Freshbite Subs

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Submitted to

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INTRODUCTION

In today's fast-paced world, the two major trends are convenience and healthy eating. FreshBite Subs is a new food establishment in Canada in the subs food industry, and they are promising a great variety of Subs and side options that can fulfill these contemporary needs. To enhance accessibility and streamline the customer experience, FreshBite Subs requires a robust online platform that allows customers to easily browse their offerings and place orders for delivery.

With the use of MERN Stack (MongoDB, Express.js, React, Node), Our team has developed an online ordering platform as well as an admin dashboard. The ordering platform will be for the users to browse through the items and place order. The admin dashboard will be for the owner/manager of FreshBite subs, wherein they can efficiently manage items and orders. The project also focuses on creating a seamless experience for the user.

This project not only provides a valuable platform for the Freshbite Subs, but it also provides an opportunity for our team to apply and enhance our skills in full-stack development.

BENEFITS OF DOING THE PROJECT

- 1. **Practical application MERN stack skills:** The present project provides the practical experience in using the MERN stack (MongoDB, Express. js, React, Node. js) in practice. Everyone gets to learn from the practical aspect of the project and enhance one's full-stack development capability, as well as coding skills.
- 2. **Experience in Evolving Industry Needs**: The sector in focus is very dynamic and the demand for online order solutions is becoming higher and higher. In this case, by working on this project, we shall have an understanding of the needs and trends in the industry when it comes to such projects so as to be fit for the job next time it is called for.
- 3. **Portfolio and Resume Enhancement**: Completing this project will provide a significant addition to our professional portfolios and resumes. It demonstrates our ability to showcase our technical expertise, project management skills, and teamwork to potential employers.
- 4. **Improved Collaboration and Communication Skills:** Performing this project in a group will improve the group process, which will enable members to communicate, share ideas, and organize the work well. All these soft skills come in handy in any workplace and will be automatically made to come to optimal strength in the course of the project's implementation.

TECHNOLOGY DESCRIPTION

MongoDB:

Role: Database Administration

Purpose: MongoDB is used as the project's database, holding all necessary information such as menu items, customer information, order specifics, and administrative records. Because MongoDB is a NoSQL database, it can handle unstructured data with flexibility, which makes it perfect for the changing requirements of a platform that orders takeout.

Express.js:

Role: Backend Framework

Purpose: The application's server-side logic is created using Express.js. It manages data flow between the client-side interface and the database by handling middleware, routing, and integration with MongoDB. A stable and expandable framework for developing the backend API is offered by Express.js.

React:

Role: Front-end library

Purpose: React is used to construct the website's user interface. Customers can easily browse menu items, place orders, and engage with the platform thanks to its dynamic, responsive, and straightforward user experience. The component-based architecture of React also contributes to the front-end code's scalability and maintainability.

Node.js:

Role: Runtime Environment

Purpose: JavaScript can be developed on the backend using Node.js, which powers the server-side execution of JavaScript. An online meal ordering system needs to be able to handle numerous customer requests and process data in real-time, and it guarantees a quick, effective, and event-driven environment.

Mongoose:

Role: Object Data Modeling (ODM) Library

Purpose: In the Node.js environment, Mongoose is utilized to communicate with MongoDB. It offers a schema-based approach to model the application data, which simplifies data validation, querying, and manipulation while maintaining database structure consistency.

CSS:

Role: Styling

Purpose: The user interface is styled using CSS (Cascading Style Sheets) to create an aesthetically pleasing and responsive design.

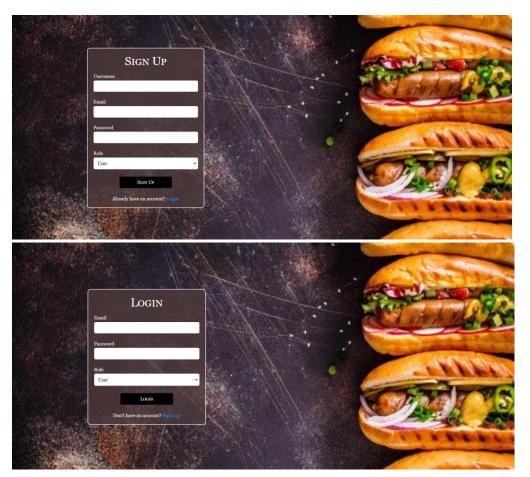
GitHub and Git:

Role: Version Control

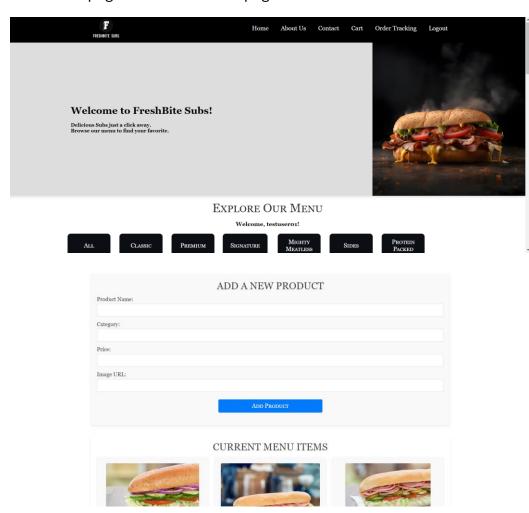
Purpose: Git is used for version control, which enables team members to effectively manage project development, track changes, and collaborate on code. The project repository is hosted by GitHub, which also makes code reviews, problem tracking, and collaboration easier.

DESIGN AND DATA FLOW

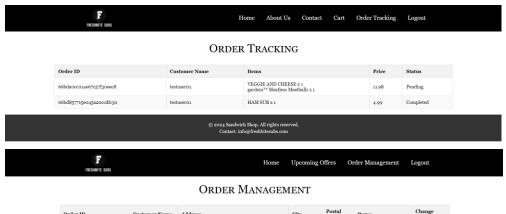
Login and signup page



User Homepage and Admin Homepage

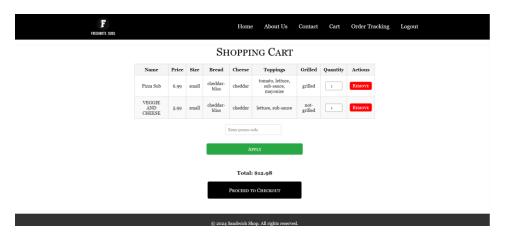


Order tracking and Order Management

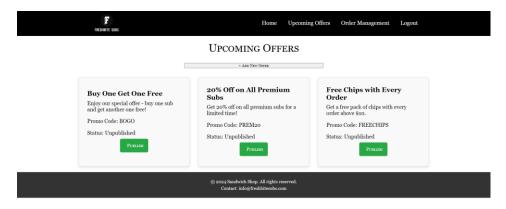


Order ID	Customer Name	Address	City	Postal Code	Items	Change Status
66bdaocco14e67c57f3oeec8	testuser01	11 abc	Kitchener	N2A 2T2	VEGGIE AND CHEESE x 1 gardein™ Meatless Meatballs x 1	Pending V
66bd857715e045a20ccdfc30	testuser01	11 abc	Kitchener	N2A 2T2	HAM SUB x 1	Completed 🕶
66bd779e7e79b7fc7e98daaa	user11	ohvadz	Kitchener	N2A 2T2	ASSORTED SUB x 1	Pending ~
66bd47bfabd7ae06654ab6c3	Vidhi	54 gig	jidfj	joignjg	VEGGIE AND CHEESE x 1	Completed 🕶
66bd435c9cf17c55b273b978	alex	24ghhjkf	njjbhifhobv	kjbuhiodf	VEGGIE AND CHEESE x 1	Completed 🗸
66bd274a3f24b2a7f706d3b2	Hiral Patel	303-1100 Courtland Avenue E	Kitchener	N2C 2H9	VEGGIE AND CHEESE x1	Pending V

Checkout Page - User

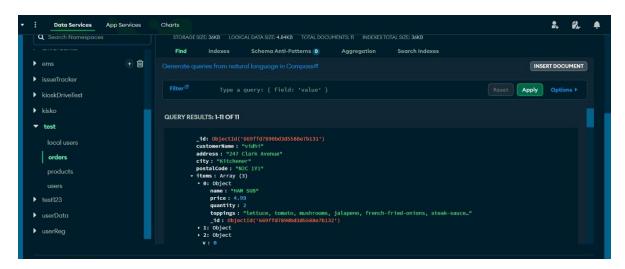


Upcoming offers

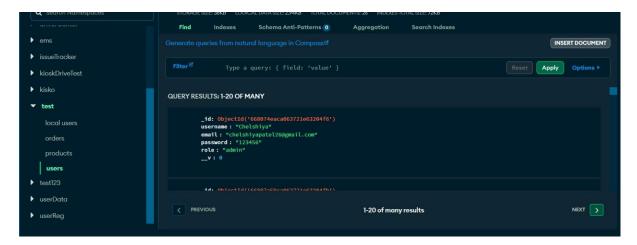


MongoDB Database

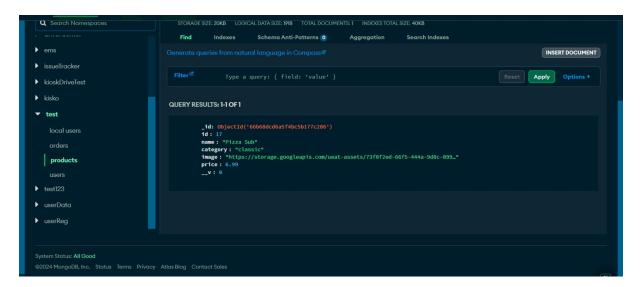
User data



Orders



Products



CONCLUSION

The website development is a big advancement to make a user friendly and convenient platform for the people now a days. With the help of the MERN stack, we have developed such an application where users can browse easily through the menu, order, and track their orders. Similarly, there are admin features that help businesses keep track of and manage things efficiently.

This has been a very good project for the team to get some hands-on full-stack development experience, problems, collaboration, and good learning on both technical and professional fronts.

Future extension:

Live Tracking on Google Maps:

Although the user has a real-time tracking system here, where the user can check the status of the order, an envisioned future development of the site could be live order

tracking based on Google Maps. Customers will be able to get this feature to monitor their orders in real time so that they are given an estimated delivery time and a visual display of the delivery route on a map. Implementing a feature like this will need embedding Google Maps API in the current order management system as an enhancement for users' convenience and transparency.

Loyalty Program:

Introducing a loyalty program that rewards customers for every order with points can convince your clients to do repeat business. The points you can redeem for discounts or free items will encourage customer retention and brand loyalty growth.

Customer Feedback and Reviews:

Description: Adding a feedback / review section for customers would allow users to rate and leave comments about the food and service. This would be a great way for FreshBite Subs to gather well needed feedback on how they can improve their food and make sure customers are satisfied.

Limitations:

Customer Engagement and Communication:

Description: To run a loyalty program, it's necessary to communicate with the customers about their points, rewards, special offers etc. There are no automated communication tool available in the current website(ex: email/SMS notifications) to talk to the customer and keep them engaged and updated about the loyalty program.

GITHUB LINK

Github Link: https://github.com/hiralpatel20/FreshBite-Subs