Project Design Phase-II

Data Flow Diagram & User Stories

Field	Value
Date	
Team ID	PNT2025TMID09483
Project Name	ShopEZ: E-commerce Application
Maximum Marks	4 Marks

Data Flow Diagrams:

A **Data Flow Diagram (DFD)** illustrates how data moves within the ShopEZ e-commerce platform. It captures how users (customers, sellers, and administrators) interact with the system, how information flows between different components, and where the data is stored.

Context Diagram (Level 0)

```
[Customer] ←→ [ShopEZ E-commerce System] ←→ [Seller]
                        ↕
                [Administrator]
                        ↕
              [Payment Gateway]
                        ↕
              [Shipping Service]
```

Level 1 DFD - ShopEZ E-commerce System

External Entities:

- Customer
- Seller
- Administrator
- Payment Gateway
- Shipping Service

Processes:

1. User Management
2. Product Catalog Management
3. Order Processing

4. Payment Processing

5. Analytics & Reporting

6. Review & Rating System

7. Inventory Management

Data Stores:

- D1: User Database

- D2: Product Database

- D3: Order Database

- D4: Payment Database

- D5: Review Database

- D6: Analytics Database

Data Flows:

- Customer → Process 1: Registration/Login Details

- Process 1 → D1: User Information

- Customer → Process 2: Search/Browse Requests

- Process 2 → D2: Product Queries

- D2 → Process 2: Product Information

- Process 2 → Customer: Product Details, Recommendations

- Customer → Process 3: Order Details

- Process 3 → D3: Order Information

- Process 3 → Process 4: Payment Request

- Process 4 → Payment Gateway: Payment Details

- Payment Gateway → Process 4: Payment Confirmation

- Process 4 → D4: Transaction Record

- Process 3 → Seller: Order Notification

- Process 3 → Shipping Service: Shipping Request

- Seller → Process 7: Inventory Updates

- Process 7 → D2: Stock Information

- Customer → Process 6: Review/Rating

- Process 6 → D5: Review Data

- Administrator → Process 5: Report Requests

- Process 5 → D6: Analytics Data

- Process 5 → Administrator: Reports & Insights