Data Flow Diagrams & Textual Analysis(Context & Level-1) for ABC Library System

Textual Analysis:

➔ I analyzed the ABC Library case study to identify the flow of data between system entities.
Key actors such as Members and Staff were identified, along with system functionalities like item search, check-out, check-in, account creation, and membership termination.
This analysis served as the foundation for creating accurate Data Flow Diagrams.
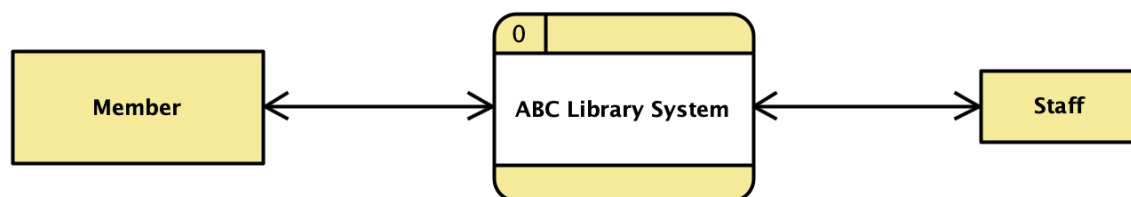
Creating Processes & Data Stores:

➔ System processes such as Search Item, Check-Out Item, Check-In Item, and Place Hold were modeled.
Data stores like Items, Members, and Transaction records were created to represent persistent information.
These elements ensure that all major flows of information within the library system are captured.

ABC Library – Context Level Data Flow Diagram

ABC Library – Context Level DFD

Data Flow Diagram (DFD):

➔ Context-level and Level-1 DFDs were developed to visualize the interactions between actors, processes, and data stores.
Members and Staff interact with the system to perform actions such as searching items, creating accounts, and checking items in/out.
Data flows show information moving between actors, processes, and stores, accurately reflecting the system's functionality.

ABC Library – Level1 Data Flow Diagram