




ASSIGNMENT TOP SHEET

Higher Diploma in Information Technology

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| Lab Group | PC number |
| | NA |

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| Module Title : Web Application Development | Module Code: IT1207 |
| Lecturer in charge : Dr. Gayana Fernando | |
| Assignment Title : Project Proposal | |
| Due Date: 15th February 2024 | Date Submitted: 14th February 2024 |
| Please Tick here if you have used a proof-reader for this assessment : | |
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| Declaration | |
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| <p>I declare that work presented in the assignment submitted to the Sri Lanka Institute of Information Technology is a record of an original work done by myself. This assessment is submitted in the partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Information Technology. The results embodied in this report have not been submitted to any other University or Institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.</p> | |
| <p>Name(s) and Signature(s) :</p> <p>A.A. Rifath</p>  | <p>Date:</p> <p>14th February 2024</p> |

Extension Deadline

Lecturer in charge agrees that the assignment may be submitted days after the deadline and should be marked without penalty.

Lecturer in charge confirmation:

Introduction and Description of the Project:

Novatech is a newly opened tech store. This store currently does not have a website for customers to view the products or an online presence. All transactions and interactions are done manually. The objective of this project is to design an e-commerce website for Novatech.

The customers will have access to features that they currently do not have like browsing products without having to come to the store, ordering products from home, checking stock availability, delivery of products, etc. This website will increase the store's reach and generate more income for the store.

Key features of the website:

- Browsing and comparing products
- Check stock availability
- Online ordering and payment options
- Track packages
- Wishlist
- Customer, Inventory, and transaction database
- User profile management
- Intuitive UI

1.1 Problem Specification:

Novatech currently operates as a traditional retail tech store. They do not have a platform for customers to interact with their products, all transactions are done manually in which a POS system is used to track inventory and prices of the products. If a customer wants to buy a product they have to come to the store which is inefficient and will reduce sales for the store. The only software used is Microsoft Excel to keep track of transactions which is done manually by the worker each time a transaction takes place.

Issues currently faced:

- Transactions done manually with a POS system and spreadsheets.
- No online payment options.
- Customers have no way to check stock availability.
- Orders are taken via phone calls and delivered.
- Customers cannot track their packages.
- Not enough popularity for the store, resulting in less sales.
- No database to track transactions and customers.

1.2 Solution Outline:

The proposed solution for Novatech involves the development of a user-friendly e-commerce website that will help with the above mentioned current limitations of the store while improving customer experience and making operations more efficient. It can greatly reduce the cost and time needed for manual processing of a transaction. Additionally, it can be more secure and faster for the customers. As shown in the below diagram the idea is to create a website with a database so that when a transaction happens it will automatically store customer details and update inventory without manual processing.

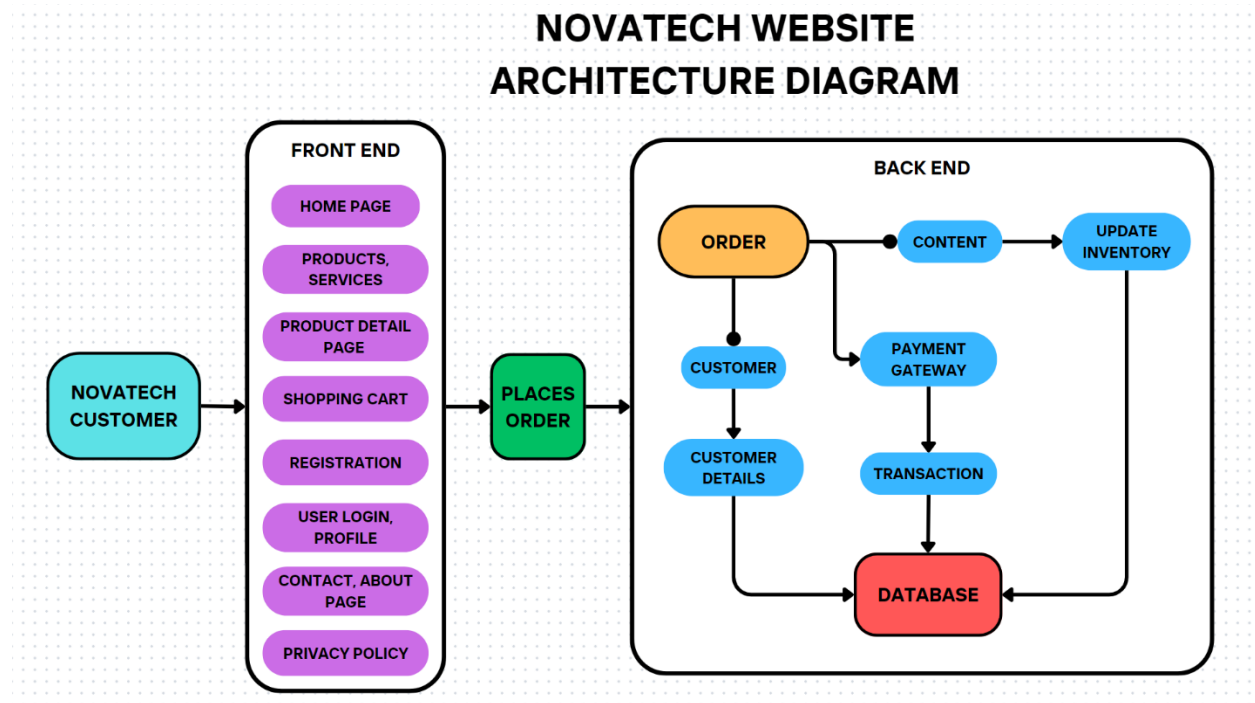


Diagram made with canva.com

1.3 Key Benefits:

- Customers can place orders via the website without having to come to the store.
- Customers can use online payment options.
- This website can help reduce the costs by eliminating the need for physical storefront and inventories.
- Increased popularity for the store, resulting in more sales.
- Can save time which can help the staff focus more on the store's important factors.
- Good user experience.
- Secure and fast.
- Efficient transaction and stock management.

2. Details of System Functions:

- **Name:** Home page
Description: The homepage is the main landing page of the website and should provide visitors with a quick and easy overview of the website's content. It should include links to the main site pages, as well as information about any ongoing special offers or promotions.
- **Name:** Products page
Description: Users can view the available products from this page. They can browse all products or use filters that allow users to narrow down their search by price, material, and other categories and check stock availability.
- **Name:** Product details page
Description: Each product page should provide detailed information about a specific product, including its name, description, price, materials and availability. It should also include high-quality photos of the products.
- **Name:** Register
Description: First time customers can register themselves to the website through this page. They have to provide details such as name, email and phone number.
- **Name:** User profile
Description: Registered users can manage and modify their profile. They should be able to view their order history, update shipping information, and change the account password.
- **Name:** Sign In
Description: Registered users can login with their credentials and manage their profile and place orders. And also sign out from their account.
- **Name:** Shopping cart
Description: This is only available for registered users. Customers can add products to their cart or manage the products selected and proceed to checkout.
- **Name:** Checkout
Description: Customers can confirm the orders in the shopping cart and proceed for the payment. It should allow customers to pay using a variety of payment methods, such as credit cards, debit cards, online payment gateway or cash on delivery.

- **Name:** Payment gateway
Description: Customers can pay for their orders using an secure online payment gateway.
- **Name:** Contact page
Description: Users can contact the store using this page for customer support and further information.
- **Name:** Privacy Policy / Terms & Conditions
Description: This page displays the privacy policy and terms & conditions of the store.
- **Name:** Customer feedback page
Description: Customers can offer feedback using this section.