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**Template: 1(E-commerce Website)**

**Class Day: Sunday morning**

**E-COMMERCE WEBSITE OBJECTIVES & PLAN**

# Objective Breakdown for E-Commerce Website

* **Define Marketplace Type:**

General E-Commerce for selling a wide range of products online.

Example/Use Case: Products: Clothing, Electronics, Groceries, or Home Decor.

* **Business Goals:**

Solve customer pain points by providing a fast, user-friendly, and secure online shopping platform.

Example/Use Case: Customers can shop conveniently with secure payment options and quick delivery.

* **Unique Features:**

Add innovative functionalities to stand out.

Example/Use Case: AI-based product recommendations, flash sales, and real-time inventory updates.

* **Data Schema:**

Define relationships between entities (products, users, orders, etc.).

Example/Use Case: Example Schema: Product linked to Orders, Orders connected to Users and Shipments.

* **Deployment and Scalability:**

Deploy the platform globally with room for growth.

Example/Use Case: Use Vercel for deployment and CDN for faster load times.

# Data Schema Chart

[Product]

* ProductID
* Name
* Description
* Price
* Stock
* Category
* Tags

|

|

[Order] -----------> [User]

* OrderID - UserID
* ProductList - Name
* TotalPrice - Email
* PaymentStatus - Address - OrderStatus - OrderHistory

|

|

[Shipment]

* ShipmentID
* OrderID
* TrackingNumber
* Status

# Business Goals (Detailed)

* **What problem does it solve?:**

Provides a seamless online shopping experience with fast delivery and easy checkout options.

* **Target Audience:**

Busy professionals, students, and families looking for convenience and affordable products.

* **Products Offered:**

A wide range of categories: electronics, fashion, groceries, and more.

**- Key Differentiators:**

Speed (quick delivery), affordability, and personalized shopping experience.

# Features and Implementation

* **Frontend: Responsive UI**

Built with Next.js and Tailwind CSS for seamless user experience across devices.

* **Backend: Dynamic Inventory**

Real-time updates to avoid stockouts or overselling.

* **Payment Gateway: Multi-Currency Payments**

Stripe integration for secure and global payment processing.

* **Marketing Tools: Flash Sales**

Limited-time deals to attract customers and boost sales.

* **Customer Experience: Wishlist and Recommendations**

Enable users to save favorite items and get AI-based suggestions.

# Deployment Plan

* **Clone Repository:**

Clone the GitHub project and install dependencies.

Tools: Git, npm/yarn

* **Database Setup:**

Connect to MongoDB Atlas or Firebase for data storage.

Tools: MongoDB, Firebase

* **Payment Integration:**

Configure Stripe for secure payments.

Tools: Stripe API

* **Hosting:**

Deploy the website on Vercel for global access.

Tools: Vercel

# Visual Workflow of the Website

1. User Browses Products -> 2. Adds to Cart -> 3. Secure Payment via Stripe -> 4. Order Confirmed

-> 5. Shipment Tracking -> 6. Delivery.