The data flow diagrams also known as DFDs made for the Online Order Management System (OOMS) project are briefly explained in this paper. Visually modeling the flow of data from external users to internal processes and data repositories is the aim of these DFDs. The Gane and sarson notation in Draw.io was used to create these diagrams.

Level 0: Diagram of context the context diagram, commonly known as the Level 0 DFD, depicts the complete OOMS as a single operation. It shows how the system interacts with outside entities. The customer, payment gateway, and shipping provider are the main external organizations. The customer interactions including registration, login, product browsing, and order placement are started by the customer. The customer and the system exchange data, including order details, payment information, and shipment instructions. Gateway receives payment confirmations from the system when it sends payment requests to it. In a similar manner, it gets tracking information and transmits shipping details to the shipping provider.

Before dissecting the system into its component parts, this context diagram lays the groundwork for comprehending the system.

Level 1: View the Decomposed Process the Level 1 DFD process is divided into six main sub process by level 1 DFD:

Registering and logging in as a customer

Product Search and browsing

Management of shopping carts

Placing and processing Orders

Processing of payments

Monitoring Orders

Relevant data stores, including customer information, product inventory order information and payment information are accessed by each of these procedures, For instance, the shopping cart and order process communicate with order information whereas the registration process reads from and writes to the customer information data store.

Transaction information is stored by the payment processing component which securely connects to the payment gateway.

Customers are thought to be able to use a web-based interface to access the system. Every data flow represents either replies produced by the system such as tracking numbers and confirmation messages or user submitted data such as shipping addresses and payment details only the proper parties such as the payment gateway are securely given access to sensitive information such as payment details.

By showing the flow of information through the system, these diagrams guarantee effective communication between team members and stakeholders throughout the development process.