WORK PLAN

Objectif : build an e-commerce website for a clothing brand

Tools : Frontend (ReactJS) Backend (Express.js) Database (MySQL)

Summary:

This project aims to build a modern e-commerce website for a clothing brand, showcasing 20 products with a shopping cart and checkout system. Payment is only via Cash on Delivery, making it simple for the client to manage without bank transactions. The system is scalable for future upgrades, including online payments, user accounts, and delivery tracking.

Additionally, the website will include an admin dashboard where the shop owner can manage all products and orders. The dashboard will display statistics such as total orders, sales, and inventory status, and will allow the admin to add, delete, or modify products directly in the database using CRUD (Create, Read, Update, Delete) operations. This ensures that the product catalog remains up-to-date and the shop can manage orders efficiently.

Project objectives

Objectif	Description	Success Criteria
Online presence	Make the shop available online	Website accessible from desktop & mobile
Product Catalog	Display 20 products with images & details	All products visible & accurate
Shopping Cart	Add/remove products, calculate total	Cart functions correctly
Checkout (COD)	Submit orders with customer details	Orders saved in database
Admin Dashboard	Manage products & orders, view statistics	Admin can CRUD products and monitor sales

System architecture

```
[React Frontend]  <--Axios-->  [Express.js Backend API]  <--
SQL--> [MySQL Database]
```

- **REACT:** UI, cart, checkout, order forms
- **EXPRESS.JS:** REST APIs for products and orders, admin CRUD operation
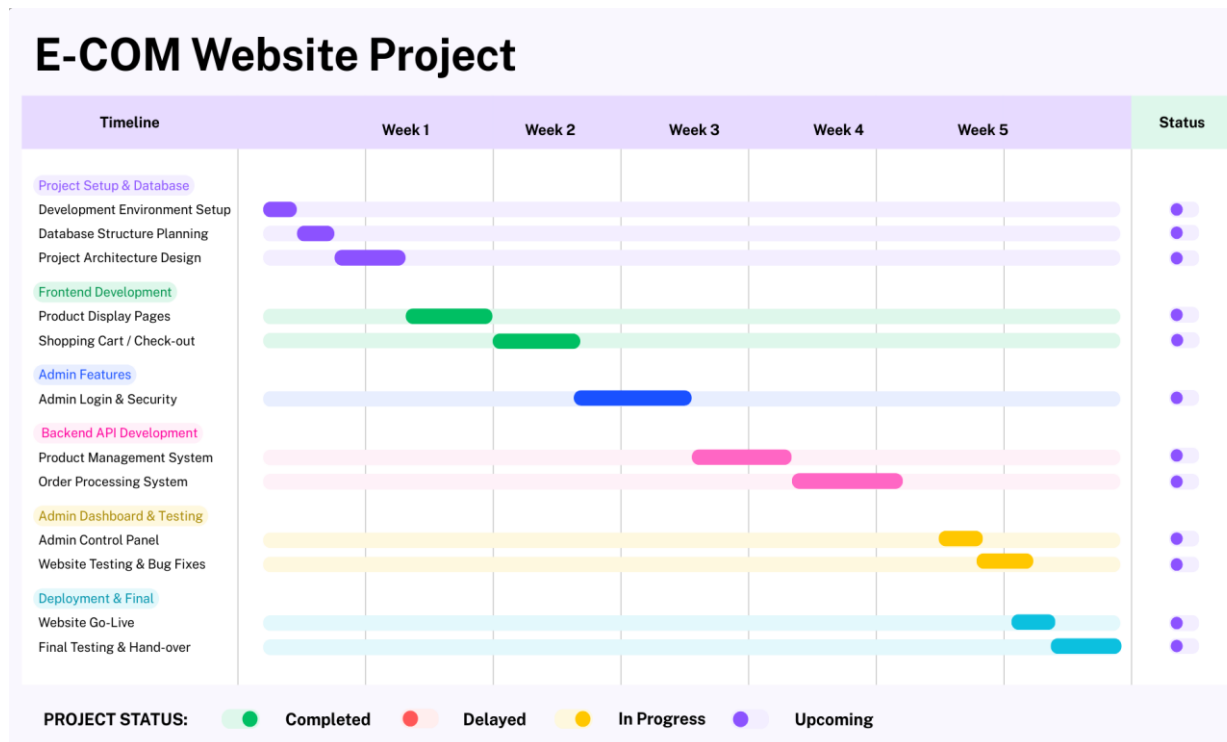- **MYSQL:** Stores products, orders, and order_items

REACT	⇒	EXPRESS.JS	⇒	MYSQL

Products	Orders	Order_Items
• ID (PK) • Name • Description • Price • Image	• ID (PK) • Costumer_Name • Phone • Address • Total_Price • Status (Pending / Received)	• ID (PK) • Order_ID (FK) • Product_ID (FK) • Quantity

Features & fonctionalities

Module	Features
Frontend	Home page, product catalog, product detail, cart, checkout form (COD), order confirmation
Backend	`/products` GET, `/orders` POST, `/orders` GET (admin), `/admin/products` CRUD
Database	products, orders, order_items tables
Admin dashboard	View orders, mark as delivered, add/edit/delete products, view statistics (total sales, inventory, orders)

Gantt diagram

Future Enhancements

- Add online payment
- Advanced product filters and categories
- Email/SMS notifications for orders
- Inventory management