**🔹 Data Flow and Entity-Relationship Diagrams (ERD)**

**Purpose**: To model how data flows between system components and the logical relationships between entities.

**a. Data Flow Diagrams (DFD)**

* Level 0: Input (Field Forms, Registration) → Processing (Validation, Enrichment) → Output (Reports, Notifications)
* Level 1-2: Detailed flows showing how, for instance, case data travels from mobile devices → middleware → central DB → analytics module

**b. Entity-Relationship Diagram (ERD)**

* **Entities**: Beneficiary, Case, User, Warehouse, Shipment, Donor, Report
* **Relationships**:
  + One Beneficiary can have many Cases
  + Each Case is assigned to one User
  + One Donor funds many Reports