

Individual Proposal

CISC3003 Web Programming

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Introduction

In response to the rapid expansion of the e-commerce industry, there is a heightened demand for efficient online shopping solutions. This project proposal outlines the development of a web-based shopping cart system designed to simplify product management and order processing. The system aims to enhance the user experience by providing a responsive and intuitive interface for both users and administrators.

Project Objectives

Develop a complete shopping cart system that supports product, order, and shopping cart management.

Ensure the system is responsive across various devices and platforms.

Implement a user-friendly interface for both customers and administrators.

Achieve high performance and reliability in product and order handling.

Technical Framework

Front-end Technologies: HTML for structuring the web pages. CSS for styling and responsive design. JavaScript for dynamic content and client-side interactions.

Back-end Technologies: PHP PDO for server-side scripting and database interactions. MySQL for database management to store and retrieve data efficiently.

Development Tools: Google Chrome for testing and debugging. XAMPP for setting up a local development server and managing the database.

System Features

Product Management: Adding new products to the inventory. Viewing and editing existing products. Removing products from the inventory.

Order Management: Creation of new orders upon customer purchases. Viewing and managing past orders and their details.

Shopping Cart Management: Adding items to the shopping cart. Modifying items in the cart, including quantity adjustments and item removals. Checkout functionality to complete purchases.

Development Phases

Phase 1: Planning and Design (1 Week)

Analyze requirements and finalize the feature list.

Design the database schema and user interface mockups.

Phase 2: Implementation (3 Weeks)

Develop the front-end interfaces using HTML, CSS, and JavaScript.

Implement back-end logic using PHP and set up the MySQL database.

Integrate front-end and back-end components.

Phase 3: Testing and Refinement (1 Week)

Perform comprehensive functional testing across different devices and browsers.

Debug and refine the code based on test results.

Phase 4: Deployment and Documentation (1 Week)

Deploy the system on a local server using XAMPP.

Document the system design, setup instructions, and user guidelines.

Expected Deliverables

A fully functional shopping cart system accessible via web browsers.

Source code and database scripts for installation and deployment.

Comprehensive documentation including setup guide, user manual, and system documentation.

A project report detailing the development process, challenges faced, and solutions implemented.

Project Management

Timeline:

Total Duration: 6 days. Weekly progress meetings to ensure the project remains on schedule.

Resources

Hardware: Personal computer for development and testing.

Software: Development tools (XAMPP, Google Chrome) and programming languages/libraries (HTML, CSS, JavaScript, PHP, MySQL).

Conclusion

This proposal presents a structured approach to develop a simple yet effective shopping cart system tailored for small to medium-sized e-commerce applications. By leveraging modern web technologies and best practices, this project aims to deliver a robust and user-friendly shopping experience.