Project Design: ShopEZ: One-Stop Shop for Online Purchases

Date	04-06-2025	
Team ID	LTVIP2025TMID53438	
Project Name	**ShopEZ: One-Stop Shop for Online Purchases**	

Solution Architecture :

1. Frontend:

   - User Interface: Design a responsive, user-friendly interface for web and mobile.

   - Technologies: Use frameworks like React, Vue.js, or Angular for a dynamic UI.

2. Backend:

   - Server & API: Implement a robust backend with APIs for product management, user accounts, orders, payments.

   - Technologies: Node.js, Python (Django/Flask), Ruby on Rails, etc.

3. Database:

   - Data Storage: Use a relational database (MySQL, PostgreSQL) or NoSQL (MongoDB) for storing products, users, orders.

4. Payment & Shipping Integration:

   - Payments: Integrate secure gateways like PayPal, Stripe.

   - Shipping: Partner with services for delivery calculations and tracking.

5. Security & Scalability:

- Security: Implement authentication, encryption, and protect against common web threats.

- Scalability: Ensure the architecture can handle growth in traffic and data.

Key Components

1. Product Management: Manage product listings, inventory, categories.

2. User Management: Handle user accounts, authentication, order history.

3. Order Processing: Manage cart, checkout, payments, shipping.

4. Analytics & Feedback: Track performance and gather user feedback.