Project Design Phase-II

Technology Stack (Architecture & Stack)

| Date | 10-4-2025 |
|---------------|-----------------|
| Team ID | SWTID1743605259 |
| Project Name | ShopEZ |
| Maximum Marks | 4 |

Functional Requirements:

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub- Task) |
|-----------|------------------------------------|--|
| FR-1 | User Registration | - Registration via form - Registration via Gmail - Registration via LinkedIn |
| FR-2 | User Confirmation | - Email confirmation - OTP-based verification |
| FR-3 | Product Browsing | Browse categoriesView product detailsFilter and search functionality |
| FR-4 | Shopping Cart and Checkout | Add items to cartModify quantityRemove itemsProceed to payment |
| FR-5 | Address Management | - Add new address - Edit or delete saved addresses |
| FR-6 | Order Management (User Side) | - View order history - Track current orders |
| FR-7 | Seller Dashboard (Future Scope) | - Add/edit/delete products- Manage inventory- View orders & sales |
| FR-8 | Admin Dashboard | - Manage users & sellers- Monitor all orders- View analytics- Handle complaints |

Non-Functional Requirements:

| NFR No. | Non-Functional Requirement | Description |
|------------|-------------------------------|---|
| NFR-1 | Usability | Responsive, intuitive UI for smooth navigation on all device types |
| NFR-2 | Security | Protection of user data via encryption, JWT, OTP, and secure payment gateways |
| NFR-3 | Reliability | System should handle failures gracefully and ensure transactional integrity |
| NFR-4 | Performance | Backend and frontend optimized for speed, with API response times under 500ms |
| NFR-5 | Availability | 24/7 uptime supported through robust cloud infrastructure (Netlify, Render) |
| NFR-6 | Scalability | Modular codebase and scalable cloud services to support future user growth |