

Project Design Phase-II

Data Flow Diagram & User Stories

Date	20 Feb 2026
Team ID	LTVIP2026TMIDS91056
Project Name	ShopSmart: Your Digital Grocery Store Experience
Maximum Marks	4 Marks

Overview

The Data Flow Diagram (DFD) illustrates how data moves through the ShopSmart system, showing interactions between users, processes, and the database. User stories describe system functionality from the perspective of end users to ensure the platform meets real user needs.

Level 0 DFD (Context Diagram)

The system consists of three main external entities:

- Customer — browses products, places orders, and makes payments
- Seller — manages products, inventory, and orders
- Administrator — monitors system performance and manages users

All entities interact with the ShopSmart system, which processes requests and stores data in the database.

Level 1 DFD

Main Processes

1. User Authentication — handles login and registration

2. Product Management — manages product listings and details
3. Order Processing — handles cart operations and order placement
4. Payment Processing — processes secure payments
5. Inventory Management — updates stock levels
6. Feedback Management — collects user reviews

Data Stores

- User Database
 - Product Database
 - Order Database
 - Payment Records
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User Stories

Customer Stories

- As a customer, I want to register and log in so that I can access my account.
- As a customer, I want to browse products so that I can choose items to purchase.
- As a customer, I want to add items to my cart so that I can manage my purchases.
- As a customer, I want to make secure payments so that my transactions are safe.
- As a customer, I want to track my orders so that I know delivery status.

Seller Stories

- As a seller, I want to add and update products so that inventory is accurate.
- As a seller, I want to manage orders so that I can fulfill customer requests.

Admin Stories

- As an admin, I want to monitor system activity so that operations run smoothly.
- As an admin, I want to manage users and sellers so that the platform remains secure.