



BSc (Hons) in Computing

Level 5

INDIVIDUAL ASSIGNMENT

Module Code & Title: COMP50016 – Sever Side Programning-2

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TOTAL (%)		

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signup 1. Mind Map - User Name Login Page - Email Address create account - Contact Number - Date Of Birth - Phone Number search bar Home Page women's clothing Men's Clothing clothing categoriesKid's Clothing Website - User Name / Password Total - Facebook Login Cart Checkout - Google Update and Remove Items - Manage Profile **Exchange Policies** Returns and Exchange - Payment Methods Terms and Conditions profile - Change Shipping Address Customer Service -Social Media Support - Change Username/Password Feedback Forms Reviews and Feedback Favorites Customer Reviews and RatingsPurchase history Checkout — Billing and ShippingDetails - User Name Data capturing Ample Clothing (Online Clothing Store) Net Sales Graph- Email Address Recent Reviews sign up / create account - Phone Number Total Number of Orders - Date Of Birth Processing Orders - FirstName On-hold Orders - LastName Low in stock products Country/Region Out of stock products Street Address Processing - District Pending Payment Check out - City View all orders Completed - Postal code/Zip Cancelled Orders - Phone Returned Packages CRM - Email Address Add New Orders - Order Notes - Add NewCustomers Customers - View all customers - All Products - Add New Products - Categories - Tags - Reviews Inventory Management — - Tracking stock availability and inventory levels.

User Name

2. Explanation of the solution, the process, features, and objectives of the system

Introduction:

The "Ample Clothing" system is an innovative synthesis of modern Customer Relationship Management (CRM) features with contemporary e-commerce capabilities. A smooth apparel purchase is made possible mainly to the web-based solution, which is meticulously developed to empower both consumers and administrators and create strong, long-lasting customer connections.

This solution includes several essential features to enhance customer management, product management, order management, and user authentication. The e-commerce website provides a user-friendly interface which allows customers to buy cloths online. Customers can create their accounts using email and password, allowing them to personalize their shopping experience and Customers can browse and explore a product catalog provided by the application and may access comprehensive product details, such as descriptions, costs, and photographs, allowing them to make wise purchases.

Within the application, customers may place orders for the required items. Customers receive order progress updates and order tracking information from the application, assuring openness and satisfaction.

The admin and the staff can manage people, goods, and orders effectively thanks to their customized CRM accounts.

The CRM gives the staff the tools they need to manage client contacts, address problems, and help, resulting in a satisfying customer experience. Additionally, the admin may add, update, and remove users using the CRM.

Customers' online buying experiences are made easier by this solution, which also allows Ample Clothing to handle customer relations and sales data effectively.

Process:

The "Ample Clothing" system runs using a clearly defined method that smoothly merges customer relationship management (CRM) and e-commerce functions.

User Registration - Customers may register for accounts by entering their email address and password. Staff and administration have personalized CRM accounts.

Browsing and shopping - Customers may explore the product catalog, examine comprehensive product information, add goods to their carts, and then shop.

Order management - Customers may place orders and obtain real-time updates on the status and location of their orders.

CRM - Administration and employees utilize customer relationship management (CRM) technologies to keep track of client connections, resolve problems, and help.

User management - The admin can add, modify, and delete users, guaranteeing effective user administration.

Handling Sales Data: The system properly handles sales data and may use it to get business insights.

Features:

The "Ample Clothing" system offers a wide range of functions that are designed to meet the requirements of both users and admin:

• Features of online shopping for customers -

A convenient product catalogs.

Photos and detailed product information.

Management of carts.

Convenient and safe checkout.

• Authenticating users -

Secure email and registration with passwords.

Individualization of the shopping process.

Role-based access for workers and administrators.

Management of orders -

Clear order placement and monitoring.

Instantaneous order updates.

Customer order history.

• CRM System -

Client contact management.

Issue-solving instruments.

Ability to provide customer service.

• Administration features -

User administration.

Administrative duties and oversight.

Organizational process management.

Data management for sales.

• Data analytics for sales -

Keeping and retrieving data.

Information and analysis.

Objective:

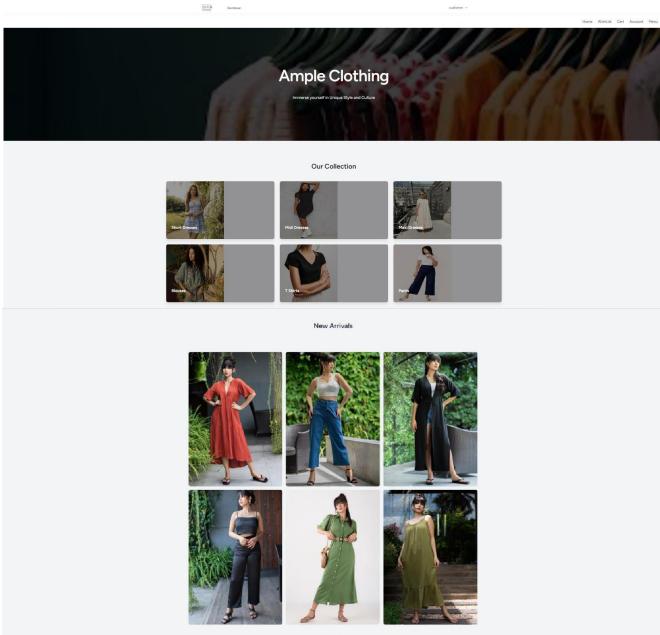
The "Ample Clothing" method is tactically created with the following primary goals in mind:

- Enhance Customer Experience A smooth, user-friendly, and customized purchasing experience is what the system promises to provide clients.
- Efficient Order Management This goal comprises placing, monitoring, and updating orders for clients in an efficient manner.
- Effective CRM Staff and admin have the resources they need to handle problems, maintain customer connections, and offer first-rate assistance.
- User Administration Administration may effectively manage user accounts and roles through user administration.
- Data-Driven Insights The system makes it possible to gather and analyze sales data in order to make wise decisions.
- Security and Trust Establishing trust through safe transactions and data security is a top priority.
- Scalability The system is made to scale in order to keep up with the business's expanding needs.
- User help One of the main goals is to offer resources and help for users.
- Utilization of input The system actively searches for and applies input for ongoing development.
- Future Development A long-term goal entails strategies for system growth and marketability as a SaaS service.

Screenshots

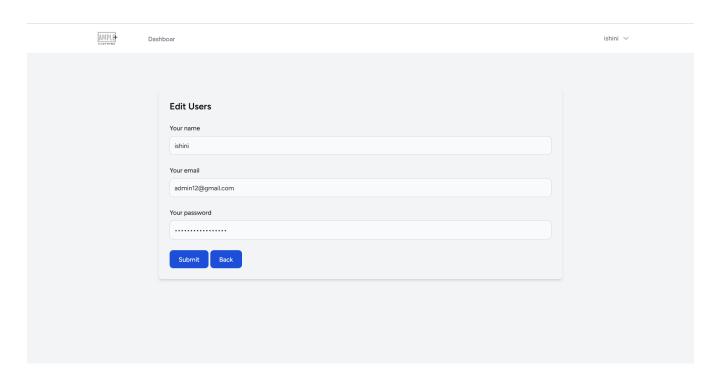
Customer Functionalities

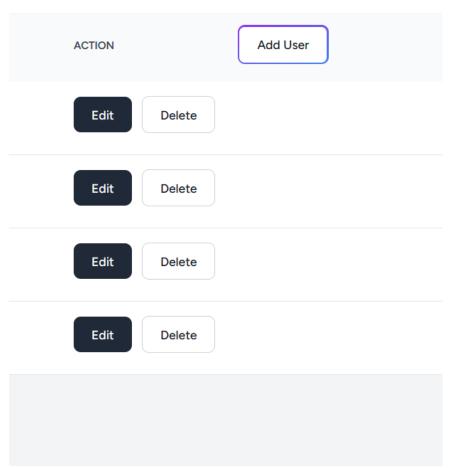
Home Page

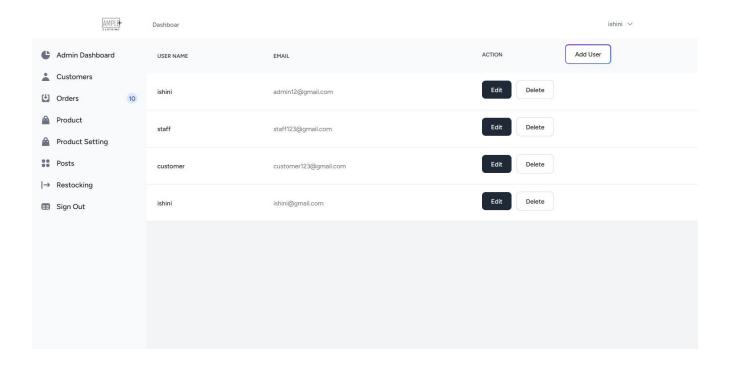


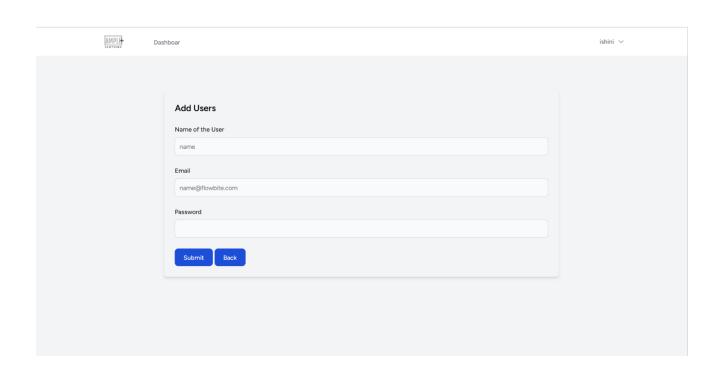


Admin Functionalities









3. Test Cases

Test Case ID	Test Case Description	Pre - Condition	Test Procedure	Test Inputs	Expected Output	Actual Output	Results
		Clothing items already exists in	Adding a item to the	Details of the added	Updating the quantity		
TC001	Adding Stock	the inventory system	system	item	of the stock	Stock quantity updated	Pass
			Selling a clothing item				
		Clothing items already exists in	and restock the same	Details of the sold item	Updating the quantity		
TC002	Updating Stock	the inventory system	product	and the restocked	of the stock	Stock quantity updated	Pass
				Reached low stock			
TC003	Stock Alerts	Few items with low stock	Montoring stock levels	threshold	System gives a alert	Alert Generated	Pass
		Various Categories available in	Creating a new clothing		New category added to		
TC004	Category Creation	the system	category	New category details	the system	New category added	Pass
		Various Categories available in	Editing and deleting an		Category details	Category details	
TC005	Category Modification	the system	exsiting category	Category details	updated and deleted	updated and deleted	Pass
	Recording Customer	Customer has made a purchase		Customer ID and	Purchase history	Purchase history	
TC006	Purchase	through the system	Recording a purchase	purchase details	updated	updated	Pass
	Viewing Purchase	Customer has made a purchase	Accessing a purchase		Purchase history	Purchase history	
TC007	History	through the system	history detail	Customer ID	displayed	displayed	Pass
			create a report on		Analytics report	Analytics report	
TC008	Purchase Analytics	Several purchases in the system	purchase analytics.	Data range for analysis	displayed	displayed	Pass
	Purchase History		Search for a specific		Searched history	Searched history	
TC009	Search	There is a purchase history	purchase	Purchase details	displayed	displayed	Pass

Test Case ID	Test Case	Description	Pre - Condition	Test Procedure	Test Inputs	Expected Output	Actual Output
		Confirming that the product		Go to the product page by clicking.			
		page appropriately displays all		Check to see that the right product			
		of the information about the	The database contains	information—name, description,		All product details are	All the products are
TC010	Functinality Testing	product.	product data.	price, etc.—is being shown.	Product ID	displayed accurately.	displayed correctly.
				Try to sign up as a new user. Examine			
		Check the user-friendliness of		the registration form's usability,		With simple instructions,	
		the user registration	Accessible user	clarity, and helpfulness of the error		a user should be able to	
TC011	Usability Testing	procedure.	registration form.	messages.	Registrartion Details	register with ease.	User Registered
				Start a product-related		The time it takes to	Systems takes a
		Check the product search	Search functionality is	search. Calculate how long it takes for		display the search results	minimum time period to
ГС012	Performance Testing	feature's response speed.	available.	search results to appear.	Search Query	is reasonable.	perform

4. The quality assurance review process.

Review Goal

The "Ample Clothing" system's quality assurance (QA) review procedure aims to:

- Functions properly given the specified requirements.
- Offers clients a user-friendly experience.
- Efficiently operates under standard load circumstances.
- Identifies areas that need improvement and fixes flaws.

Roles and Responsibilities

- QA Team The QA Team oversees organizing, carrying out, and evaluating the review procedure.
- Development Team Assists QA in fixing bugs and improving the system.
- Project Manager The QA review is overseen and approved by the project manager.

Review Phases

- Test Planning Establishing the goals, parameters, and resources for a test.
- Test Case Creation The process of creating thorough test cases that address numerous elements.
- Test Execution Running tests and documenting real outcomes.
- Defect Reporting Reporting defects involve keeping track of any flaws or problems found during testing.
- Analysis- Assessing each case's test results.
- Recommendations Outlining adjustments and upgrades considering findings.
- The QA review method has been examined and approved.

Review Criteria

The "Ample Clothing" system is assessed by the QA review based on functionality, usability, and performance standards.

5. Why the test cases were created, and a deep analysis.

a) User Registration

Purpose - The purpose of this test case was to verify the user registration procedure. The goal was to make sure people could sign up easily, as this is a crucial part of onboarding customers.

Deep Analysis - An important step in the user onboarding process is the registration of new users. The pleasure of users is increased and adoption is promoted through a simple registration process. The user-friendliness of the system may be determined by analyzing the test case's findings. Any variations from anticipated results may point to places where usability needs to be improved.

b) Product Search

Purpose - This test case assesses the functioning of the product search tool, which is essential for helping consumers locate goods effectively.

Deep Analysis - A flawless shopping experience depends on effective product search. User happiness directly depends on how quickly and accurately search results are returned. Performance problems will be highlighted, along with any possible effects they may have on usability.

Recommendations:

The following suggestions are offered in light of the findings and comprehensive study of test cases:

To improve system dependability, give discovered issues high priority and fix them right away. Keep doing usability tests to improve the user experience even further. Complete performance testing should be carried out at peak load conditions. Create and maintain a reliable defect monitoring system to ensure ongoing quality enhancements.

6. The future upgrade plan to ensure the system is future-proofed

Future-Proofing "Ample Clothing" as a SaaS Solution: A Strategic Roadmap

To be competitive, organizations must adapt and innovate as the digital world continues to change at an unprecedented rate. Our web-based application "Ample Clothing," which combines an e-commerce website with a powerful Customer Relationship Management (CRM) system without difficulty, is no exception. A future upgrade strategy is essential to ensuring its continued relevance and market dominance. The goal of this strategy is to describe how we see turning "Ample Clothing" into a Software as a Service (SaaS) solution, an initiative that offers scalability, accessibility, and long-term growth.

The SaaS Advantage: Scalability and Accessibility

The implementation of the SaaS model is the cornerstone of our future upgrading strategy. This tactical change is a paradigm shift that enables "Ample Clothing" to surpass the constraints of conventional software. Our platform has never-before-seen scalability thanks to SaaS. Our system can easily expand resources in response to demand, ensuring that it can handle any sizeable increase in the number of users.

SaaS also enables universal accessibility. "Ample Clothing" is now accessible from any location, at any time, and on any device with an internet connection thanks to cloud-based deployment. Customers are not the only ones who can oversee operations from multiple places with ease; our staff and administrators can as well, increasing responsiveness and efficiency.

The potential for "Ample Clothing" to become a Software as a Service (SaaS) solution is quite promising. Outlining the strategic roadmap and important factors for promoting and selling our SaaS service to a larger audience is crucial as we start this journey.

By turning "Ample Clothing" into a Software as a Service (SaaS) solution, we can make our present CRM and e-commerce system more adaptable so that it can be advertised and sold to a wider customer base. With this growth, businesses in the clothes retail sector, especially small and medium-sized ones, now have more access to our user-friendly and feature-rich solution without having to invest heavily in its creation and upkeep. Strategic market positioning, adaptable pricing strategies, effective digital marketing, first-rate customer service, and a dedication to data protection are the main components of our future strategy. As a result, "Ample Clothing" is guaranteed to develop into a reliable and affordable solution for clothing merchants and business owners wishing to improve their online visibility and customer relationship management.