

Shopping Cart System: A Development Odyssey

Problem Statement

- Online store requires a shopping cart system
- Goal: Develop full-stack solution
- Key requirements: User-friendly, secure, scalable

Development

- Front-end: React.js for dynamic UI
- Back-end: Node.js, Express, MongoDB
- RESTful API design for seamless integration

Client/Server Interaction

- Implement request/response cycle
- JWT for secure authentication
- Real-time updates with WebSockets

Launch & Maintain

- Phased rollout to manage risk
- 24/7 monitoring and support
- Continuous improvement based on user feedback

Deployment

- CI/CD pipeline with Jenkins
- Containerization with Docker
- Load balancing for high availability

Testing

- Unit tests for individual components
- Integration tests for API endpoints
- End-to-end testing with Cypress

