

**SIMATS SCHOOL OF ENGINEERING**

**SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES**

**CHENNAI-602105**

**"BlossomGifts: A Seamless Online Flower and Gift Ordering Platform"**

**A CAPSTONE PROJECT REPORT**

*Submitted in the partial fulfillment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**INFORMATION TECHNOLOGY**

**Submitted by**

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**Under the Supervision of**

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**NOVEMBER 2024**

**DECLARATION**

We,S.MOHAMMAD HABEEB,**B.VENKATA THARUN** students of **Bachelor of Engineering in Computer Science and Engineering,** Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, hereby declare that the work presented in this Capstone Project Work entitled **"BlossomGifts: A Seamless Online Flower and Gift Ordering Platform"** is the outcome of our own bonafide work and is correct to the best of our knowledge and this work has been undertaken taking care of Engineering Ethics.

(B.VENKATA THARUN (192210090)

(S.MOHAMMAD HABEEB (192210583)

Date:

Place:

**CERTIFICATE**

This is to certify that the project entitled **"BlossomGifts: A Seamless Online Flower and Gift Ordering Platform"**submitted by B.VENKATA THARUN **and S.MOHAMMAD HABEEB** has been carried out under my supervision. The project has been submitted as per the requirements in the current semester of B. Tech Computer Science and Engineering.

Teacher-in-charge

YUVARAJ S

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**ABSTRACT**

BlossomGifts is an intuitive and user-friendly online platform designed to simplify the process of ordering flowers and gifts for any occasion. The website offers a diverse range of floral arrangements, gift baskets, and personalized gifts, organized by occasion, recipient, and price range to provide users with a seamless browsing experience. Key features include user registration, login, and a customizable order system with flexible delivery date and time options. High-quality product images, detailed descriptions, and real-time order tracking enhance the overall shopping experience. Customers can schedule future deliveries, receive order confirmations via email or SMS, and benefit from secure payment options. Additionally, the platform rewards loyal customers with special promotions and discounts. BlossomGifts is committed to delivering thoughtful gifts with ease and ensuring customer satisfaction through timely deliveries and reliable service. This report provides an in-depth overview of the platform’s design, key functionalities, and customer-focused features**.**

**INTRODUCTION**

BlossomGifts is an innovative online platform designed to offer users a convenient and efficient way to order flowers and gifts for any occasion. With the growing demand for online shopping, particularly for personalized gifts and floral arrangements, BlossomGifts aims to provide a seamless and enjoyable experience. The platform caters to a wide range of customer needs by offering a diverse selection of products that can be easily browsed and selected based on occasion, recipient, or budget.

In addition to its extensive product catalog, BlossomGifts emphasizes user convenience by incorporating key features such as user registration and login, customizable order options, and flexible delivery scheduling. High-quality product images and detailed descriptions ensure customers can make informed decisions, while real-time order tracking and secure payment methods further enhance the customer experience.

The platform also rewards customer loyalty through promotions and discounts, making BlossomGifts not only a practical tool for gift-giving but also a cost-effective solution. This report will explore the development, functionality, and customer-focused features of BlossomGifts, demonstrating how it meets the demands of modern consumers seeking an easy and reliable way to send thoughtful gifts and flowers.

**PROJECT DESCRIPTION**

BlossomGifts is a user-centered online platform created to streamline the process of ordering flowers and gifts for any occasion. The primary goal of the project is to offer an accessible, efficient, and enjoyable shopping experience for users who wish to send thoughtful gifts to loved ones, whether it’s for a birthday, anniversary, holiday, or any special event.

The platform is designed with simplicity and functionality in mind, featuring a clean interface that allows users to easily browse a wide variety of floral arrangements, gift baskets, and personalized gifts. The products are categorized by occasion, recipient, and price range, enabling customers to quickly find the perfect gift. High-resolution images and detailed descriptions of each product further aid in decision-making.

To enhance user engagement, BlossomGifts includes a user registration system that allows customers to create accounts for a personalized experience. Registered users can save their preferences, track orders, and schedule future deliveries. The order system is highly customizable, providing flexibility in selecting delivery dates and times to ensure timely arrival. Real-time order tracking and notifications via email or SMS keep customers informed about their orders.

In terms of security, BlossomGifts incorporates multiple secure payment methods, ensuring safe transactions. The platform also offers special promotions, discounts, and loyalty rewards for returning customers, encouraging repeat purchases. Overall, BlossomGifts aims to offer a seamless and reliable service that guarantees customer satisfaction and fosters loyalty.

This project addresses the growing need for an online solution that combines ease of use with high-quality products and services, making it easier than ever to send gifts that brighten someone’s day.

**PROBLEM DESCRIPTION**

The goal of this project is to build a simple software platform for BlossomGifts, an online service that allows users to browse, customize, and order flowers and gifts for various occasions. The main problem addressed is the need for a convenient and user-friendly solution for individuals who want to send thoughtful gifts and flowers but lack the time or ability to shop in person.

In today’s fast-paced world, there is a growing demand for efficient online services that enable users to order products with ease. BlossomGifts seeks to solve this problem by offering an intuitive platform where users can browse through a range of products, customize their orders, and schedule deliveries—all from the comfort of their homes. The platform should provide seamless navigation, secure payment options, real-time order tracking, and reliable customer support to ensure user satisfaction.

**Key challenges include developing a system that:**

1. Organizes a wide variety of floral arrangements and gifts into clear, accessible categories.

2. Allows users to register, log in, and manage their profiles.

3. Supports customizable orders with options for selecting delivery dates and times.

4. Provides real-time order tracking, notifications, and secure payment methods.

5. Encourages customer loyalty with promotions and discounts for frequent users.

By addressing these challenges, the project aims to create a software solution that simplifies the gift-buying process, saves time, and ensures timely delivery for customers, ultimately enhancing their overall experience with the service.

**TOOL DESCRIPTION**

BlossomGifts is an online platform designed to facilitate the ordering of flowers and gifts for various occasions. It offers a comprehensive range of products, customizable delivery options, and a secure checkout process. The platform combines simplicity and functionality, ensuring users can browse, select, and order gifts with ease.

User Interface

The user interface (UI) is designed with a focus on simplicity and user-friendliness. It features a clean, intuitive layout that allows users to easily navigate the platform. Key UI components include:

Homepage

Displays featured floral arrangements, gift ideas, and current promotions. Users can quickly search for products by occasion, recipient, or price range using the prominently displayed navigation bar.

Product Catalog

Products are categorized by events (e.g., birthdays, anniversaries) and recipient types (e.g., friends, family). Each product page includes high-quality images, detailed descriptions, and options for customization, such as delivery date selection and gift wrapping.

Registration/Login

Users can create an account or log in to access personalized features like order tracking, saved preferences, and order history. Guest checkout is also supported.

Order Customization

The order process is interactive, allowing users to specify delivery dates and times, add special messages, and select from various packaging options.

Cart and Checkout

The cart page provides a summary of selected items, with options to modify or remove products. The checkout process includes multiple secure payment methods, ensuring a hassle-free transaction.

Real-Time Order Tracking

Users can track their orders in real-time and receive notifications via email or SMS.

Mobile Compatibility

The interface is responsive, offering a seamless experience across desktops, tablets, and mobile devices.

Features

User Registration and Login

Users can create accounts to save personal details, view order history, and manage preferences for faster future orders.

Customizable Orders

Customers can personalize orders by selecting delivery dates, times, and adding special notes or packaging options.

Real-Time Order Tracking

Customers can monitor the status of their orders from the moment of purchase until delivery, with real-time updates via email or SMS.

Secure Payment Options

The platform supports multiple secure payment methods, including credit cards, PayPal, and other digital payment solutions.

Promotions and Discounts

BlossomGifts rewards loyal customers with special promotions, discounts, and seasonal offers, encouraging repeat business.

Scheduled Deliveries

Users can schedule deliveries for future dates, making it easier to plan ahead for special occasions.

Customer Support

The platform includes a help center with FAQs and customer support options, ensuring users can resolve any issues quickly.

By integrating these features, BlossomGifts provides a seamless and enjoyable experience for customers looking to send thoughtful gifts efficiently and securely.

**OPERATIONS**

BlossomGifts operates through a series of well-defined processes designed to ensure seamless order placement, delivery, and customer satisfaction. The platform's operations can be broken down into several key stages, each contributing to the overall efficiency of the service:

User Account Management

Registration and Login:

Users can create accounts by providing basic personal information such as name, email, and delivery address. This allows them to track orders, save preferences, and view order history. Existing users can log in using their credentials for a personalized shopping experience.

Profile Management:

Users can update personal details, add or remove payment methods, and manage delivery addresses. This streamlines future transactions.

Product Browsing and Selection

Product Categorization:

Items are organized into clear categories, such as occasion, recipient, and price range, making it easy for users to find relevant products.

Search Functionality:

A search bar allows users to quickly locate specific products by name or keywords.

Product Pages:

Each product page contains high-resolution images, descriptions, customization options (e.g., delivery date selection), and price details.

Order Customization

Delivery Scheduling:

Users can choose a specific delivery date and time slot, ensuring that gifts are delivered at the most convenient moment for recipients.

Special Instructions:

Customers can include personalized messages, choose gift-wrapping options, and provide any special delivery instructions for the courier.

Order Placement and Payment:

Cart Management:

Users can add products to the cart, review selected items, and adjust quantities before proceeding to checkout.

Checkout Process:

The platform offers a streamlined and secure checkout experience. Users can select their preferred payment method from multiple options, including credit/debit cards, PayPal, and other secure gateways.

Order Confirmation:

Upon successful payment, customers receive an order confirmation via email or SMS, detailing the order summary, delivery details, and tracking link.Order Processing and Fulfillment

Order Handling:

Once an order is placed, it is processed by BlossomGifts’ system. The selected items are prepared, packaged, and dispatched for delivery.

Third-Party Logistics:

BlossomGifts partners with reliable courier services to ensure timely delivery of products. The system automatically assigns couriers based on the customer’s delivery preferences and location.

Real-Time Order Tracking

Tracking Notifications:

Customers receive real-time updates about the status of their orders, including when the order is being processed, dispatched, and delivered.

Tracking Interface:

Users can log in to their account or click on a link in the confirmation email to view the live status of their orders.

Customer Support and Feedback

Support Channels:

BlossomGifts provides multiple support channels, including email, live chat, and a help center with FAQs, to assist users with any issues related to orders, deliveries, or platform navigation.

Order Modifications and Cancellations:

If users need to modify or cancel their order, they can do so within a set time frame via their account or by contacting customer support.

Post-Delivery Feedback:

After delivery, customers are invited to provide feedback about their experience, allowing BlossomGifts to continually improve its service.

Loyalty and Promotions

Loyalty Rewards Program:

BlossomGifts encourages repeat business by offering discounts and promotions to returning customers. Special offers may be distributed via email newsletters or personalized recommendations based on previous purchases.

Seasonal Promotions:

During holidays or special occasions, BlossomGifts launches promotional campaigns to attract more users and boost sales.

Through these well-structured operations, BlossomGifts ensures smooth transactions from order placement to delivery, aiming to create a hassle-free and reliable shopping experience for its customers.

**MODULE DESCRIPTION**

BlossomGifts is built using a modular approach, where the platform is divided into various functional components, each addressing specific operations. This allows for a scalable, maintainable, and efficient system that delivers a seamless user experience. Below is an overview of the key modules and their functionalities:

User Management Module

Registration and Login:

- Enables new users to create accounts by providing necessary information (e.g., name, email, password).

- Allows existing users to log in securely and access their accounts.

- Offers options for social media login or guest checkout for users who do not wish to register.

Profile Management:

- Users can update their personal information, manage multiple delivery addresses, and save payment methods for future transactions.

- Provides access to order history and tracking details.

Product Catalog Module

Product Display:

- Displays a wide range of flowers, gift baskets, and personalized gifts, categorized by occasion, recipient, or price range.

- Users can browse through categories, view product details, and add items to their cart.

Search and Filter Options:

- Provides a search bar to find specific products by keywords.

- Includes filtering options to narrow down products by price, occasion, or delivery availability.

Order Customization Module

Custom Delivery Options:

- Allows users to select delivery dates and time slots, ensuring the gifts arrive on the desired day.

Personalized Messages:

- Provides options for adding custom notes or messages that will be delivered along with the gifts.

Gift Wrapping and Packaging:

- Offers additional options for gift wrapping, packaging, and other presentation choices.

Cart and Checkout Module

Cart Management:

- Users can view items in their cart, update quantities, or remove items before proceeding to checkout.

- The cart displays a detailed summary of selected products, including customization options, delivery dates, and prices.

Secure Checkout Process:

- Integrates multiple secure payment gateways (credit/debit cards, PayPal, etc.).

- Supports secure transactions with encryption for user data and payment information.

- Users can also apply discount codes or promotional offers during checkout.

5. Order Tracking and Notification Module

- Real-Time Order Tracking:

- After placing an order, users can track its status in real-time, from processing to delivery.

- The system sends regular notifications via email or SMS, updating customers on the order's progress.

- Tracking Dashboard:

- Registered users can log in to their accounts and access a dashboard showing their order history and current order statuses.

6. Inventory and Product Management Module (Admin Side)

- Product Management:

- Admins can add, update, or remove products from the catalog, along with managing product descriptions, images, and pricing.

- Manages product stock and ensures availability for users placing orders.

- Discount and Promotions Management:

- Admins can create, update, or manage promotions, discount codes, and seasonal offers, which are displayed to users during browsing and checkout.

7. Order Processing and Fulfillment Module

- Order Assignment:

- Automatically assigns orders to the appropriate delivery services based on location and delivery preferences.

- Ensures that orders are packed and prepared for shipment in a timely manner.

- Third-Party Integration:

- Integrates with logistics and courier services for efficient order dispatch and delivery tracking.

8. Loyalty and Promotions Module

- Loyalty Program:

- Provides registered users with a rewards system where they can accumulate points based on their purchases and redeem them for discounts on future orders.

- Special Promotions:

- Offers personalized discounts, seasonal promotions, and special deals based on user activity and purchase history.

- Email Campaigns:

- Sends promotional emails, newsletters, and notifications about exclusive deals to registered users.

9. Feedback and Customer Support Module

- Customer Support:

- Provides users with a help center, FAQs, and multiple support channels, including live chat, email, or phone support.

- Feedback Collection:

- After an order is delivered, the platform requests feedback from customers, helping improve the service by gathering insights on user satisfaction.

- Issue Resolution:

- Users can report issues related to their orders (e.g., delivery delays, product issues) and have them resolved by the customer support team.

10. Security and Payment Module

- Secure Payments:

- Implements industry-standard encryption and payment security measures to protect user data during transactions.

- Supports multiple secure payment methods, such as credit/debit cards, PayPal, and other digital wallets.

- nFraud Prevention:

- Detects and prevents potential fraud using automated tools that verify user data and transaction patterns.

BlossomGifts employs a modular approach to ensure that each component of the platform works independently while contributing to the overall functionality. This design allows for ease of maintenance, scalability, and continuous enhancement. Each module serves a specific purpose, ensuring smooth operations, from product selection and order placement to payment, fulfillment, and customer support. The result is an efficient, user-friendly platform that makes online gift shopping a convenient and enjoyable experience.

**IMPLEMENTATION**

**Registeration.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Register</title>

<link rel="stylesheet" href="styles.css">

<style>

body {

background-image: url('https://i.pinimg.com/564x/90/e2/ab/90e2ab9c4bce6cf9a3308e9c7726b5eb.jpg'); /\* Use your background image URL \*/

background-size: cover; /\* Ensures the image covers the full screen \*/

background-position: center center; /\* Centers the image \*/

background-repeat: no-repeat; /\* Prevents the image from repeating \*/

background-attachment: fixed; /\* Keeps the background fixed when scrolling \*/

margin: 0;

padding: 0;

font-family: 'Times New Roman', Times, serif;

color: #333;

display: flex;

align-items: center;

justify-content: center;

height: 100vh;

}

.container {

width: 430px;

padding: 30px;

background: rgba(255, 255, 255, 0.9);

border-radius: 10px;

box-shadow: 0 4px 10px rgba(0, 0, 0, 0.1);

text-align: center;

border: 2px solid #007bff;

}

h2 {

margin-bottom: 20px;

font-weight: bold;

color: #007bff;

}

input {

width: calc(100% - 20px);

padding: 10px;

margin-bottom: 15px;

border: 2px solid #007bff;

border-radius: 5px;

box-sizing: border-box;

font-weight: bold;

}

.button {

background-color: #fff200;

color: rgb(255, 255, 255);

padding: 10px 15px;

border: none;

border-radius: 5px;

cursor: pointer;

margin: 10px 0;

font-weight: bold;

}

.button:hover {

background-color: #8cb300;

}

p {

margin: 15px 0;

font-weight: bold;

}

a {

color: #007bff;

text-decoration: none;

}

a:hover {

text-decoration: underline;

}

.error {

color: #ff6347;

font-size: 12px;

margin-top: -10px;

margin-bottom: 10px;

text-align: left;

}

</style>

</head>

<body>

<div class="container">

<h2>Register</h2>

<form id="registerForm" action="register.php" method="post">

<input type="text" name="name" placeholder="Username" id="name" required><br>

<div class="error" id="nameError"></div>

<input type="email" name="email" placeholder="Email ID" id="email" required><br>

<div class="error" id="emailError"></div>

<input type="password" name="password" placeholder="Password" id="password" required><br>

<div class="error" id="passwordError"></div>

<input type="password" name="confirmPassword" placeholder="Confirm Password" id="confirmPassword" required><br>

<div class="error" id="confirmPasswordError"></div>

<button class="button" type="submit">Register</button>

</form>

<p>Already have an account? <a href="login.html">login</a></p>

</div>

<script>

document.getElementById('registerForm').addEventListener('input', validateForm);

function validateForm() {

let valid = true;

// Validate Name

const name = document.getElementById('name').value;

const nameError = document.getElementById('nameError');

if (name.trim() === '') {

nameError.textContent = 'Name is required.';

valid = false;

} else if (name.length < 2 || name.length > 50) {

nameError.textContent = 'Name must be between 2 and 50 characters.';

valid = false;

} else if (!/^[a-zA-Z\s]+$/.test(name)) {

nameError.textContent = 'Name can only contain letters and spaces.';

valid = false;

} else {

nameError.textContent = '';

}

// Validate Email

const email = document.getElementById('email').value;

const emailError = document.getElementById('emailError');

if (email.trim() === '') {

emailError.textContent = 'Email ID is required.';

valid = false;

} else if (!validateEmail(email)) {

emailError.textContent = 'Invalid email format. Please use lowercase letters only.';

valid = false;

} else {

emailError.textContent = '';

}

// Validate Password

const password = document.getElementById('password').value;

const passwordError = document.getElementById('passwordError');

if (password.trim() === '') {

passwordError.textContent = 'Password is required.';

valid = false;

} else if (!validatePassword(password)) {

passwordError.textContent = 'Password must be at least 8 characters long and include uppercase, lowercase, digit, and special character.';

valid = false;

} else {

passwordError.textContent = '';

}

// Validate Confirm Password

const confirmPassword = document.getElementById('confirmPassword').value;

const confirmPasswordError = document.getElementById('confirmPasswordError');

if (confirmPassword.trim() === '') {

confirmPasswordError.textContent = 'Confirm Password is required.';

valid = false;

} else if (confirmPassword !== password) {

confirmPasswordError.textContent = 'Passwords do not match.';

valid = false;

} else {

confirmPasswordError.textContent = '';

}

return valid;

}

function validateEmail(email) {

const lowerCaseEmail = email.toLowerCase();

const regex = /^[a-z0-9.\_%+-]+@[a-z0-9.-]+\.[a-z]{2,4}$/;

if (email !== lowerCaseEmail) {

return false;

}

return regex.test(lowerCaseEmail);

}

function validatePassword(password) {

const regex = /^(?=.\*[a-z])(?=.\*[A-Z])(?=.\*\d)(?=.\*[@$!%?&])[A-Za-z\d@$!%?&]{8,}$/;

return regex.test(password);

}

document.getElementById('registerForm').addEventListener('submit', function(event) {

event.preventDefault();

if (validateForm()) {

const name = document.getElementById('name').value;

const email = document.getElementById('email').value.toLowerCase();

const password = document.getElementById('password').value;

// Save user details in localStorage or send to server (mock implementation)

localStorage.setItem('name', name);

localStorage.setItem('email', email);

localStorage.setItem('password', password); // Note: Never store plain passwords in production!

alert('Successfully registered!');

window.location.href = 'login.html';

}

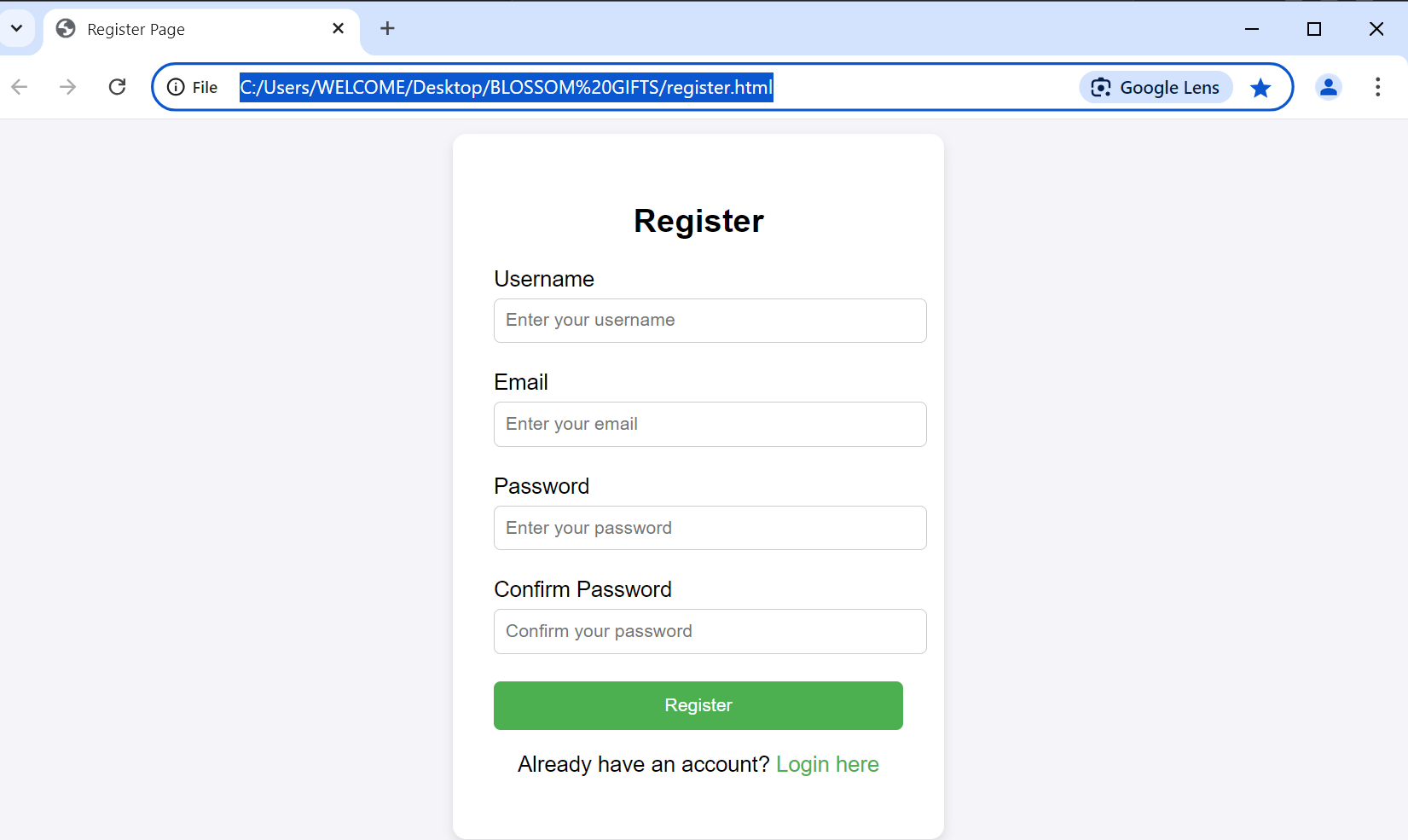
});

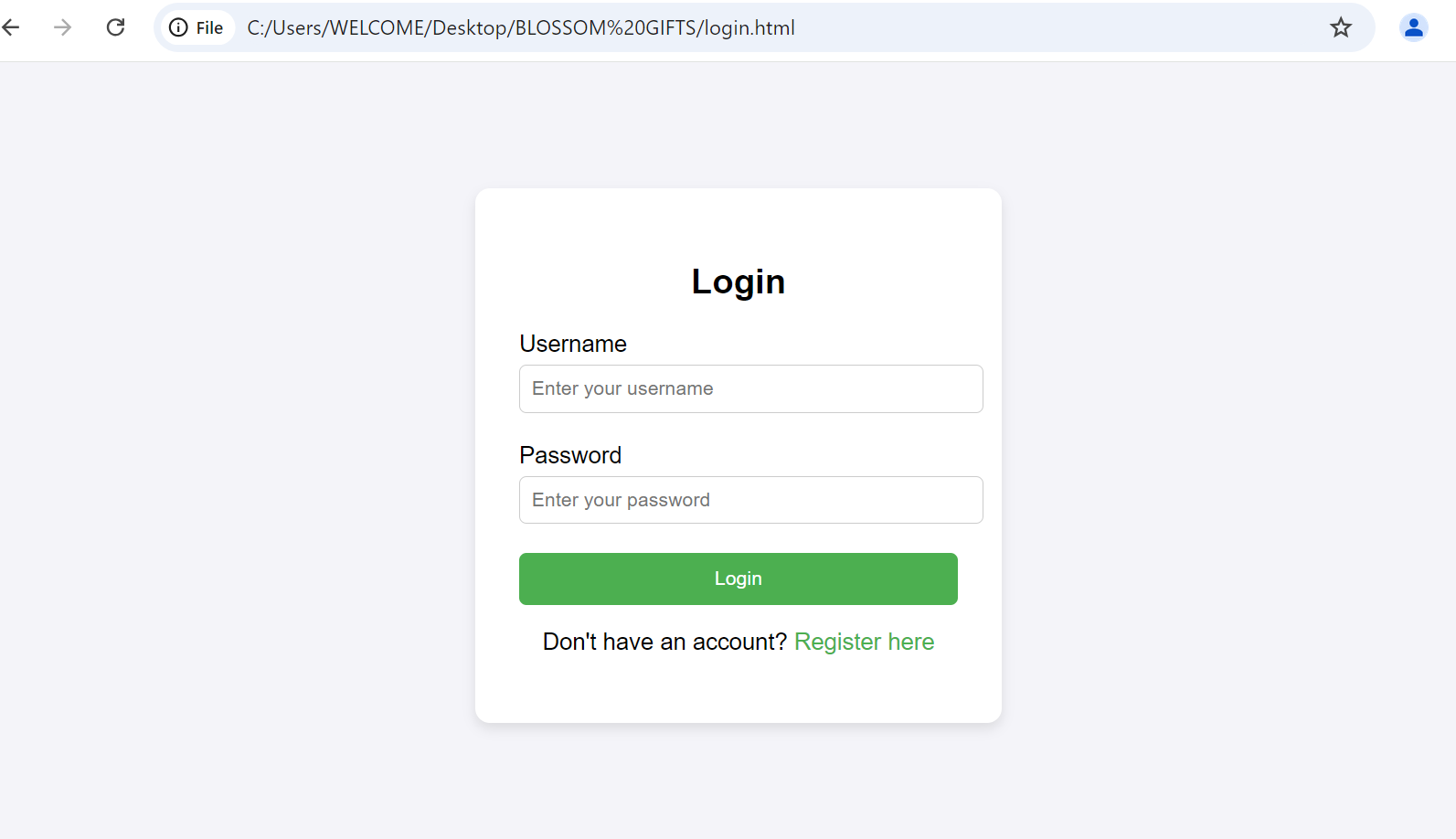
</script>

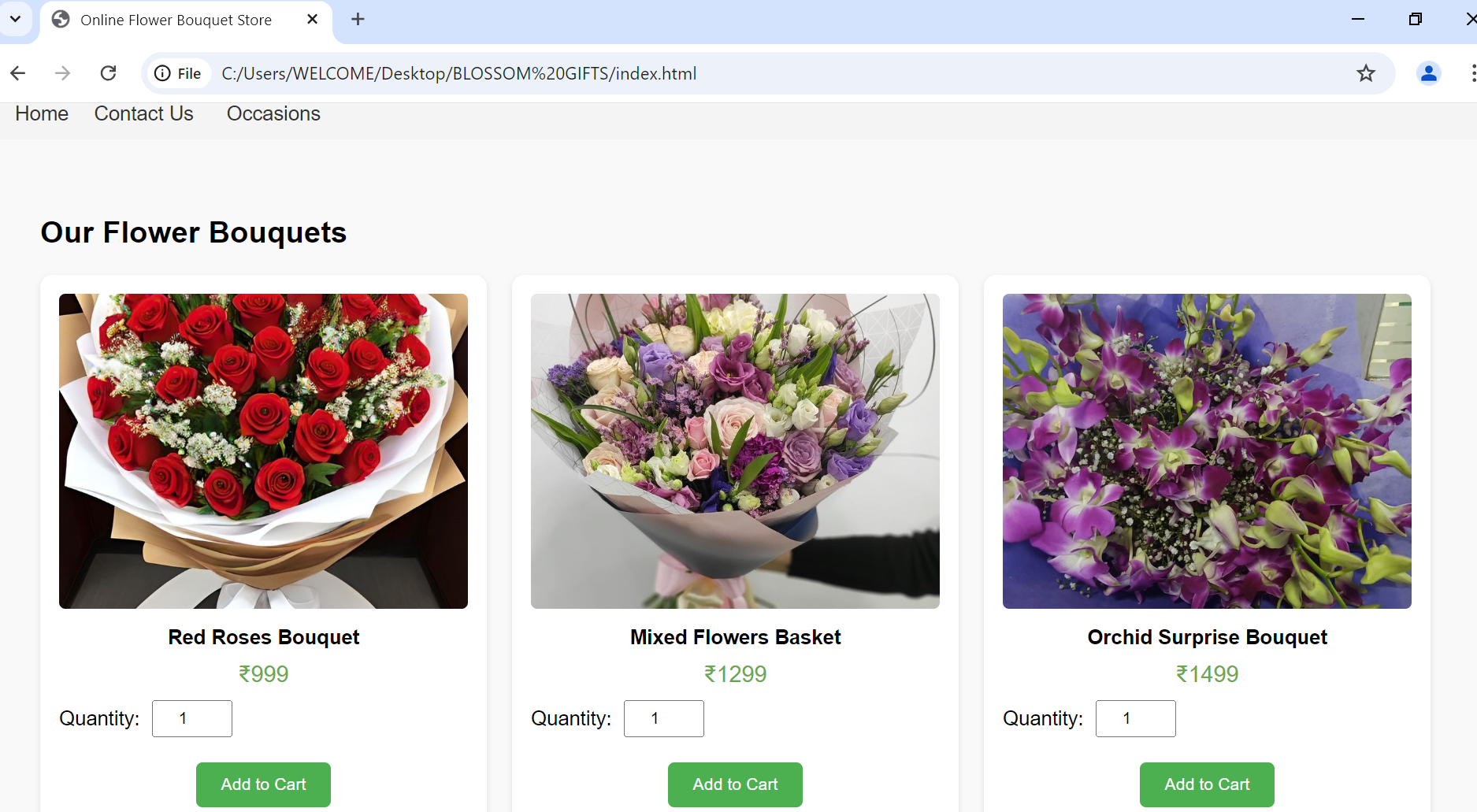
</body>

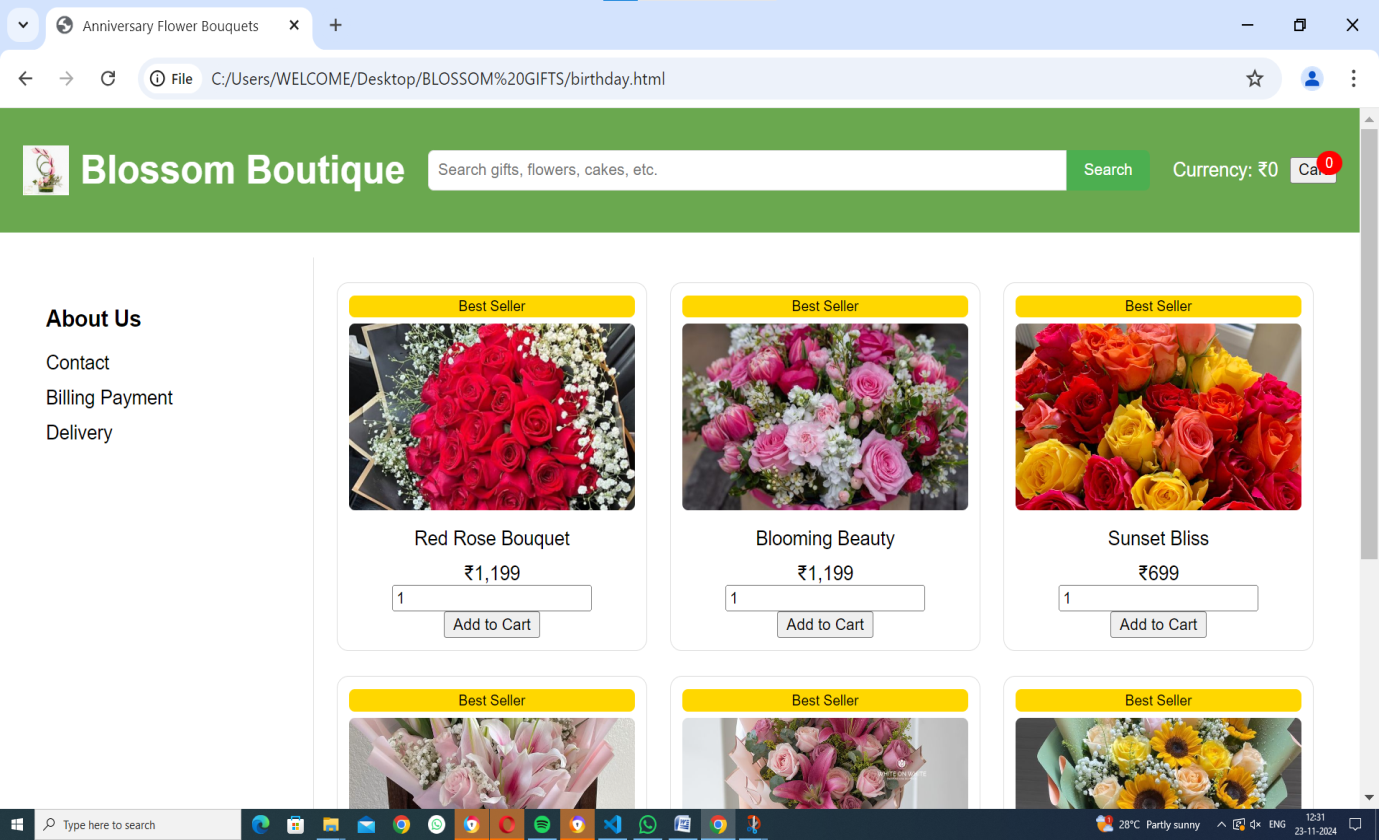
</html>

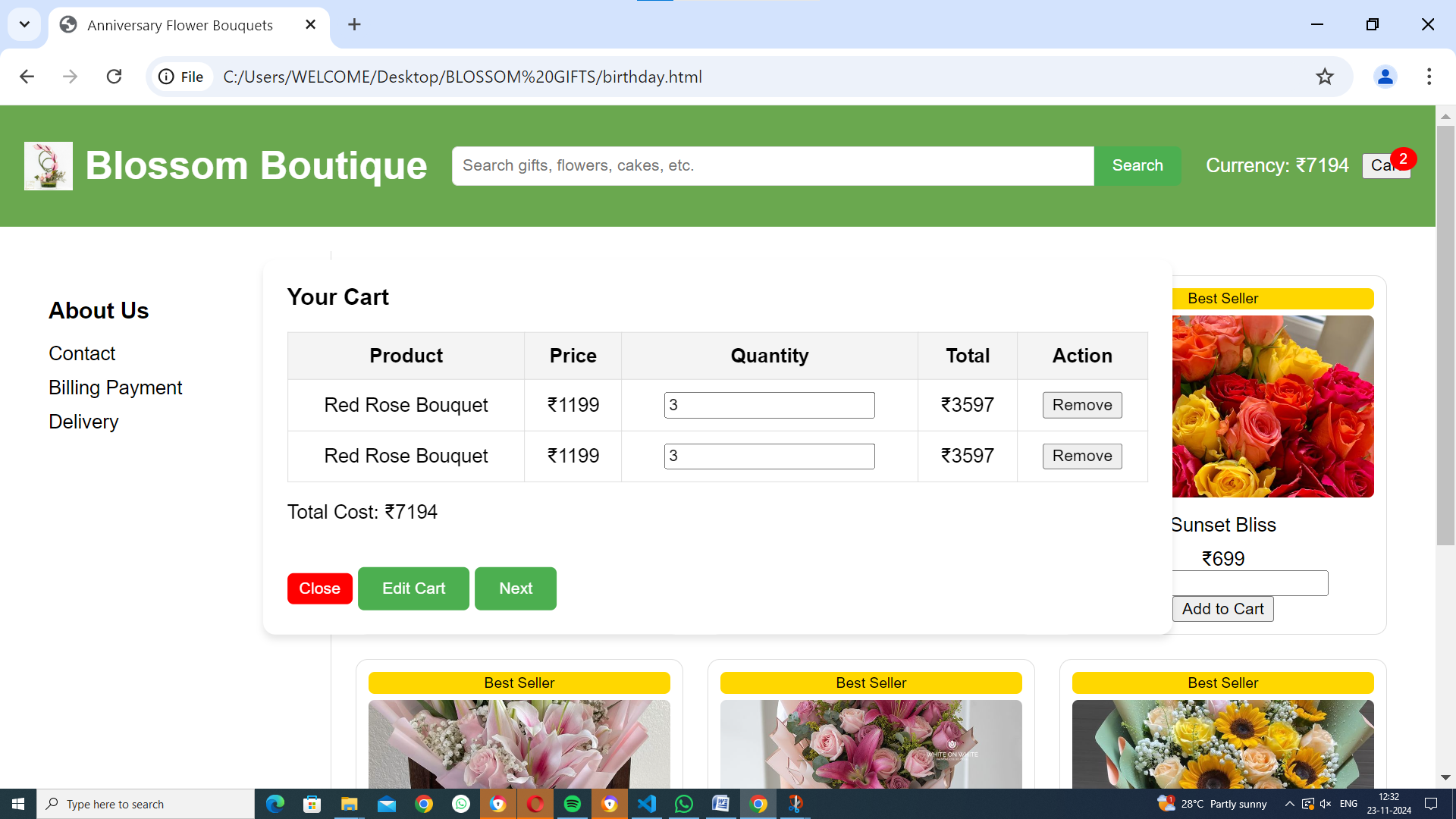
**OUTPUT**

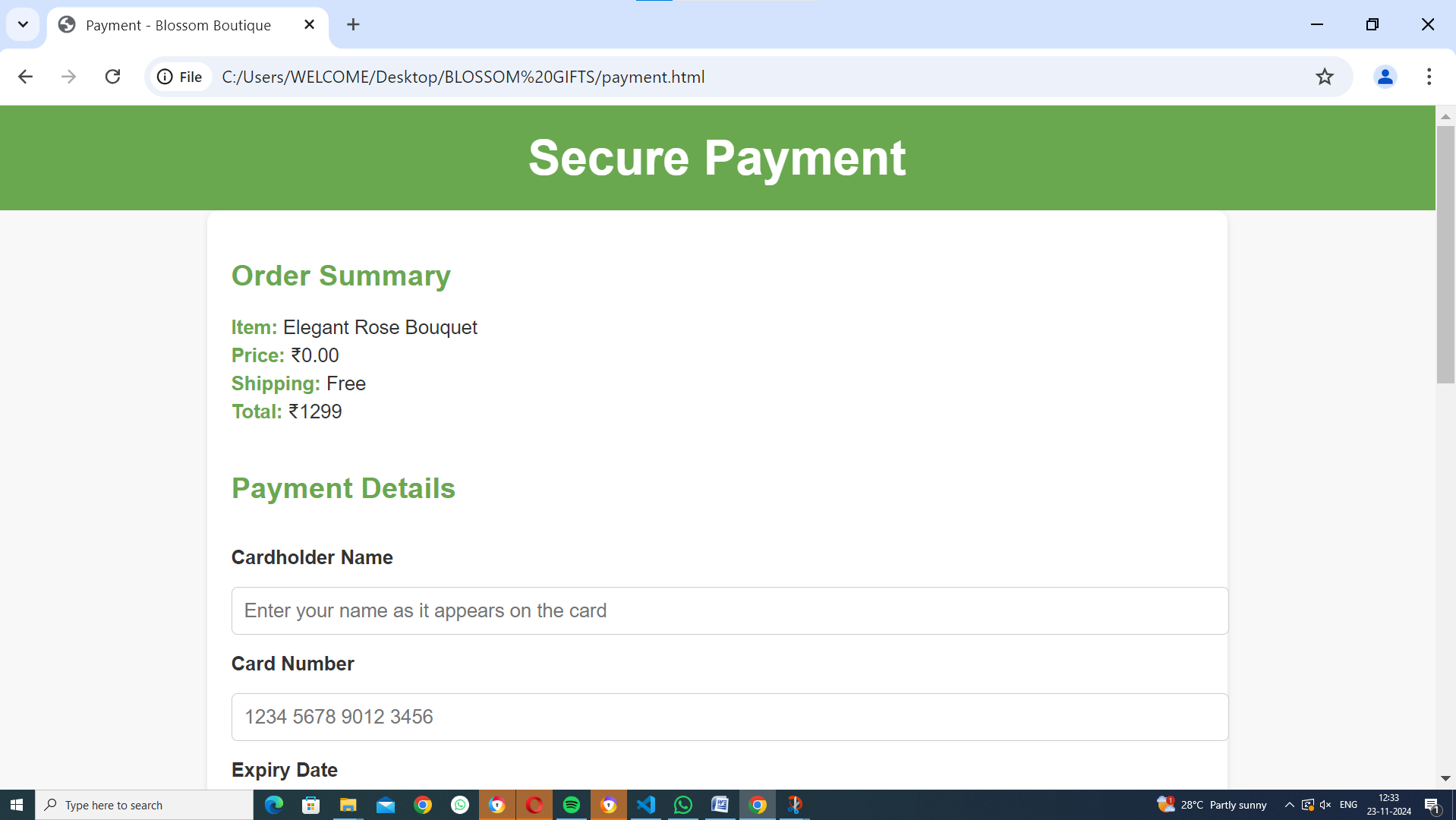
****

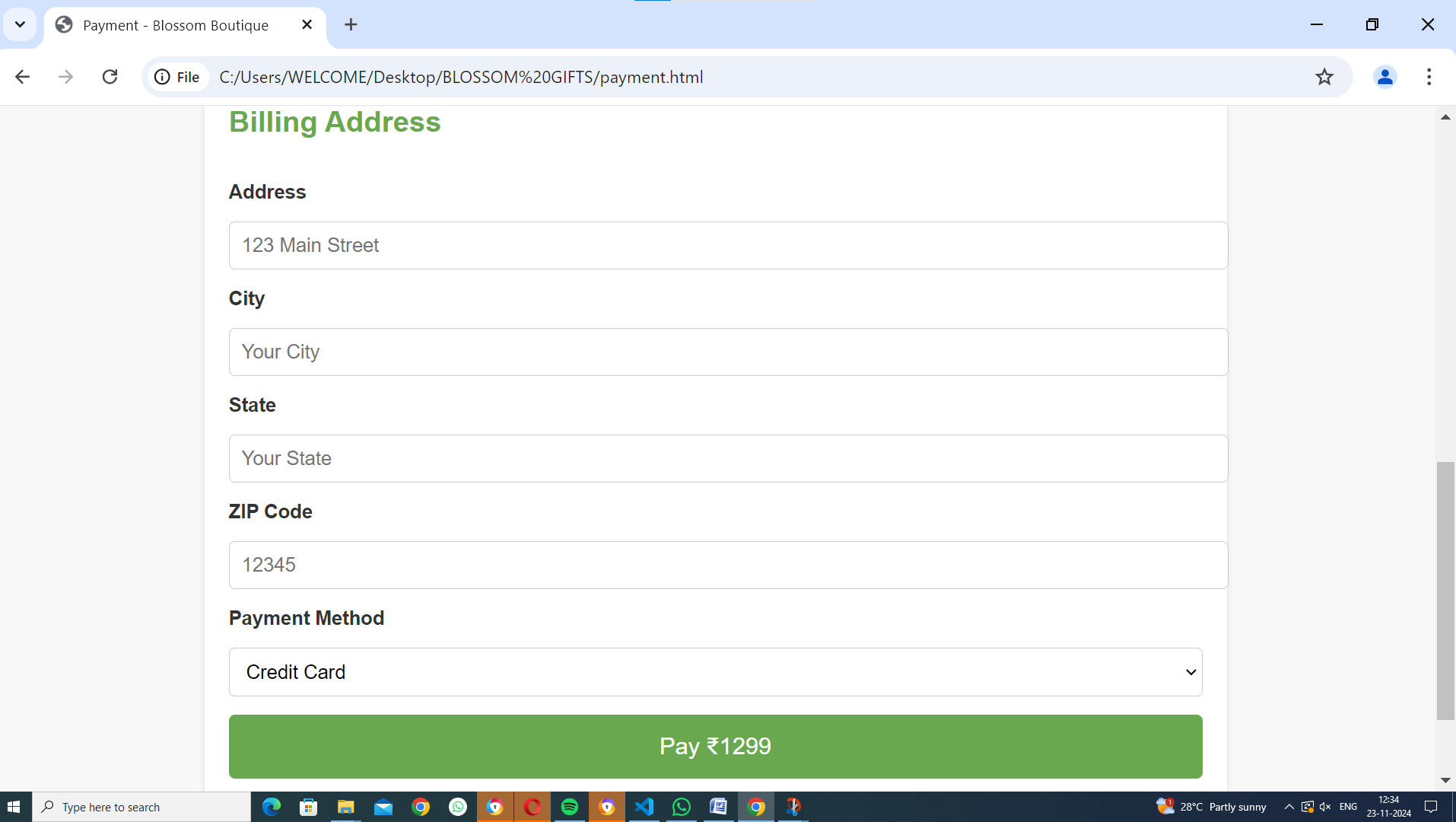
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**CONCLUSION**

BlossomGifts provides a streamlined and intuitive platform for ordering flowers and gifts, offering a user-friendly interface and a range of customizable features. By focusing on key functionalities such as product browsing, order customization, secure payment processing, and real-time order tracking, BlossomGifts ensures a seamless shopping experience for its customers. The modular approach employed in the system design facilitates scalability, security, and efficient operations, enabling the platform to meet customer needs effectively. With personalized offers, timely deliveries, and dedicated customer support, BlossomGifts achieves its goal of making thoughtful gift-giving convenient, reliable, and enjoyable. This project demonstrates the integration of various components to create a robust, feature-rich online shopping solution that prioritizes user satisfaction and operational efficiency.

**REFERENCES**

[**https://developer.mozilla.org/en-US/docs/Web/HTML**](https://developer.mozilla.org/en-US/docs/Web/HTML)

[**https://www.w3schools.com/html/**](https://www.w3schools.com/html/)

[**https://css-tricks.com/**](https://css-tricks.com/)

[**https://javascript.info/**](https://javascript.info/)

[**https://tc39.es/ecma262/**](https://tc39.es/ecma262/)

[**https://developers.google.com/focus/web-development**](https://developers.google.com/focus/web-development)

[**https://web.dev/**](https://web.dev/)

[**https://fontawesome.com/**](https://fontawesome.com/)

[**https://www.w3schools.com/js/js\_array\_methods.asp**](https://www.w3schools.com/js/js_array_methods.asp)

[**https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Building\_blocks/Events**](https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Building_blocks/Events)