

Project Design Phase II

Data Flow Diagram & User Stories

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Project Name: ShopMart

Data Flow Diagram (DFD)

The ShopMart platform streamlines the online shopping experience by guiding users from product discovery to post-purchase support. The DFD illustrates interactions between users and system components such as authentication, cart handling, order management, and feedback collection.

DFD Elements:

- **External Entities:**
 - User (Guest / Registered)
 - Admin
- **Processes:**
 - P1: View Homepage & Products
 - P2: User Login / Registration
 - P3: Search & Filter Products
 - P4: Add to Cart
 - P5: Checkout & Payment
 - P6: Order Tracking
 - P7: Submit Feedback
- **Data Stores:**
 - D1: User Profiles
 - D2: Product Catalog
 - D3: Cart Details
 - D4: Orders
 - D5: Feedback Records
- **Data Flows:**
 - F1: Browse Request → P1 → Product List
 - F2: Credentials → P2 → Authenticated Session
 - F3: Search Query → P3 → Filtered Results

- F4: Product Selection → P4 → Updated Cart
- F5: Cart → P5 → Order Confirmation
- F6: Order ID → P6 → Delivery Status
- F7: User Comments → P7 → Feedback Stored

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
User (Guest)	Product Discovery	USN-1	As a guest, I can view products without login.	Product catalog is visible with limited interaction.	High	Sprint-1
User	Account Access	USN-2	As a user, I can register or log in to my account.	Account created / session started after login.	High	Sprint-1
User	Cart Functionality	USN-3	As a user, I can add products to my cart.	Product is visible in cart with quantity.	High	Sprint-1
User	Checkout & Payment	USN-4	As a user, I can purchase items securely.	Order confirmation displayed after payment.	High	Sprint-2
User	Order Tracking	USN-5	As a user, I can track my placed order.	Status updates shown in user dashboard.	Medium	Sprint-2
User	Feedback	USN-6	As a user, I can leave reviews or feedback.	Review appears under product and is stored.	Medium	Sprint-3
Admin	User Management	USN-7	As an admin, I can manage users and access rights.	Admin panel reflects changes in privileges.	Medium	Sprint-3
Admin	Product Management	USN-8	As an admin, I can update the product catalog.	Products added, edited, or removed in real time.	Medium	Sprint-3
Admin	Order Oversight	USN-9	As an admin, I can view and manage all orders.	Admin dashboard displays order details.	Medium	Sprint-3