart button functionality not yet implemented)
- Product Grid: The grid is built using Flexbox, allowing items to wrap and resize for various screen sizes. Each product card has hover effects, displaying product details with animations.
- Product Page Styling: All products are centered and consistently styled using Flexbox. Hovering over product images triggers a zoom effect for better user interaction.
- Each category page has a "back to all cake" button that points to the product.html page

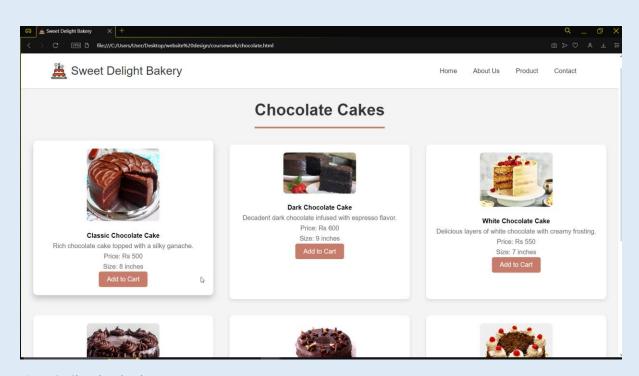


Figure 25 Chocolate.html page

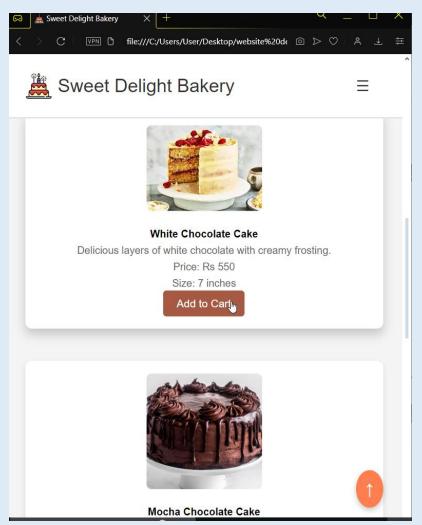


Figure 26 Grid layout adjusted for smaller screen

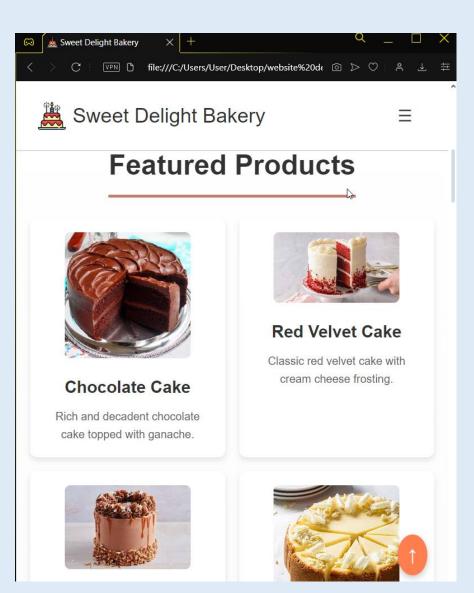


Figure 27 Grid layout adjusted for smaller screen

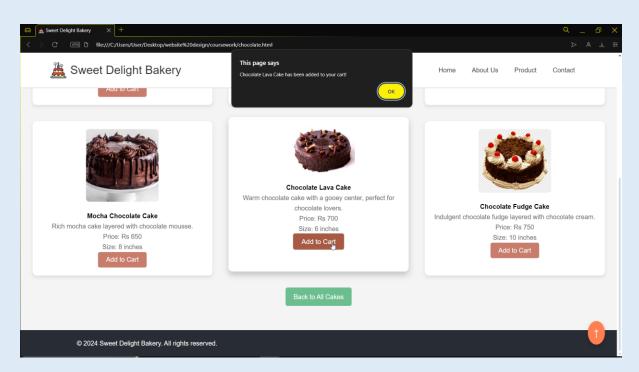


Figure 28 Message alert when add to cart button is triggered

```
home.html
                                                                                      chocolate.html X
♦ chocolate.html > ♦ html > ♦ body > ♦ a#scrollToTopBtn.scroll-to-top
    <html lang="en">
              <img src="images/chocolate.jpg" alt="Chocolate Cake">
              <h4>Classic Chocolate Cake</h4>
              Rich chocolate cake topped with a silky ganache.
              Price: Rs 500
              Size: 8 inches
              <div class="product-item">
              <h4>Dark Chocolate Cake</h4>
              Decadent dark chocolate infused with espresso flavor.
              Price: Rs 600
              Size: 9 inches
              <button class="add-to-cart-btn" onclick="addToCart('Dark Chocolate Cake')">Add to Cart/button>
           <h4>White Chocolate Cake</h4>
              >Delicious layers of white chocolate with creamy frosting.
              <button class="add-to-cart-btn" onclick="addToCart('White Chocolate Cake')">Add to Cart</button>
              <img src="images/img11.jpg" alt="Chocolate Cake">
```

Figure 29 html code for chocolate.html page

```
# product_styles.css × 

⇔ chocolate.html
wedding.html
 # product_styles.css > 43 .category
        .cake-category h2{
              font-size: 2.5em;
              margin-bottom: 30px;
              font-weight: 700;
             border-bottom: 4px solid ■#c87c6b; /* Decorative underline */
              display: inline-block;
             padding-bottom: 10px;
         .cake-category {
              padding: 60px 20px; /* Add padding to match the product page */
              text-align: center; /* Center text and images within the section */
         .cake-category .product-grid {
    display: flex;
              flex-wrap: wrap;
              justify-content: center; /* Center items in the grid */
              margin: 10px; /* Add space between items */
         .product-item .category-image {
              width: 300px; /* Fixed width for consistency */
height: 200px; /* Fixed height for consistency */
              object-fit: cover; /* Ensure the image covers the area without stretching */
display: block; /* Treat images as block elements */
margin: 0 auto: /* Center the images */
```

Figure 30 part of css code for category cake

```
product.html
               wedding.html
                                                    JS contact_script.js
                                                                        # product_styles.css X
                                                                                              JS hor
# product_styles.css > 43 .back-to-all-btn
       .add-to-cart-btn {
           background-color: ■#c87c6b;
           color: □#fff;
           padding: 10px 20px;
          border-radius: 5px;
          text-decoration: none;
           font-size: 1em;
           transition: background-color 0.3s, transform 0.3s;
           border: none;
           cursor: pointer; /* Change cursor on hover */
       .add-to-cart-btn:hover {
           background-color: ■#a65a43;
           transform: scale(1.05);
       .back-to-all-btn {
          background-color: ■#6dbe8f;
          color: □#fff;
           padding: 10px 20px; /* Padding around the text */
120
          border-radius: 5px;
          text-decoration: none;
           font-size: 1em;
           transition: background-color 0.3s, transform 0.3s; /* Transition effects */
           display: inline-block;
           margin-top: 20px; /* Space above the button */
       .back-to-all-btn:hover {
           background-color: ■ #a65a43; /* Darker shade on hover */
```

Figure 31 css code for button styling

Figure 32 JavaScript for message alert

Contact page

- The contact page allows users to submit queries directly to the bakery via a contact form, which captures input data and uses EmailJS to send messages seamlessly without a backend server
- Error Handling: If the email fails to send, the user is alerted with an error message, requesting them to try again.

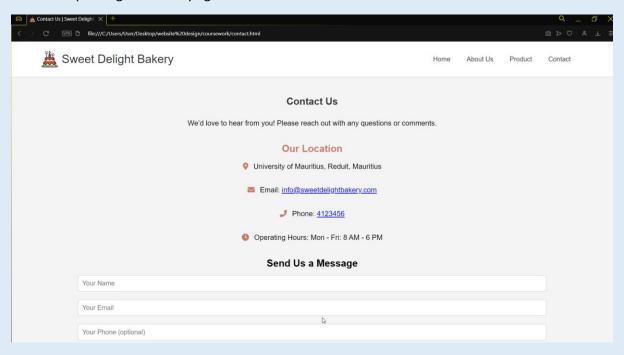


Figure 33 contact page

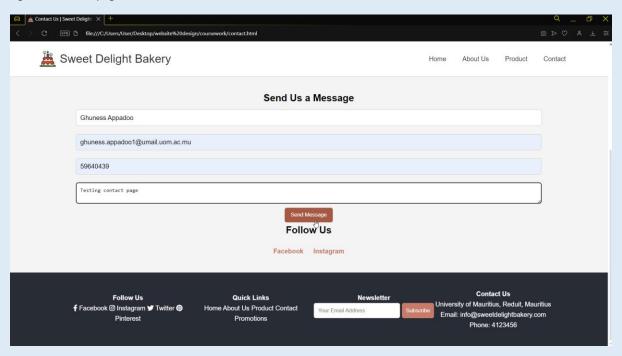


Figure 34 Testing contact page

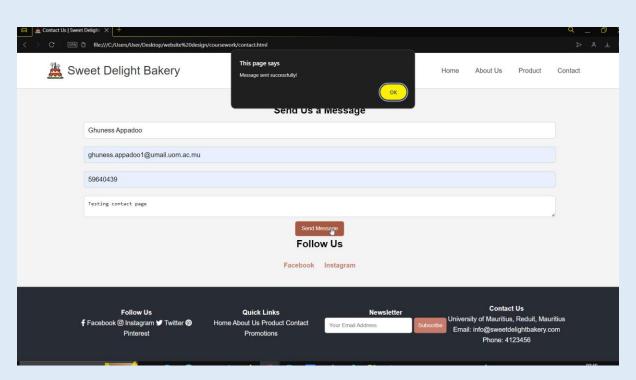


Figure 35 Message sent successfully

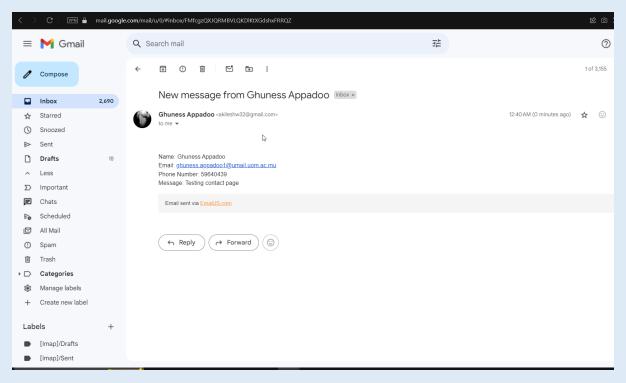


Figure 36 Message received on the email address set as administrator of the webpage through emailjs

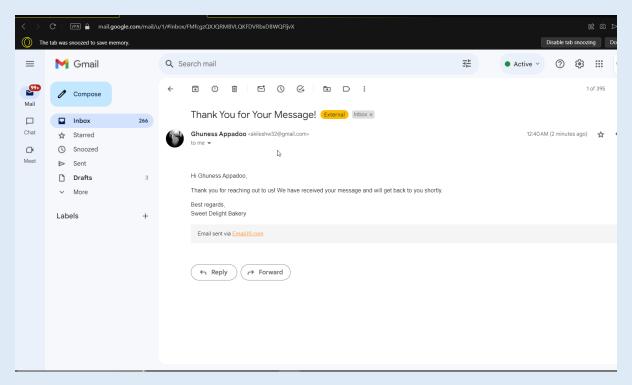


Figure 37 auto reply email sent to acknowledge the message

```
home.html
                                     wedding.html
                                                                                 contact.html ×
                                                                                                                              # product_styles.cs
◆ contact.html > ♦ html > ♦ body > ♦ header > ♦ div.container > ♦ nav.navbar > ♦ ul#navbar-links
        <html lang="en">
                 <h1>Contact Us</h1>
                 Vep d love to hear from you! Please reach out with any questions or comments.
                 <div class="contact-info">
                       <h2>Our Location</h2>
                      <i class="fas fa-map-marker-alt"></i> University of Mauritius, Reduit, Mauritius
                      <i class="fas fa-envelope"></i> Email: <a href="mailto:akileshw32@gmail.com">info@sweetdelightbak<i class="fas fa-phone-alt"></i> Phone: <a href="tel:+4123456">4123456</a>
                       <i class="fas fa-clock"></i> Operating Hours: Mon - Fri: 8 AM - 6 PM
                 <h2>Send Us a Message</h2>
                      <input type="text" id="name" placeholder="Your Name" required>
                      <input type="email" id="email" placeholder="Your Email" required>
<input type="tel" id="phonenumber" placeholder="Your Phone (optional)">
                      <textarea id="message" placeholder="Your Message" required></textarea>
                      <button type="submit">Send Message</button>
                  <h2>Follow Us</h2>
                  <div class="social-media">
                      <a href="https://www.facebook.com" target="_blank">Facebook</a> <a href="https://www.instagram.com" target="_blank">Instagram</a>
```

Figure 38 html code for contact page

```
ontact.html ×
                                                                                        JS contact_script.js
                                                                                                             # produc
◆ contact.html > ♦ html > ♦ body > ♦ section#contact > ♦ form#contact-form > ♦ textarea#message
      <html lang="en">
              <div class="footer-container">
                  <div class="footer-info">
                      <h4>Contact Us</h4>
                       University of Mauritius, Reduit, Mauritius
                       \label{eq:percon} $$\p>Email: info@sweetdelightbakery.com
                       Phone: 4123456
          <script src="home_script.js"></script>
          <script src="contact_script.js"></script>
          <script type="text/javascript"</pre>
          src="https://cdn.jsdelivr.net/npm/@emailjs/browser@4/dist/email.min.js">
      <script type="text/javascript">
      (function(){
        emailjs.init({
          publicKey: "yFNJZrWWHD5f5NPjc",
      })();
```

Figure 39 script to integrates EmailJs and to initialize the EmailJs service using the public key

Figure 40 contact_script

This JavaScript code handles the functionality of the **Contact Form** on the website, allowing users to submit messages. Here is an explanation of its main components:

1. DOMContentLoaded Event:

 The code is wrapped inside a DOMContentLoaded event listener to ensure that the form is fully loaded before any JavaScript interactions occur. This prevents errors if the form elements are not yet available.

2. Form Submission Handling:

- The code targets the form with the ID contact-form and adds a submit event listener to it.
- Prevent Default Submission: When the form is submitted, the default form submission (which reloads the page) is prevented using event.preventDefault().

3. Input Values:

 The script retrieves values from the input fields: name, email, phone number (optional), and message. These values are extracted from the form fields using the elements property and stored in variables.

4. Sending Emails with EmailJS:

- EmailJS is used to send the form data as an email. The service and template IDs
 (service_qsqrt6d and template_h8b2hra) are passed to the emailjs.send() function
 along with the form data. (public key, service and template IDs are unique for each
 user when sign up with EmailJS)
- The email service sends the form content to a predefined email address without requiring a backend server.

5. Success & Error Handling:

- Upon successful submission, the user is alerted with a "Message sent successfully!" message, and the form is reset for future submissions.
- If the email fails to send, an error message is logged, and the user is alerted with a message saying "Error sending message. Please try again later.".

This code ensures seamless interaction by allowing users to send messages directly through the website and receive immediate feedback, improving user experience.

Figure 41 part of css code for contact page

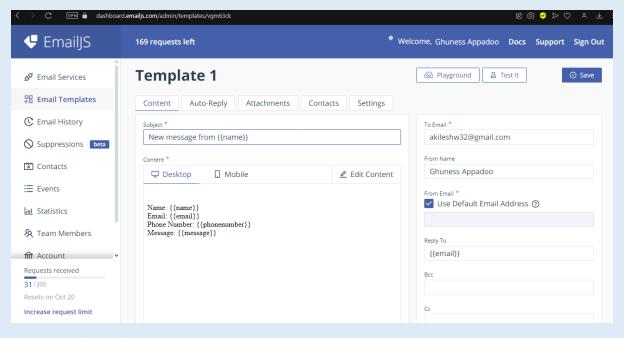


Figure 42 EmailJS template1

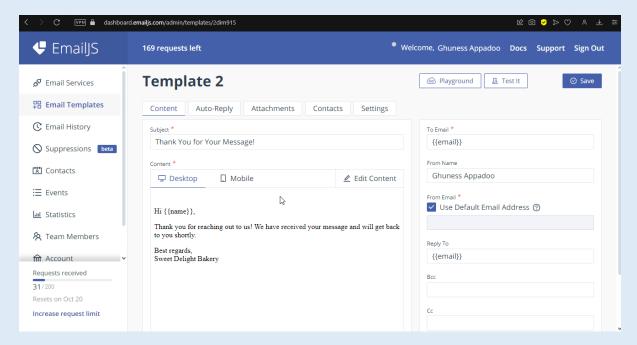


Figure 43 EmailJS template2 for autoreply

Responsive Design

1) Mobile Responsiveness

- **Hamburger Menu**: On small screens, the navigation menu is replaced with a hamburger icon that toggles the visibility of the menu items when clicked.
- Product Grid: The layout of product cards adjusts to smaller screens, showing fewer products per row for better readability.
- **Flexible Images**: All images, including product images and carousel images, resize according to the screen size to prevent distortion. The use of object-fit: cover ensures that images maintain their aspect ratio.

2) Media Queries

 Media queries ensure the site looks and functions well on different screen sizes (desktop, tablet, mobile). The grid layout adjusts to show different numbers of products based on the screen width.

User Interactivity

1. Add to Cart Button

• Interactive Buttons:

- Each product card contains an "Add to Cart" button. This button changes color and slightly enlarges when hovered to signal interactivity.
- User Experience: The button uses smooth CSS transitions to enhance the experience and make interactions more engaging.

2. Back to All Products Button

Return Navigation:

- On product detail pages, there is a "Back to All Products" button that allows users to return to the main product listing.
- Hover Effects: The button enlarges and changes color when hovered over, using the same transition properties as the "Add to Cart" button for consistency.

3. Scroll-to-Top Button

• **Scroll Detection**: A scroll-to-top button appears when the user scrolls more than 300 pixels down the page. This button provides a quick way to return to the top of the page with a smooth scrolling effect when clicked.

4. Hover Effects

- **Images**: Product images and category images have a slight zoom-in effect when hovered over, enhancing interactivity.
- **Buttons**: Both the "Add to Cart" and "Back to All Products" buttons change color and size when hovered to signal that they are clickable.

Technical Overview

I. Technologies Used

- II. **HTML5:** Used for structuring the content in a semantic and accessible way, ensuring compatibility with modern web standards.
- III. **CSS3:** Utilized for styling the layout and ensuring a responsive design across devices using Flexbox and media queries.
- IV. JavaScript: Provides interactivity for various UI components such as the contact form, carousel, and scroll-to-top button.
- V. **EmailJS:** Allows form submissions to be sent via email without the need for a backend server, simplifying the process of user communication.
- VI. **Font Awesome:** Used to add scalable vector icons for social media links and other navigation components.

Third-Party Integrations

- **EmailJS**: Used to handle email submissions from the contact form.
- Font Awesome: Adds icons for social media and navigation, enhancing the UI.

Future Improvements

Future improvements could include adding functionality to the 'Add to Cart' button, allowing users to fully engage with the e-commerce capabilities of the site.

Conclusion
In conclusion, the Sweet Delight Bakery website offers a user-friendly, responsive design with
functional components such as a contact form, interactive product displays, and smooth navigation
across devices. By leveraging modern web technologies like EmailJS, JavaScript, and CSS3, the site
delivers an engaging and efficient user experience.