Development of an E-Commerce Web for Chili Products Using the MERN Stack

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ABSTRACT

The Chili e-commerce platform was developed to address the limitations of traditional methods for managing and selling chili-based products, which often lack efficiency and accessibility. This project aims to develop a comprehensive web application that supports effective product and order management for administrators, while providing consumers with a seamless interface for browsing products, viewing details, and completing purchase transactions.

The system is built using the MERN stack, with React.js utilized for front-end development to deliver a responsive and user-centric interface that enhances the overall user experience. The back-end is developed using Node.js and Express.js, integrated with a MongoDB database to efficiently manage and process data related to products, users, and transactions. The development process was completed within the planned timeframe and included both unit and system testing to ensure reliability and functional accuracy.

Evaluation results demonstrate that the platform operates effectively and fulfills all predefined objectives. Customers can conveniently navigate the product catalogue and place orders, while administrators are able to manage inventory, update product information, and monitor transactions in a systematic manner. Overall, the Chili e-commerce platform enhances operational efficiency and aligns with the requirements of modern digital commerce.

INTRODUCTION

This project focuses on the development of an online chili product website as part of a cooperative education program in Full-Stack web development. The system was created to apply information technology knowledge to real-world practice by addressing the limitations of traditional product and order management. It provides an efficient web-based solution that enables users to conveniently access products and make purchases, while allowing administrators to systematically manage product information and customer orders.

TECHNOLOGY

METHODOLOGY

Get Requirement
Study Requirement
System Design
System Development
System Testing
Evaluation and Improvement
Deployment

ARCHITECTURE

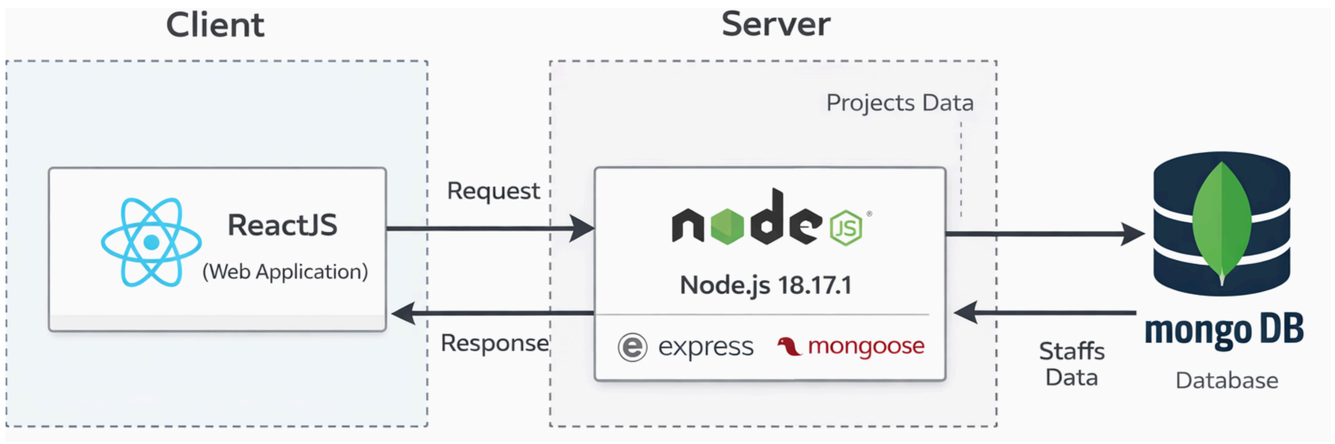

Figure 1: System Architecture of the Chili E-commerce Platform

CONCLUSION

The development of the Chili Website was successfully completed in accordance with the defined objectives. The e-commerce system effectively supports product and order management by enabling administrators to manage data efficiently, while allowing users to conveniently access product information and complete purchase transactions. The results demonstrate that the system is practical for real-world implementation and effectively addresses the demands of online commerce in the digital era.

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