



E COMMERCE WEBSITE

Debarghya Bera 4 th Year, Department of CSE, Gandhi Institute for Technology, BPUT, India

debarghya2021@gift.edu.in

Sandip Kumar Pradhan 4 th Year, Department of CSE, Gandhi Institute for Technology, BPUT, India
sandippradhan2021@gift.edu.in

ABSTRACT

BLUEBERRY is a dynamic e commerce platform designed to offer a seamless and engaging online shopping experience. This website provides a diverse range of products/services, catering to varied customer needs. Key features include an intuitive user interface, robust search and filtering capabilities, secure transaction processing, and personalized recommendations. BLUEBERRY aims to optimize the online shopping journey, enhancing customer satisfaction and driving sales through efficient design and functionality.

KEYWORDS

HTML, CSS, MongoDB, Express.js, React.js, Node.js

I. INTRODUCTION

BLUEBEERY is a feature-rich, intuitive e-commerce application designed to deliver a seamless and efficient online shopping experience for both customers and administrators. At its core, BLUEBEERY provides a digital marketplace where users can explore a wide range of products across various categories, making product discovery simple and enjoyable. The platform ensures that each product is presented with clear and comprehensive details, including accurate pricing, which helps users make well-informed purchasing decisions. The shopping experience is streamlined through an integrated cart system that allows users to add items, proceed to checkout, and receive a detailed bill summarizing their transaction, all within a few clicks.

II. LITERATURE REVIEW

The development of BLUEBEERY was inspired by existing research and studies in the fields of e-commerce, product management, and user experience. A comprehensive understanding of the challenges faced by both businesses and consumers in the online retail space was crucial in shaping the application. This literature survey highlights key insights from academic research, industry reports, and market trends to underscore the importance of the BLUEBEERY platform.

III. SYSTEM DESIGN

The platform is designed in a modular architecture, consisting of:

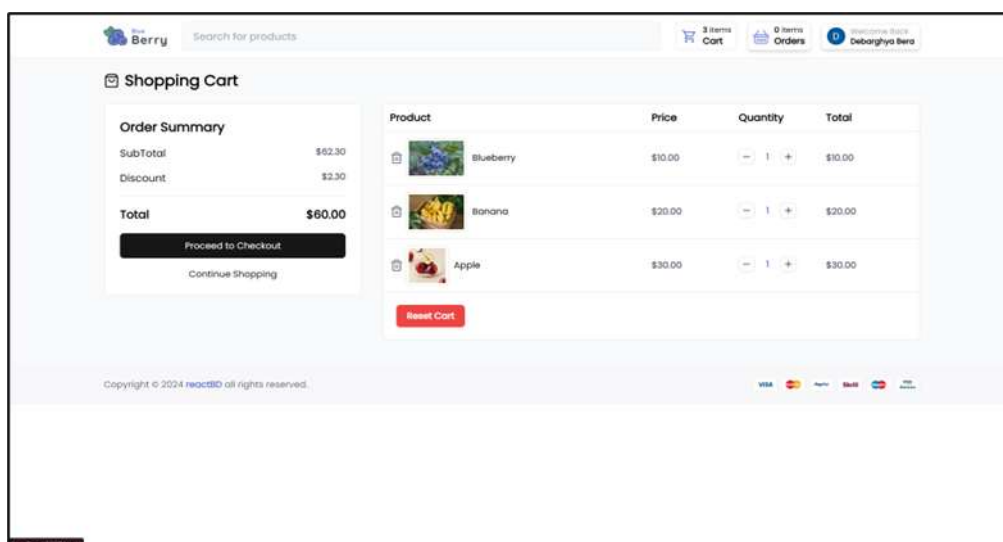
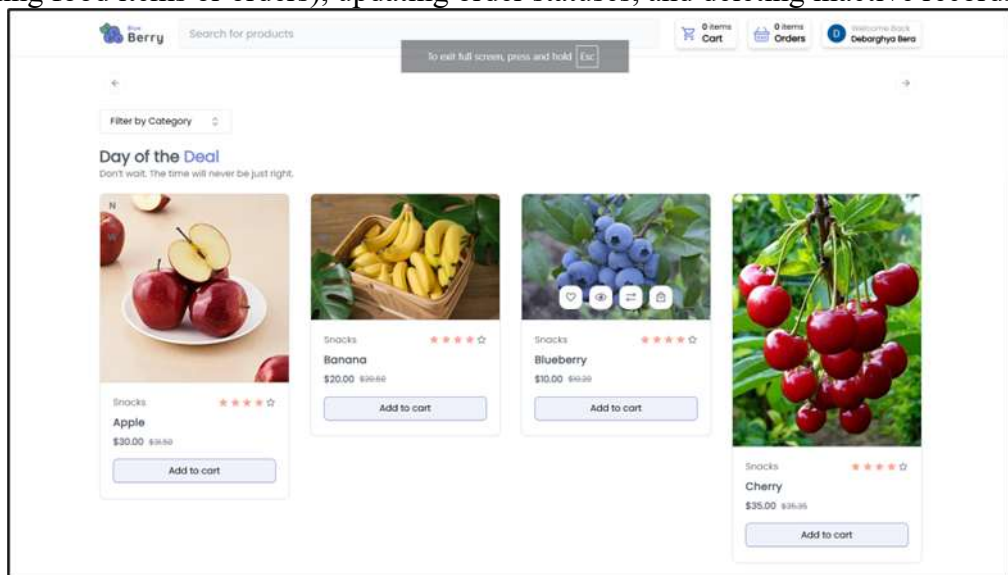
- Frontend (React + Next.js): Provides a dynamic, responsive user interface.
- Backend (Node.js + Express): Handles server logic, APIs, and authentication.
- Database (MongoDB): Stores structured data for users, products, and orders.
- CMS (Sanity): Allows easy content updates for admins without touching code.
- Authentication (Clerk): Manages user sign-up, login, and session handling securely.

IV. IMPLEMENTATION

MongoDB Atlas is used to host the database on the cloud, providing scalability, security, and automated backups to ensure data integrity and availability.

Backend Integration: The backend is built using Node.js and Express.js, which interact with MongoDB through Mongoose. Mongoose provides an abstraction layer for managing the schema and performing CRUD operations on the database.

CRUD Operations: The platform supports creating new users, restaurants, and orders, retrieving data (e.g., fetching food items or orders), updating order statuses, and deleting inactive records.



V. CONCLUSION

The BlueBerry e-commerce food ordering platform has been successfully designed and implemented as a modern, scalable, and efficient web application. Leveraging the MERN stack alongside Next.js, Sanity, and Clerk, the platform offers a complete solution for both customers and administrators. Key features such as secure user authentication, dynamic product management, categorized food browsing, real-time order tracking, and seamless data operations have been effectively realized. The application demonstrates solid performance, user-friendly navigation, and a modular structure, making it easy to maintain and extend.

ACKNOWLEDGEMENT

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