

Project Design Phase-II

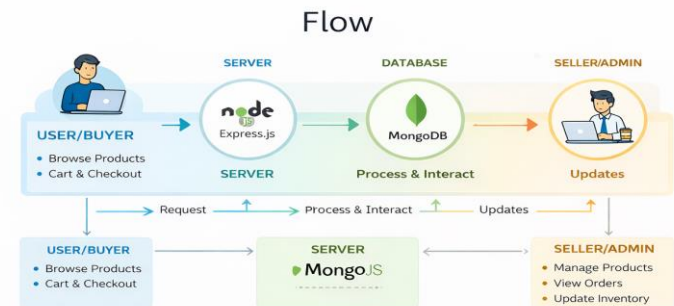
Data Flow Diagram & User Stories

Date	31 January 2026
Team ID	LTVIP2026TMIDS42166
Project Name	ShopEZ : One-Stop Shop for Online Purchases
Maximum Marks	4 Marks

Data Flow Diagrams:

The Data Flow Diagram (DFD) for ShopEZ illustrates how data moves between users, the system, and the database in the e-commerce platform. At the first level, the primary external entities are the User (Buyer) and the Admin/Seller. The user interacts with the system by registering, logging in, browsing products, adding items to the cart, and placing orders. These requests are sent to the backend server developed using Node.js and Express.js, where the application processes authentication, product retrieval, cart management, and order handling. The server then interacts with the MongoDB database to store and retrieve data such as user details, product information, cart items, and order records. Once processed, the system sends appropriate responses back to the user interface. Similarly, the Admin/Seller accesses the dashboard to add products, manage inventory, and view orders, with all updates being stored in the database. Overall, the DFD shows a structured flow of data ensuring secure communication, efficient processing, and smooth interaction between frontend, backend, and database components in ShopEZ.

Example: [\(Simplified\)](#)



1. The user browses products and adds items to the cart.
2. A request is sent to the server for cart and checkout management.
3. The server processes the request and interacts with the MongoDB database.
4. Order details, user data, and inventory updates are stored and retrieved from MongoDB.
5. Sellers/admins can view orders, manage products, and update inventory through their dashboard.

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
	Dashboard					
Customer (Web user)						
Customer Care Executive						
Administrator						