

Tables and Fields

Branch

- branch_code (PK)
- branch_name
- location
- contact_number

Product

- product_id (PK)
- product_name
- size
- color
- category
- quantity_in_stock
- unit_price
- discontinued

Customer

- customer_id (PK)
- first_name
- last_name
- email
- isMember

Member

- member_id (PK)
- customer_id
- gender
- Date_registered

Sales Rep

- sales_rep_id (PK)
- name
- branch_code (FK → Branch)
- email
- hire_date
- active_status

Sales

- sale_id (PK)
- customer_id (FK → Customer)
- sales_rep_id (FK → Sales Rep)
- branch_code (FK → Branch)
- sale_date
- payment_type
- total_amount

Sales Items

- sale_item_id (PK)
- sale_id (FK → Sales)
- product_id (FK \rightarrow Product)
- quantity ordered
- unit_price

Restock

- restock_id (PK)
- product_id (FK → Product)
- supplier_name
- quantity added
- cost_price
- restock_date

Returns

- return id (PK)
- sale_id (FK → Sales)
- return_date
- reason

Return Items

- return_item_id (PK)
- return_id (FK → Returns)
- product_id (FK → Product)
- quantity_returned

Stock Transfer

- transfer_id (PK)
- product id (FK → Product)
- $\bullet \quad source_branch_code \ (FK \to Branch) \\$
- dest_branch_code (FK → Branch)
- quantity_transferred
- transfer_date
- reason

Relationships Between Tables

| Parent Table | Child Table | Relationship Type | Description |
|--------------|----------------|----------------------|---|
| Branch | Sales Rep | One-to-Many | Each branch can have many sales reps. |
| Branch | Sales | One-to-Many | Each sale happens at a single branch. |
| Branch | Stock Transfer | One-to-Many (×2) | A transfer has both a source and destination branch. |
| Product | Sales Items | One-to-Many | A product can appear in many sale items. |
| Product | Restock | One-to-Many | A product can be restocked multiple times. |
| Product | Return Items | One-to-Many | A product can be returned in many return entries. |
| Product | Stock Transfer | One-to-Many | A product can be transferred between branches multiple times. |
| Customer | Sales | One-to-Many | A customer can make many purchases. |
| Customer | Member | one-to-one | One Customer may have zero or one Member entry. |
| Sales Rep | Sales | One-to-Many | A sales rep can facilitate many sales. |
| Sales | Sales Items | One-to-Many | One sale can have multiple items (products). |
| Sales | Returns | One-to-Many | One sale can have multiple return transactions. |
| Returns | Return Items | One-to-Many | One return can include multiple items. |