Billing Software

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Introduction

Traditional billing systems have lots of headaches such as Lacks advanced reporting and analytics capabilities.Analyzing sales trends and customer behavior is challenging. works with single functionalityBilling Software is a comprehensive billing management system built using the MERN (MongoDB, Express.js, React, Node.js) stack. Designed for efficient and secure handling of billing operations, this application offers features such as user authentication, inventory management, bill creation, and storage. The system ensures that the inventory is updated automatically whenever a bill is saved, facilitating easy stock management. Additionally, the software provides insightful visualizations, like donut diagrams, to help users understand stock details and sales trends.

Project Scope

The primary aim of the Billing Software is to streamline the billing process for businesses, providing an easy-to-use interface for managing inventory, creating bills, and storing them for future reference. The project scope includes:

- - Developing a user-friendly interface for handling billing operations.
- - Implementing secure user authentication for login and signup.
- - Providing an efficient way to manage and view inventory.
- - Enabling the creation and storage of bills.
- - Offering insightful visualizations to analyze stock and sales.
- - Facilitating easy navigation through a well-organized dashboard.
- - Providing search functionality for inventory and saved bills.
- -customized offers can be given to the Customers through mail
- -Easy to handle and can run everywhere

Functional Requirements

1. Login & Signup

-User Authentication- Secure user authentication to ensure only authorized users can access the system.

- Signup-Allow new users to create an account.

- Login- Allow existing users to log in to the system.

2. Home

- Dashboard- A central navigation point for accessing all features of the application.

3. Inventory

-Manage Stock-Add, view, and update stock details.

- Search Functionality- Quickly search through inventory items.

- Donut Diagram-Visual representation of stock details for easier inventory management.

4. Saved Bills

- View Bills-Access previously saved bills.

- Search Functionality-Quickly search through saved bills.

- Donut Diagram- Visual representation to analyze sales trends and item quantities.

5. Create Bill

- Generate Bills-Create new bills with items selected from the inventory.

- Update Inventory-Automatically reduce the quantity of items in the inventory when a bill is saved.

6. Logout

- End Session: Securely log out from the system, ending the user session.

Technology used

FRONT END : REACTJS,HTML,CSS, TAILWIND CSS, JAVASCRIPT

BACKEND: NODEJS, EXPRESS DATABASE: MONGODB

AUTHENTICATION: JWT

HOSTING: DOCKER

Installation

To install and run the Billing Software, follow these steps:

1. Clone the repository:

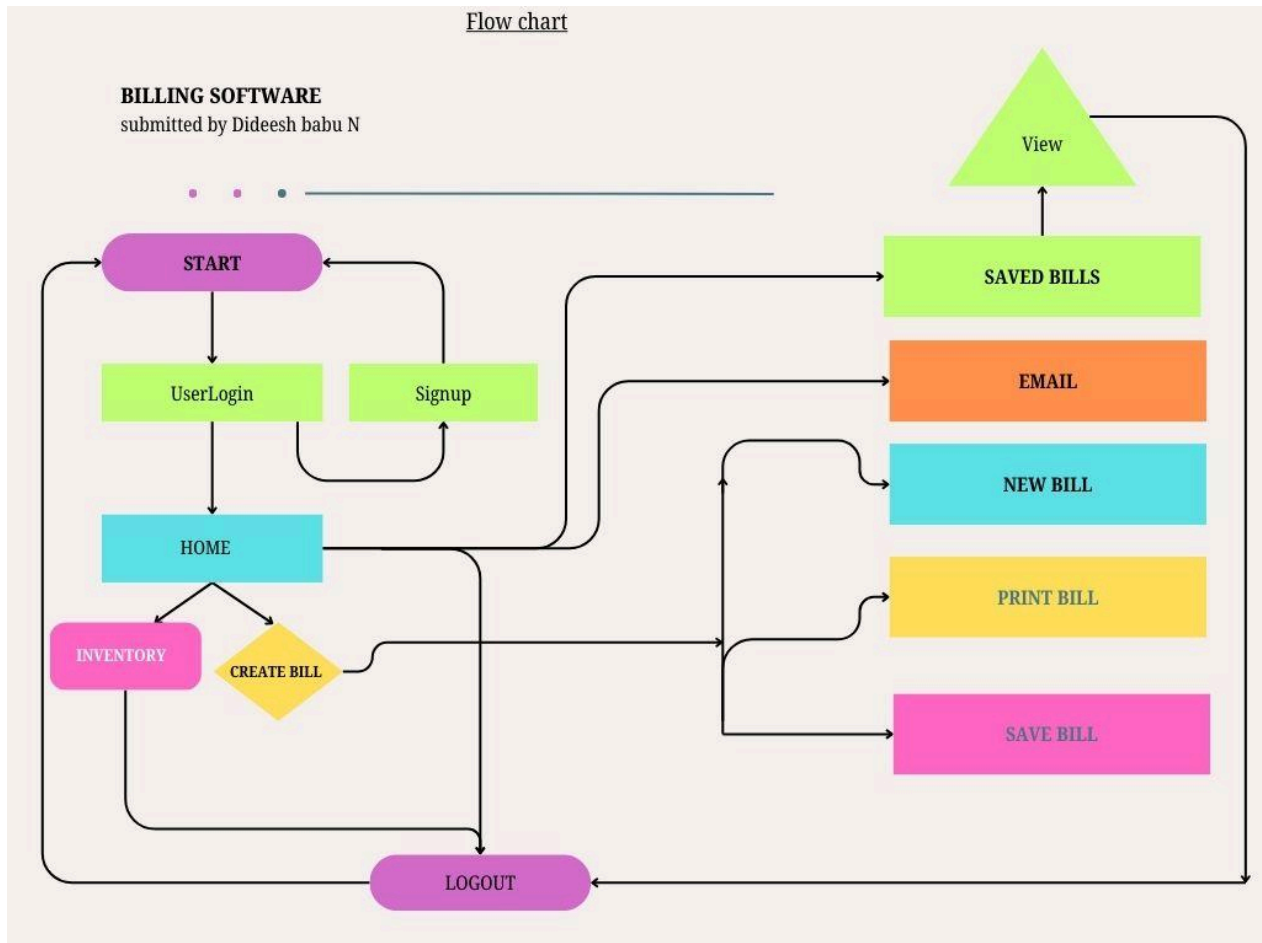   git clone https://github.com/dideesh92/FINAL_PROJECT-Billing-Software.git

2. Navigate to the project directory:

   cd FINAL_PROJECT-Billing-Software

3. Build and start the Docker containers:

   docker compose up --build

Workflow Diagram:

Flow chart

BILLING SOFTWARE
submitted by Dideesh babu N

START

UserLogin

Signup

HOME

INVENTORY

CREATE BILL

LOGOUT

SAVED BILLS

View

EMAIL

NEW BILL

PRINT BILL

SAVE BILL

Screen Recording:

[WatchRecording](https://drive.google.com/file/d/1upO4nIXlLL2pKHrqKjl-02PXIezRHu2o/view?usp=sharing)

Conclusion

The Billing Software project aims to provide a comprehensive and user-friendly solution for managing billing operations. By leveraging the capabilities of the MERN stack, the application offers robust features for inventory management, bill creation, and data visualization. The integration of secure user authentication and efficient search functionalities further enhances the usability of the system. This software serves as an effective tool for businesses looking to streamline their billing processes and gain valuable insights into their sales and inventory.