

E-Commerce Website Like OLX

A presentation on the working, design, and need of an online shopping system

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Introduction

- ▶ E-commerce means buying and selling products or services online.
- ▶ This project creates an online store where customers can view, select, and buy products.



Objectives

“The main objectives of our project are:

- ▶ To create an easy registration and login system.
- ▶ To allow sellers to post, update, and delete advertisements.
- ▶ To let buyers search and filter products.
- ▶ To provide an admin panel for managing users and ads.
- ▶ To ensure security and responsive design.”



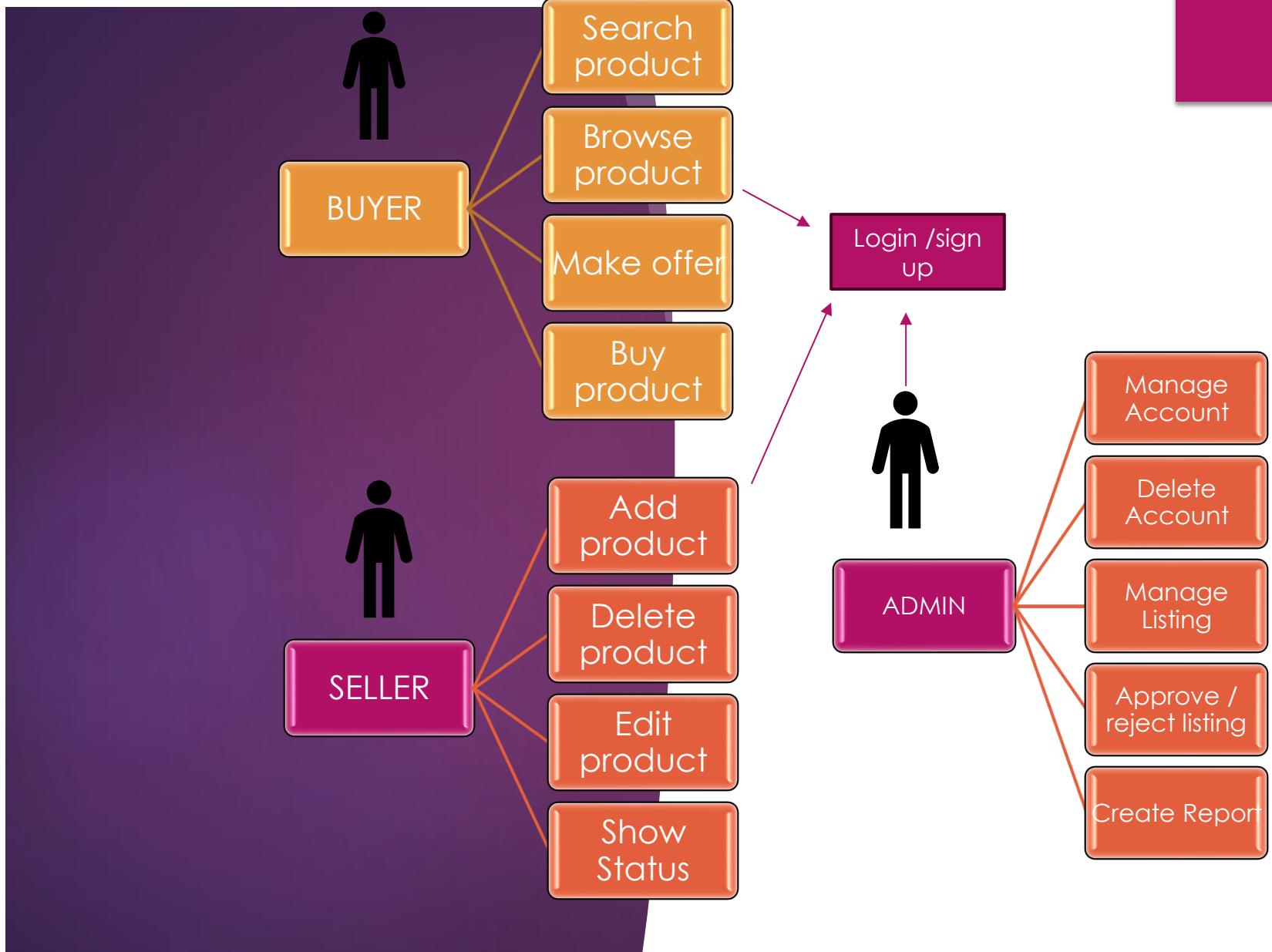
Project Requirements

- ▶ Functional Requirements
 - User registration and login
 - Post, edit, and delete ads (Seller)
 - Browse and search items (Buyer)
 - Admin approval of listings
 - Manage user profiles
- ▶ Non-Functional Requirements
 - Responsive UI across devices
 - Secure authentication
 - Scalable architecture



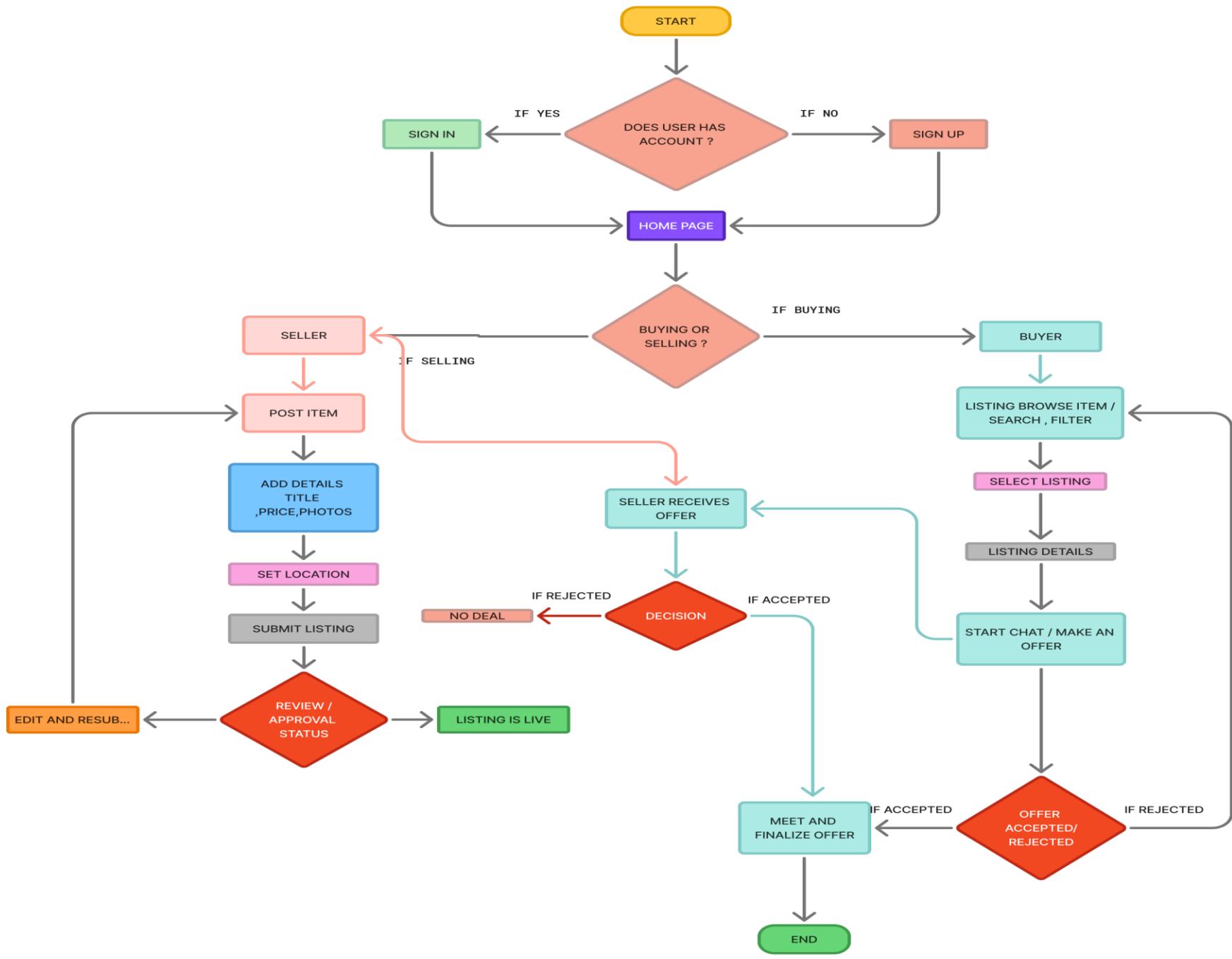
USE CASE DIAGRAM

- ▶ **Actors:** Buyer, Seller, Admin
- ▶ **Buyer:** Browse, Chat, Meetup
- ▶ **Seller:** List Products, advertise product , Chat
- ▶ **Admin:** Manage Users & Listings



UI Flow Diagram

- ▶ Home → Login/Register → Dashboard
- ▶ Seller: Add/View Listings → Chat with Buyer
- ▶ Buyer: Browse/Search Products → View Details → Chat with Seller
- ▶ Chat: Discuss details → Fix Meetup → Offline exchange
- ▶ Admin: Monitors users, listings & chats



BUYER MODULE

- ▶ Buyer can register, log in, and manage their profiles.
- ▶ Browse products by category or search by name.
- ▶ Add products to the cart or wishlist.
- ▶ Buyer can chat directly with sellers, and arrange meetups to complete deals.

ALL CATEGORIES ▾

Cars

Motorcycle

Mobile

For Sale : House & Apartment

Scooters

Commercial & Others

For Rent : Houses & Apartment

CATEGORIES

— All Categories

— Bikes

Motorcycles (2,924)

Scooters (1,394)

Spare Parts (185)



Suzuki Access 125

Suzuki Access 125

Suzuki Access 125

Suzuki Access 125

LOCATIONS

— India

— Maharashtra

— Pune

- Pimpri Chinchwad (105)
- Kharadi (69)
- Hadapsar (68)
- Wakad (65)



₹ 40000

₹ 40000

₹ 40000

₹ 40000

2023 | 23,7700 km

2023 | 23,7700 km

2023 | 23,7700 km

2023 | 23,7700 km

Pune Yesterday

Pune Yesterday

Pune Yesterday

Pune Yesterday

Filters**BUDGET**

Choose a range below

0

2,00,000+

Suzuki Access 125

Suzuki Access 125

Suzuki Access 125

Suzuki Access 125

₹ 40000

₹ 40000

₹ 40000

₹ 40000

2023 | 23,7700 km

2023 | 23,7700 km

2023 | 23,7700 km

2023 | 23,7700 km

Pune Yesterday

Pune Yesterday

Pune Yesterday

Pune Yesterday

Apply

SELLER MODULE

- ▶ Sellers can register and manage their accounts.
- ▶ Add, edit, or remove products with details (name, price, image, stock).
- ▶ View and manage orders received from buyers.
- ▶ Update order status (sold , unsold).
- ▶ Check sales reports and product performance.
- ▶ Communicate with buyers via chat or messages.

SELLER MODULE

 SellerPro
Dashboard

 Dashboard

 Orders

 Products

 Customers

 Analytics

 Settings

 John Smith
john@example.com

 Sign out

Dashboard

Welcome back! Here's your store overview.

 Export

 + Add Product



Total Revenue

\$45,231



 +12.5% vs last month

Orders

1,234



 +8.2% vs last month

Products

89



 +5.1% vs last month

Customers

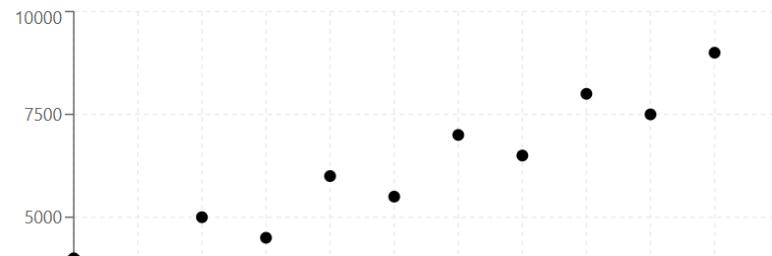
867



 -2.1% vs last month

Sales Overview

Last 12 months 



Top Products

[View all](#)

Wireless Headphones

234 sales • \$46,800

85%

Smart Watch

187 sales • \$56,100

72%

ADMIN MODULE

- ▶ Manages all users (buyers and sellers).
- ▶ Approves or disapproves user accounts.
- ▶ Monitors product listings and transactions.
- ▶ Manages site content (categories, banners, promotions).
- ▶ Generates sales, revenue, and user activity reports.
- ▶ Handles complaints, refunds, approval & disapproval of users and listing

ADMIN MODULE

 Admin Dashboard

 Dashboard

 Product Management

 Sales Details

 Reports

 User Management

 Settings

Dashboard Overview

Welcome to your ecommerce admin dashboard

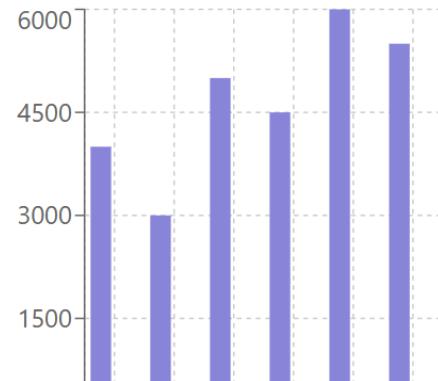
Total Revenue
\$108,000 

Total Orders
1,750 

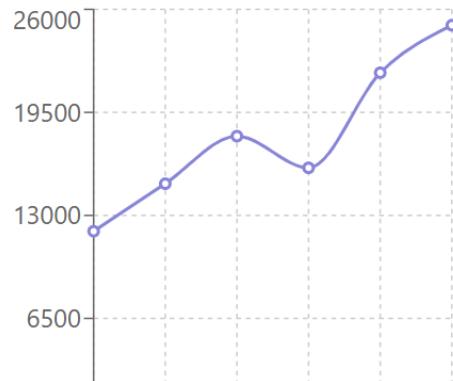
Active Products
342 

Total Users
8,429 

Sales & Orders



Revenue Trend



Database Design

- ▶ Basic tables/entities: User, Product, Cart, Order, Payment.
- ▶ Connections: One user can place many orders, each order can have several products.



Data Need to be Stored

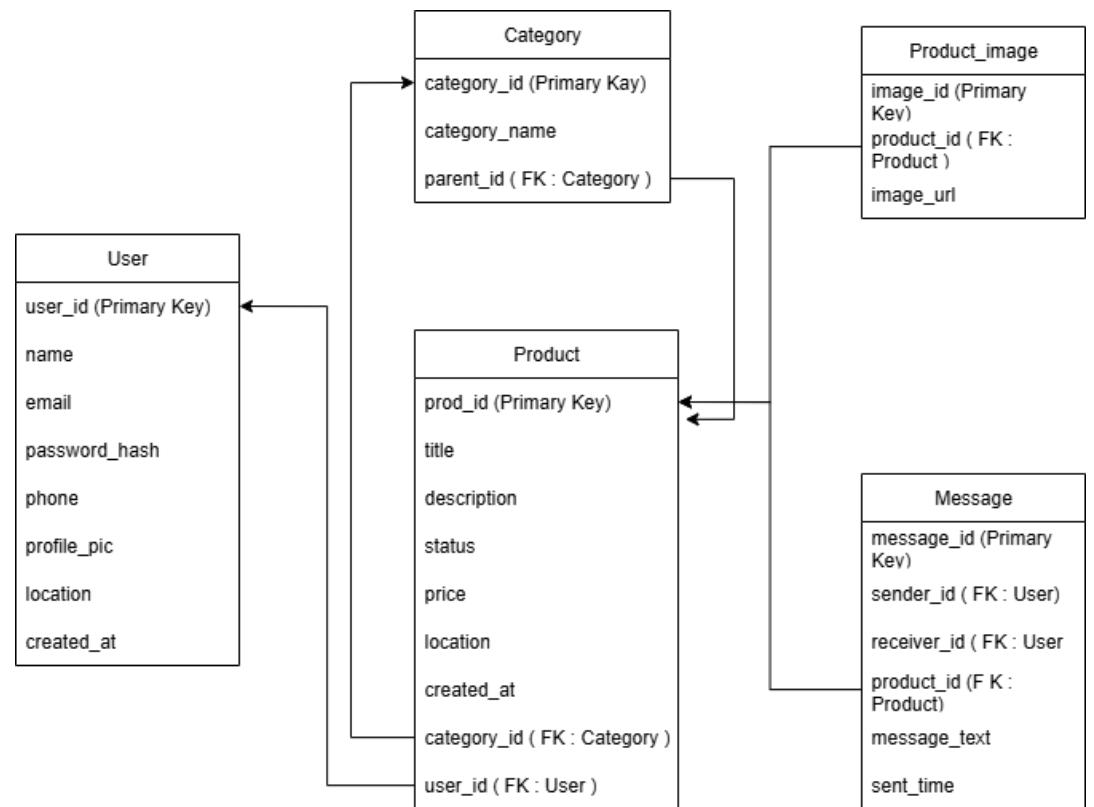
- ▶ User Data
 - ▶ (User's Information like : Name , Phone no, etc)
- ▶ Product's Data (Product Info and Description)
 - ▶ (Like : Title, Description, Price etc)
- ▶ Chat and Messages Data
 - ▶ (Sender, Reciever info, message text etc)
- ▶ Related Images
 - ▶ (image_id, image_path)
- ▶ Favourite and wishlist



Database Schema

Tables :

- User
- Category
- Product
- Product_image
- Message



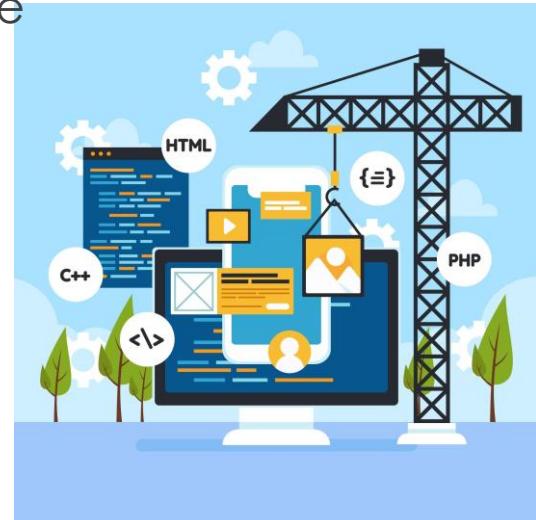
Database Optimizing Strategy

- ▶ Indexing On
 - ▶
- ▶ Normalizing the tables
- ▶ Adding extra columns for future use
- ▶ Query Optimization
 - ▶ Avoiding select *
 - ▶ Limiting data retrieval (Use LIMIT or TOP)



Technology Stack

- ▶ Frontend: HTML, CSS, JavaScript, and React – used to build a responsive and interactive UI.
- ▶ Backend: Node.js with Express – handles API requests and business logic.
- ▶ Database: MySQL – stores structured data efficiently.
- ▶ Version Control: GitHub – for collaboration and code management.
- ▶ Testing Tool: Postman – used to test APIs and ensure they function as expected.
- ▶ This stack ensures that our application is fast, secure, and easy to maintain.”



Workflow

- ▶ Step 1: Users register or log in as buyer or seller.
- ▶ Step 2: Seller lists products with images and details.
- ▶ Step 3: Buyer browses or searches products from the listings.
- ▶ Step 4: Buyer and seller can chat directly to discuss product details.
- ▶ Step 5: Both agree on a meetup location and time.
- ▶ Step 6: After meetup, the transaction happens offline.
- ▶ Step 7: Admin monitors users, listings, and chats for security.



Conclusion

- ▶ Helps customers shop online easily and securely.
- ▶ Enables businesses to reach more customers efficiently.