

HIGH-LEVEL TECHNICAL PLAN FOR AN E-COMMERCE WEBSITE

E-COMMERCE

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OVERVIEW: -

This plan provides a detailed overview of the system architecture, workflows, and API requirements for implementing an e-commerce website. The goal is to ensure scalability, security, and user-friendliness while adhering to best practices.

System Architecture

It includes: -

- 1. Frontend.
- 2. Backend.
- 3. Infrastructure.

Workflows

It includes: -

- 1. User Registration and Login to The Platform.
- 2. Product Browsing.
- 3. Search and Filtering.
- 4. Shopping Cart
- 5. Checkout and Payments.
- 6. Admin Workflow.

API Requirements

It includes: -

- 1. Authentication.
- 2. Product Management.
- 3. Cart.
- 4. Orders.
- 5. Search and Filters.

Schemas

It includes: -

- 1. Product Schema stores all product details and links to the Category Schema.
- 2. Category Schema stores information about different product categories.

- 3. Review Schema lets users review products and links back to the Product Schema.
- 4. Content Pages Schema handles static content like "Terms and Conditions".
- 5. User Schema stores user profile details.
- 6. Order Schema helps manage order data (though transactional data will live in MongoDB).
- 7. Cart Schema stores user cart data until checkout.

Security Measures

It includes: -

- 1. JWTTokens.
- 2. Payment Security.
- 3. Session Security.

Scalability

It includes: -

- 1. Modular Architecture
- 2. Database Scaling.
- 3. Horizontal Scaling