CLOUD COMPUTING ASSIGNMENT 1



FLORISTIC WEBSITE COSTUMER SIDE ONLY

BY

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Table of Contents

Introduction	3
Problem Statement	
Solution	3
Requirements	3
Non-Functional and Functional Requirements	4
Waterfall Model	5
Use Case Diagram	7
Conclusion,	
References	12

Introduction

We are a group of honours students at Dut who were given the opportunity to create a website for Floristic plant retails.

Problem Statement

In metropolitan areas worldwide, residents living in Central Business Districts (CBDs) often experience a profound disconnect from nature due to the dense urban environment. This lack of access to natural spaces and greenery can adversely affect their mental and physical well-being, leading to increased stress levels, decreased productivity, and diminished overall quality of life. Floristics is a plant retail that is the solution to this connection needed to nature. However, with peoples busy life it hard to find time to visit a plant retail.

Solution

Therefore, we as a team of experienced developers have decided to take on the task of building a website for Floristic plant retail. To help customers to be able to purchase plants from their comforts of home in the busy lifestyles. We are offering greenery on the click of a button.

Requirements

- 1. User authentication and account management:
 - User registration and login functionality.
 - View order history.
- 2. Shopping cart and payment:
 - Shopping cart function to add, remove, and update items.
- 3. Responsive Design:
 - Mobile-friendly and responsive website design for seamless shopping on all devices (desktop, tablet, smartphone).
- 4. Online payments and orders processed.
- 5. Customer service:
 - About page.
 - Contact page.
 - · Horticulture.

Non-Functional and Functional Requirements

Category	Functional Requirements	Non-Functional Requirements
User Authentication	- Users should be able to create accounts	- Secure authentication mechanism
	- Users should be able to log in/out	- Password encryption and storage
	- Users should be able to reset passwords if forgotten	- Two-factor authentication
Browsing Products	- Users should be able to browse products by category	- Fast loading times
	- Users should be able to search for specific products	- Responsive design for various devices
	- Users should be able to filter products by various criteria	- Intuitive and user-friendly interface
Product Details	- Users should be able to view detailed product information	- Accurate and up-to-date product information
	- Users should be able to view product reviews and ratings	- High-resolution product images
	- Users should be able to add products to their shopping cart	- Secure transactions
Shopping Cart	- Users should be able to view and modify items in their cart	- Persistent shopping cart across sessions
	- Users should be able to proceed to checkout	- Notification for out-of-stock items
	- Users should be able to apply promo codes or discounts	
Checkout Process	- Users should be able to provide shipping and billing details	- Secure payment gateway
	- Users should be able to choose shipping options	- Multiple payment options (credit card, PayPal, etc.)
	- Users should receive order confirmation after successful payment	- SSL encryption for data transmission

Category	Functional Requirements	Non-Functional Requirements
Customer Support	- Users should be able to contact customer support	- Responsive customer support team
	- Users should be able to access FAQs and help resources	- Knowledgeable and helpful support staff
	 Users should receive timely responses to inquiries 	- Multiple communication channels (chat, email, phone)

Waterfall Model.

Requirements Gathering:

Define the goals and scope of the nursery e-commerce platform.

Gather requirements such as types of plants to be sold, user accounts, payment methods, shipping options, etc.

System Design:

Design the overall architecture of the e-commerce platform, including databases, servers, and user interfaces.

Create wireframes and mock-ups to visualize the user interface and user experience.

Define the technology stack to be used, such as the programming languages, frameworks, and databases.

Implementation:

Develop the back-end functionality of the e-commerce platform, including user authentication, product management, shopping cart, and checkout process.

Develop the front-end interfaces based on the design mock-ups, ensuring responsiveness and usability across different devices.

Integrate third-party services such as payment gateways and shipping providers.

Testing:

Perform unit testing to ensure the functionality of individual components.

Conduct integration testing to verify the interaction between different modules.

Perform system testing to validate the overall behaviour of the e-commerce platform.

Carry out user acceptance testing to gather feedback from real users and make necessary improvements.

Deployment:

Deploy the e-commerce platform to a staging environment for final testing.

Once approved, deploy the platform to a production environment for public access.

Monitor the platform for any issues or performance bottlenecks and address them promptly.

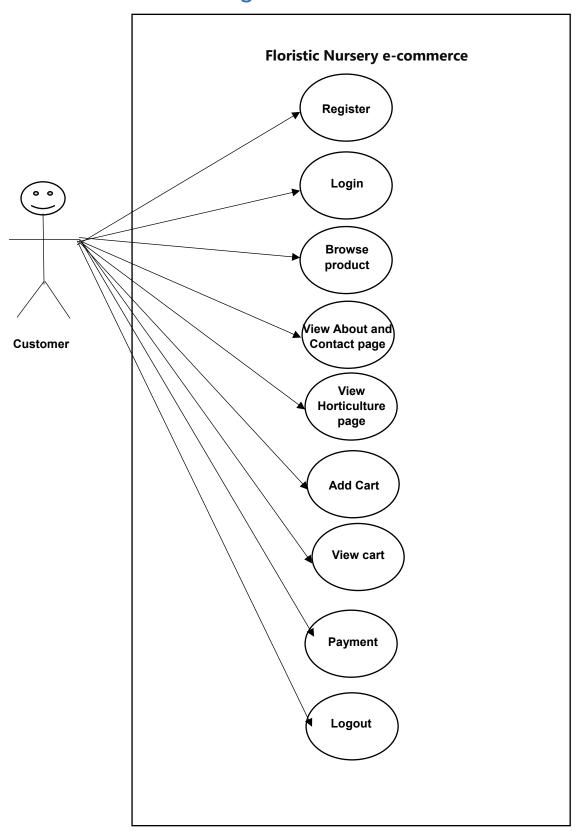
Maintenance:

Provide ongoing maintenance and support to ensure the smooth operation of the e-commerce platform.

Regularly update the platform with new features, security patches, and bug fixes.

Monitor user feedback and analytics to identify areas for improvement and optimization.

One Use Case Diagram



Prototype

Main Homepage

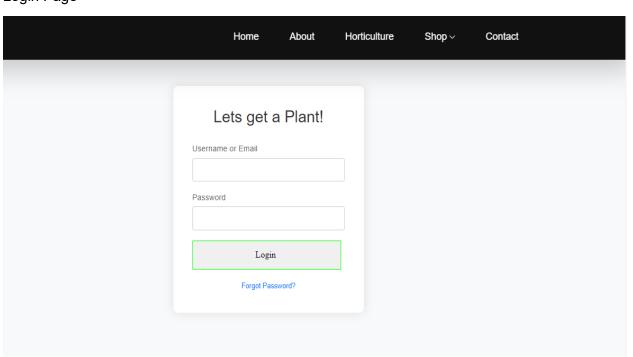


Welcome to Floristics website please Login or Sign up to Continue.

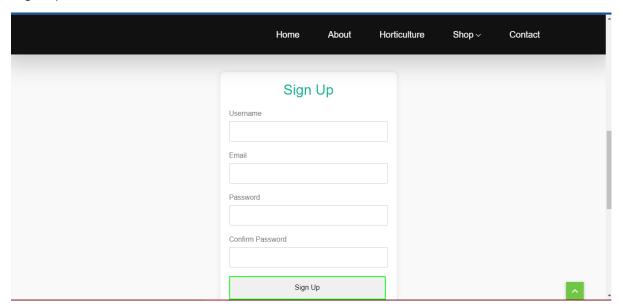
Login

SignUp

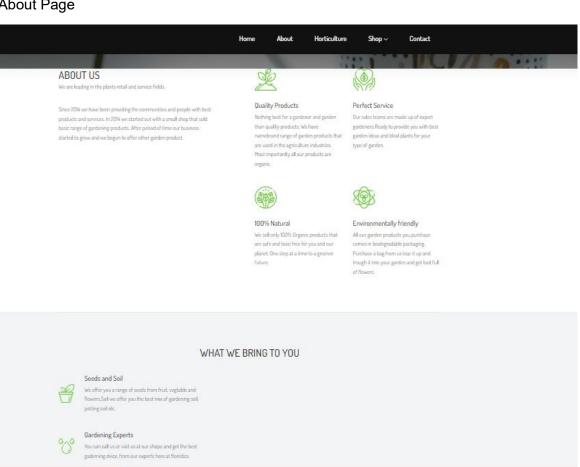
Login Page



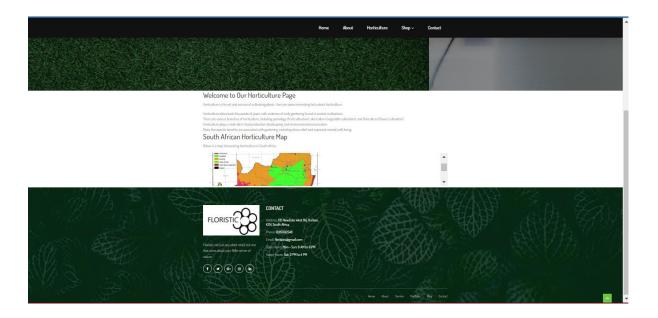
Sign Up



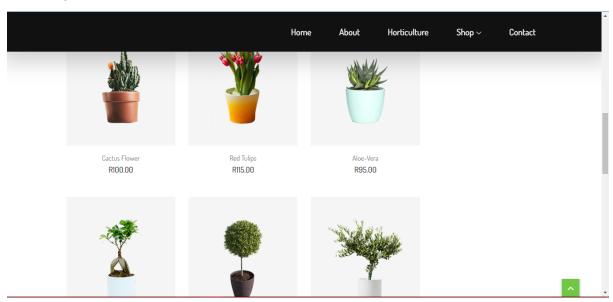
About Page



Horticulture page



Shop page



Shopping Cart



Order History page



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Conclusion

13

We were able to create the perfect website for Floristic plant retail. It was successful in bringing mass numbers of customers. The reviews about our website were overall good.

Card

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Pending

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Student Declaration

I, the undersigned, certify that:

- I am familiar with the rules regulating higher qualifications at Durban University of Technology, and understand the seriousness with which DUT will deal with violations of ethical practice in my research.
- where I have used the work of others this has been correctly referenced in the proposal and again referenced in the bibliography. Any research of a similar nature that has been used in the development of my research project is also referenced.
- this project has not been submitted to any other educational institution for the purpose of a qualification.
- where patents are developed under the supervision of the Durban University of Technology involving institutional expenditure, such patents will be regarded as joint property entitling the Durban University of Technology to its share, subject to the Durban University of Technology's policy on the Management and Commercialisation of Intellectual Property.
- I understand that plagiarism is wrong, and incurs severe penalties.

I HEREBY DECLARE THAT THE ABOVE FACTS ARE CORRECT.

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