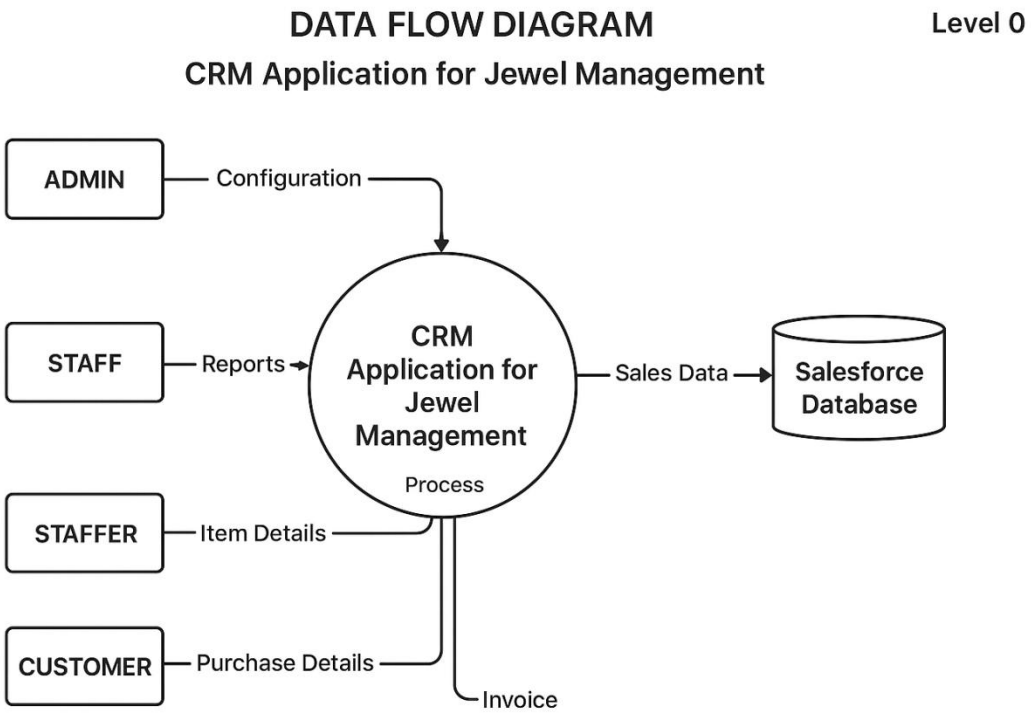
DATA FLOW DIAGRAM

Date	31 OCTOBER 2025
Team ID	NM2025TMID04251
Project Name	CRM Applicaton for Jewel Management-(Developer) in Salesforce
Maximum Marks	4 Marks

Data Flow Diagram (DFD)

The **Data Flow Diagram (DFD)** illustrates the logical flow of data through the **CRM Application for Jewel Management** system. It shows how data moves between various modules such as **Customer**, **Item**, **Price**, and **Billing**, along with the processes that transform the data.

The DFD helps visualize how information enters the system, how it is processed, and how output is generated in the form of invoices, reports, and dashboards.



1. **Context Level DFD (Level 0)**

Description:
The **Context Level DFD** represents the overall system as a single process, showing how external entities (Admin, Staff, and Customer) interact with the CRM system.

Entities:

- **Admin:** Manages users, permissions, and system configurations.
- **Staff:** Adds jewelry items, generates bills, and updates records.
- **Customer:** Provides purchase information and receives bills.

Data Flow Summary:

- Admin inputs configuration and user data → System stores it in Salesforce Database.
- Staff enters item details and customer information → System processes billing.
- Customer receives invoice and confirmation.
- Reports and dashboards display sales and performance data to Admin.

2. **Level 1 DFD**

Description:
The **Level 1 DFD** expands the main CRM system into multiple sub-processes such as **Customer Management**, **Item Management**, **Price Management**, and **Billing Generation**. It shows the flow of data among these components.

Process No.	Process Name	Input	Output	Data Store
P1	Customer Management	Customer details	Customer records	Customer Object
P2	Item Management	Item attributes (name, purity, weight)	Item records	Item Object
P3	Price Management	Metal rate updates	Updated price records	Price Object
P4	Billing Automation	Customer + Item + Price details	Billing invoices	Billing Object
P5	Reports & Dashboards	Data from all modules	Sales analytics, dashboards	Report Repository

3. **Level 2 DFD (Billing Process Expansion)**

Description:
The **Billing process** (P4) is further expanded to show detailed interactions within the billing system.

Data Flow Steps:

1. Staff selects **Customer ID** and **Item ID**.
2. System retrieves **Price details** from Price Object.
3. Record-Triggered Flow calculates **Total Amount** and applies tax automatically.
4. The **Billing record** is created and stored in Salesforce.
5. System sends **invoice confirmation** to Customer.
6. Admin can view and analyze billing performance through dashboards.

4. **Data Stores**

Data Store	Description
D1 – Customer Object	Stores customer name, contact, address, and purchase details.
D2 – Item Object	Maintains jewelry item details such as type, purity, and weight.
D3 – Price Object	Contains gold/silver rate details updated periodically.
D4 – Billing Object	Stores all transaction and invoice records.
D5 – Report Repository	Holds processed data for analytics and dashboard visualization.

5. **System Flow Summary**

- Data flows **from users (Admin, Staff, Customer)** into respective CRM modules.
- **Record-triggered flows** handle automatic updates between related objects.
- The **Salesforce database** acts as the central repository for all objects.
- **Reports and dashboards** display real-time business insights.

This DFD ensures that data movement within the system is **secure, accurate, and consistent**, enabling jewelry business owners to efficiently manage customers, sales, and pricing operations.