REQUIREMENT ANALYSIS

Data Flow Diagram & User Stories

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Project Name	ShopSmart: Your Digital Grocery Store Experience

Data Flow Diagram (DFD) :

A **Data Flow Diagram (DFD)** is a graphical representation of how data moves through a system. It shows the **flow of data between processes, external entities, and data stores** in a system without showing program logic or internal data structures.

Why Use a DFD?
- It provides a **clear overview** of how the system handles data.
- Useful for analyzing and designing the system architecture.
- Helps identify inputs, outputs, processes, and data storage in a system.

Components in a DFD
- **External Entities:** Represent users or systems that interact with the application.
- **Processes:** Represent tasks/functions performed by the system.
- **Data Stores:** Databases or storage that hold data.
- **Data Flows:** Arrows that show the movement of data between entities, processes, and stores.

Example (Simplified Flow for ShopSmart):

Customer --> [Login/Register] --> [Authentication Process] --> [User Database]
Customer --> [Browse Products] --> [Product Search Process] --> [Product Database]
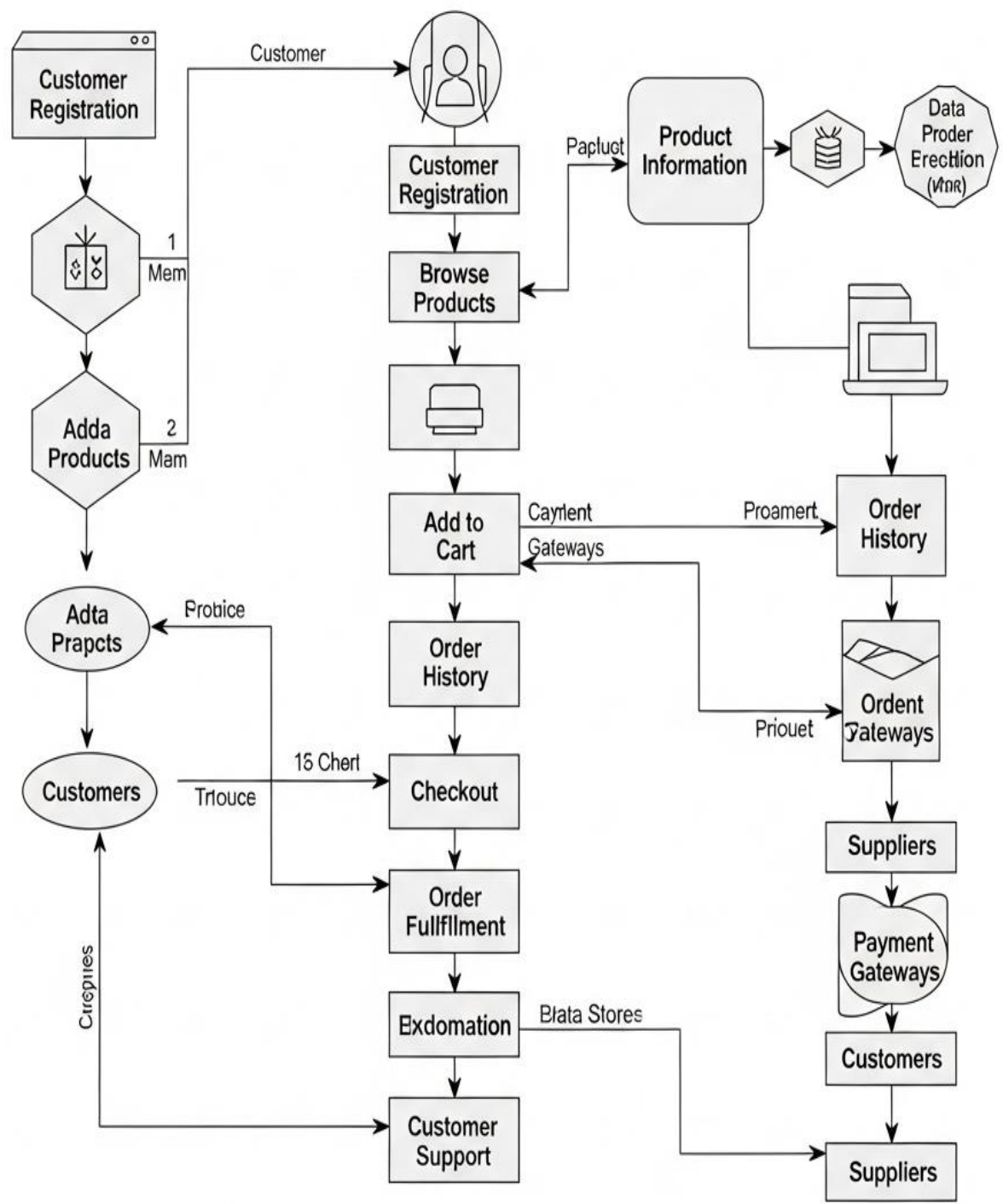Customer --> [Add to Cart] --> [Cart Process] --> [Cart Database]
Customer --> [Checkout] --> [Order Process] --> [Order Database]
Admin --> [Manage Products] --> [Product Management Process] --> [Product Database]

Data Flow Diagram (DFD):

ShopSmart DFD

User Stories Table:

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 a confirmation email once I have registered for the application.	I can receive a 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 via Facebook	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail.	I can register & access via Gmail	Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering my email & password.	I can access the system securely	High	Sprint-1
Customer (Web user)	Product Search & Order	USN-6	As a user, I can browse and search products using category and price filters.	I can view filtered product results	High	Sprint-2
		USN-7	As a user, I can add products to my cart and adjust quantities.	My cart updates dynamically	High	Sprint-2
		USN-8	As a user, I can place orders with a selected payment method.	I get a success message and confirmation email	High	Sprint-2
Seller	Product Management	USN-9	As a seller, I can log in to my dashboard and	I can add/edit/delete products	High	Sprint-3

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
			manage my product listings.			
		USN-10	As a seller, I can view and track customer orders.	I see a list of customer orders	Medium	Sprint-3
Admin	Admin Dashboard	USN-11	As an admin, I can approve or deactivate sellers.	I can manage seller status from dashboard	High	Sprint-3
		USN-12	As an admin, I can manage product listings and user accounts.	I can add/edit/delete any products or users	High	Sprint-3