FUFU REPUBLIC CASE STUDY (VICTOR AIGBEDION)

Tables

1. **Date:**
    - Date (Primary Key)
    - Month
    - Year
    - Quarter
    - Day of Week
2. **Product:**
    - ID (Primary Key)
    - Product Name
    - Category
    - Price
3. **Customer:**
    - ID (Primary Key)
    - Customer Name
    - Email
    - Phone Number
    - Loyalty Points
4. **Outlet:**
    - ID (Primary Key)
    - Outlet Name
    - Address
    - City
    - State
    - Zip code

5. **Sales Channel:**
    - ID (Primary Key)
    - Channel Name
    - Channel Type (e.g., Online, In-store)

6. **Promotion:**
    - ID (Primary Key)
    - Promotion Name
    - Promotion Type
    - Start Date
    - End Date

7. **Inventory:**
    - ID (Primary Key)
    - Product ID (Foreign Key to Product Table)
    - Outlet ID (Foreign Key to Outlet Table)
    - Quantity On Hand
    - Reorder Level
    - Reorder Quantity

8. **Sales:**
    - ID (Primary Key)
    - Sales Date (Foreign Key to Date Table)
    - Product ID (Foreign Key to Product Table)
    - Customer ID (Foreign Key to Customer Table)
    - Outlet ID (Foreign Key to Outlet Table)
    - Channel ID (Foreign Key to Sales Channel Table)

- Promotion ID (Foreign Key to Promotion Table)
- Quantity Sold
- Amount.

Relationships

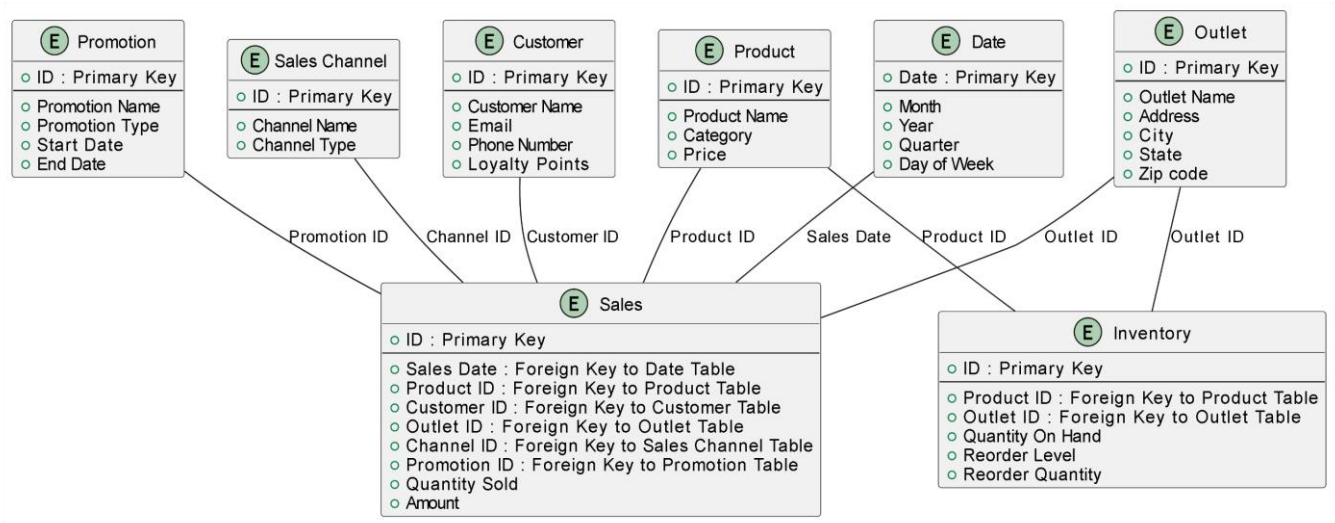
1. **Sales Table** to **Date Table**:
    - Sales Date in Sales Table references Date in Date Table.
2. **Sales Table** to **Product Table**:
    - Product ID in Sales Table references ID in Product Table.
3. **Sales Table** to **Customer Table**:
    - Customer ID in Sales Table references ID in Customer Table.
4. **Sales Table** to **Outlet Table**:
    - Outlet ID in Sales Table references ID in Outlet Table.
5. **Sales Table** to **Sales Channel Table**:
    - Channel ID in Sales Table references ID in Sales Channel Table.
6. **Sales Table** to **Promotion Table**:
    - Promotion ID in Sales Table references ID in Promotion Table.
7. **Inventory Table** to **Product Table**:
    - Product ID in Inventory Table references ID in Product Table.
8. **Inventory Table** to **Outlet Table**:
    - Outlet ID in Inventory Table references ID in Outlet Table.

Constraints

1. **Primary Keys**:
    - Each entity has a primary key (ID) that uniquely identifies each record.
2. **Foreign Keys**:
    - Sales Date.

- Product ID.
- Customer ID.
- Outlet ID.
- Channel ID.
- Promotion ID.
- Product ID.
- Outlet ID.

3. **Not Null Constraints**:
    - Sales Date, Product ID, Customer ID, Outlet ID, Channel ID, and Promotion ID in Sales Table.
    - Product ID and Outlet ID in Inventory Table.



Business Process: Sales Analysis

The sales performance analysis procedure involves the careful tracking and assessment of sales data to identify trends, highlight top-selling products, and evaluate the success of sales strategies. This procedure is critical for supporting data-informed decision-making that seeks to enhance sales and optimize operational efficiency.

Business Questions:

- What is the overall sales figure for each product category?
- Which products rank as the highest in sales?
- In what ways do sales fluctuate by region and time frame?
- Which sales channels demonstrate the highest effectiveness?
- How do promotional activities influence sales outcomes?
- What patterns can be observed in customer buying behaviour
- What are the current inventory levels for each product across various outlets?

Models

Grain:

- The grain of the fact table will be at the individual sales transaction level (i.e. each row in the sales table).

Dimensions:

1. ***Date***
2. ***Product***
3. ***Customer*.**
4. ***Outlet*.**
5. ***Sales Channel*.**
6. ***Promotion*.**
7. ***Inventory*.**

Fact:

1. ***Sales*.**