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| [Clothes store] | Designd By:  Abdelrahman sami  225256  Ahmed ramadan 225236  Abdelrahman Ahmed  225278  Habiba Osman  225008  Marawan Mohamed  225114 |

Project Summary:

Workflow:

- Customers browse and select products.

- Orders are placed by customers either in-person or online.

- Staff members handle orders, updating their status (pending, processing, completed, etc.).

- Inventory levels are adjusted as orders are processed and products are sold or restocked.

Usage:

- Customers interact with the system to browse products, place orders, and track order status.

- Staff members manage orders, inventory, and interact with customers for sales and service.

- Managers oversee staff, monitor sales, and ensure inventory levels are maintained.

This project sets up a foundational structure for a retail system, enabling functionalities related to product management, sales, inventory control, and customer service. Further development and integration with application logic could build upon this structure to create a comprehensive retail management system.

SQl Code:

-- create schemas:

CREATE SCHEMA production;

GO

CREATE SCHEMA sales;

GO

-- create tables

CREATE TABLE production.categories (

category\_id INT IDENTITY (1, 1) PRIMARY KEY,

category\_name VARCHAR (255) NOT NULL

);

CREATE TABLE production.brands (

brand\_id INT IDENTITY (1, 1) PRIMARY KEY,

brand\_name VARCHAR (255) NOT NULL

);

CREATE TABLE production.products (

product\_id INT IDENTITY (1, 1) PRIMARY KEY,

product\_name VARCHAR (255) NOT NULL,

brand\_id INT NOT NULL,

category\_id INT NOT NULL,

model\_year SMALLINT NOT NULL,

list\_price DECIMAL (10, 2) NOT NULL,

FOREIGN KEY (category\_id) REFERENCES production.categories (category\_id) ,

FOREIGN KEY (brand\_id) REFERENCES production.brands (brand\_id)

);

CREATE TABLE sales.customers (

customer\_id INT IDENTITY (1, 1) PRIMARY KEY,

first\_name VARCHAR (255) NOT NULL,

last\_name VARCHAR (255) NOT NULL,

phone VARCHAR (25),

email VARCHAR (255) NOT NULL,

street VARCHAR (255),

city VARCHAR (50),

state VARCHAR (25),

zip\_code VARCHAR (5)

);

CREATE TABLE sales.stores (

store\_id INT IDENTITY (1, 1) PRIMARY KEY,

store\_name VARCHAR (255) NOT NULL,

phone VARCHAR (25),

email VARCHAR (255),

street VARCHAR (255),

city VARCHAR (255),

state VARCHAR (10),

zip\_code VARCHAR (5)

);

CREATE TABLE sales.staffs (

staff\_id INT IDENTITY (1, 1) PRIMARY KEY,

first\_name VARCHAR (50) NOT NULL,

last\_name VARCHAR (50) NOT NULL,

email VARCHAR (255) NOT NULL UNIQUE,

phone VARCHAR (25),

active tinyint NOT NULL,

store\_id INT NOT NULL,

manager\_id INT,

FOREIGN KEY (store\_id) REFERENCES sales.stores (store\_id) ,

FOREIGN KEY (manager\_id) REFERENCES sales.staffs (staff\_id)

);

CREATE TABLE sales.orders (

order\_id INT IDENTITY (1, 1) PRIMARY KEY,

customer\_id INT,

order\_status tinyint NOT NULL,

-- Order status: 1 = Pending; 2 = Processing; 3 = Rejected; 4 = Completed

order\_date DATE NOT NULL,

required\_date DATE NOT NULL,

shipped\_date DATE,

store\_id INT NOT NULL,

staff\_id INT NOT NULL,

FOREIGN KEY (customer\_id) REFERENCES sales.customers (customer\_id),

FOREIGN KEY (store\_id) REFERENCES sales.stores (store\_id) ,

FOREIGN KEY (staff\_id) REFERENCES sales.staffs (staff\_id)

);

CREATE TABLE sales.order\_items (

order\_id INT,

item\_id INT,

product\_id INT NOT NULL,

quantity INT NOT NULL,

list\_price DECIMAL (10, 2) NOT NULL,

discount DECIMAL (4, 2) NOT NULL DEFAULT 0,

PRIMARY KEY (order\_id, item\_id),

FOREIGN KEY (order\_id) REFERENCES sales.orders (order\_id) ,

FOREIGN KEY (product\_id) REFERENCES production.products (product\_id)

);

CREATE TABLE production.stocks (

store\_id INT,

product\_id INT,

quantity INT,

PRIMARY KEY (store\_id, product\_id),

FOREIGN KEY (store\_id) REFERENCES sales.stores (store\_id) ,

FOREIGN KEY (product\_id) REFERENCES production.products (product\_id)

);

Insert code:

use clothesStore;

SET IDENTITY\_INSERT production.brands ON;

INSERT INTO production.brands(brand\_id,brand\_name) VALUES(1,'Bershka')

INSERT INTO production.brands(brand\_id,brand\_name) VALUES(2,'Zara')

INSERT INTO production.brands(brand\_id,brand\_name) VALUES(3,'Defacto')

INSERT INTO production.brands(brand\_id,brand\_name) VALUES(4,'Pull&Bear')

INSERT INTO production.brands(brand\_id,brand\_name) VALUES(5,'splash')

INSERT INTO production.brands(brand\_id,brand\_name) VALUES(6,'Lacoste')

INSERT INTO production.brands(brand\_id,brand\_name) VALUES(7,'Polo')

INSERT INTO production.brands(brand\_id,brand\_name) VALUES(8,'Max')

INSERT INTO production.brands(brand\_id,brand\_name) VALUES(9,'Versace')

SET IDENTITY\_INSERT production.brands OFF;

SET IDENTITY\_INSERT production.categories ON;

INSERT INTO production.categories(category\_id,category\_name) VALUES(1,'Children Clothes')

INSERT INTO production.categories(category\_id,category\_name) VALUES(2,'Men Clothes')

INSERT INTO production.categories(category\_id,category\_name) VALUES(3,'Women Clothes')

SET IDENTITY\_INSERT production.categories OFF;

SET IDENTITY\_INSERT production.products ON;

INSERT INTO production.products(product\_id, product\_name, brand\_id, category\_id, model\_year, list\_price) VALUES(1,'Kids Vest Leather - 2022',3,1,2022,559.99)

INSERT INTO production.products(product\_id, product\_name, brand\_id, category\_id, model\_year, list\_price) VALUES(2,'Kids Jeans - 2019',6,1,2019,799.99)

INSERT INTO production.products(product\_id, product\_name, brand\_id, category\_id, model\_year, list\_price) VALUES(3,'Kids Pajamas - 2021',9,1,2021,899.99)

INSERT INTO production.products(product\_id, product\_name, brand\_id, category\_id, model\_year, list\_price) VALUES(4,'Men Blazer Leather - 2019 ',1,2,2019,559.99)

INSERT INTO production.products(product\_id, product\_name, brand\_id, category\_id, model\_year, list\_price) VALUES(5,'Men Suit - 2020',4,2,2020,799.99)

INSERT INTO production.products(product\_id, product\_name, brand\_id, category\_id, model\_year, list\_price) VALUES(6,'Men Jeans - 2023',7,2,2023,899.99)

INSERT INTO production.products(product\_id, product\_name, brand\_id, category\_id, model\_year, list\_price) VALUES(7,'Women Dress - 2018',5,3,2018,559.99)

INSERT INTO production.products(product\_id, product\_name, brand\_id, category\_id, model\_year, list\_price) VALUES(8,'Women Skirt - 2018',8,3,2019,799.99)

INSERT INTO production.products(product\_id, product\_name, brand\_id, category\_id, model\_year, list\_price) VALUES(9,'Women Leggings - 2023',2,3,2023,899.99)

SET IDENTITY\_INSERT production.products OFF;

-- sales.customers table

INSERT INTO sales.customers(first\_name, last\_name, phone, email, street, city, state, zip\_code) VALUES('ali','mohamed',NULL,'ali.mohamed@yahoo.com',' Mohamed Ali ','cairo','EG',14127);

INSERT INTO sales.customers(first\_name, last\_name, phone, email, street, city, state, zip\_code) VALUES('ahmed','khaled',NULL,'ahmed.khaled@yahoo.com','Elmoez ','cairo','EG',14156);

INSERT INTO sales.customers(first\_name, last\_name, phone, email, street, city, state, zip\_code) VALUES('menna','mohamed',NULL,'menna.mohamed@yahoo.com','Qaser Nile ','cairo','EG',14150);

INSERT INTO sales.customers(first\_name, last\_name, phone, email, street, city, state, zip\_code) VALUES('mostafa','mohamed',NULL,'mostafa.mohamed@yahoo.com','Elazher ','cairo','EG',14145);

INSERT INTO sales.customers(first\_name, last\_name, phone, email, street, city, state, zip\_code) VALUES('omer','mohamed',NULL,'omer.mohamed@yahoo.com','Salah Salem ','cairo','EG',14123);

INSERT INTO sales.customers(first\_name, last\_name, phone, email, street, city, state, zip\_code) VALUES('loay','ahmed',NULL,'loay.ahmed@yahoo.com','Fesal ','Giza','EG',141253);

INSERT INTO sales.customers(first\_name, last\_name, phone, email, street, city, state, zip\_code) VALUES('gehan','ali',NULL,'gehan.ali@yahoo.com','Mostafa Elnahas ','cairo','EG',14158);

-- stores

INSERT INTO sales.stores(store\_name, phone, email, street, city, state, zip\_code)

VALUES('Owl store 1','01097457086','Owl store 1@clothes.shop','Emad Eldean', 'cairo','EG',95060),

('Owl store 2','01025592193','Owl store 2@clothes.shop','Elazher', 'cairo','EG',11432);

-- production.stocks

INSERT INTO production.stocks(store\_id, product\_id, quantity) VALUES(1,1,27);

INSERT INTO production.stocks(store\_id, product\_id, quantity) VALUES(2,3,5);

INSERT INTO production.stocks(store\_id, product\_id, quantity) VALUES(1,2,6);

INSERT INTO production.stocks(store\_id, product\_id, quantity) VALUES(1,7,23);

INSERT INTO production.stocks(store\_id, product\_id, quantity) VALUES(2,5,22);

INSERT INTO production.stocks(store\_id, product\_id, quantity) VALUES(2,8,0);

INSERT INTO production.stocks(store\_id, product\_id, quantity) VALUES(1,4,8);

INSERT INTO production.stocks(store\_id, product\_id, quantity) VALUES(1,9,0);

INSERT INTO production.stocks(store\_id, product\_id, quantity) VALUES(1,6,10);

SET IDENTITY\_INSERT sales.staffs ON;

INSERT INTO sales.staffs(staff\_id, first\_name, last\_name, email, phone, active, store\_id, manager\_id) VALUES(1,'Fabiola','Jackson','fabiola.jackson@bikes.shop','(831) 555-5554',1,1,NULL);

INSERT INTO sales.staffs(staff\_id, first\_name, last\_name, email, phone, active, store\_id, manager\_id) VALUES(2,'Mireya','Copeland','mireya.copeland@bikes.shop','(831) 555-5555',0,2,1);

INSERT INTO sales.staffs(staff\_id, first\_name, last\_name, email, phone, active, store\_id, manager\_id) VALUES(3,'Genna','Serrano','genna.serrano@bikes.shop','(831) 555-5556',1,2,2);

INSERT INTO sales.staffs(staff\_id, first\_name, last\_name, email, phone, active, store\_id, manager\_id) VALUES(4,'Virgie','Wiggins','virgie.wiggins@bikes.shop','(831) 555-5557',0,1,2);

SET IDENTITY\_INSERT sales.staffs OFF;

SET IDENTITY\_INSERT sales.orders ON;

INSERT INTO sales.orders(order\_id, customer\_id, order\_status, order\_date, required\_date, shipped\_date, store\_id,staff\_id) VALUES(1,259,4,'20160101','20160103','20160103',1,2);

INSERT INTO sales.orders(order\_id, customer\_id, order\_status, order\_date, required\_date, shipped\_date, store\_id,staff\_id) VALUES(2,1212,4,'20160101','20160104','20160103',2,3);

INSERT INTO sales.orders(order\_id, customer\_id, order\_status, order\_date, required\_date, shipped\_date, store\_id,staff\_id) VALUES(3,523,4,'20160102','20160105','20160103',2,4);

INSERT INTO sales.orders(order\_id, customer\_id, order\_status, order\_date, required\_date, shipped\_date, store\_id,staff\_id) VALUES(4,175,4,'20160103','20160104','20160105',1,1);

INSERT INTO sales.orders(order\_id, customer\_id, order\_status, order\_date, required\_date, shipped\_date, store\_id,staff\_id) VALUES(5,1324,4,'20160103','20160106','20160106',2,2);

SET IDENTITY\_INSERT sales.orders OFF;

INSERT INTO sales.order\_items(order\_id, item\_id, product\_id, quantity, list\_price,discount) VALUES(1,3,1,56,5499.99,0.05);

INSERT INTO sales.order\_items(order\_id, item\_id, product\_id, quantity, list\_price,discount) VALUES(2,4,5,22,269.99,0.2);

INSERT INTO sales.order\_items(order\_id, item\_id, product\_id, quantity, list\_price,discount) VALUES(3,1,7,23,869.99,0.07);

INSERT INTO sales.order\_items(order\_id, item\_id, product\_id, quantity, list\_price,discount) VALUES(4,2,4,40,3199.99,0.2);

INSERT INTO sales.order\_items(order\_id, item\_id, product\_id, quantity, list\_price,discount) VALUES(5,3,9,20,659.99,0.07);

DQl code:

--select all

SELECT \* FROM production.brands

SELECT \* FROM production.categories

SELECT \* FROM production.products

SELECT \* FROM production.stocks

SELECT \* FROM sales.customers

SELECT \* FROM sales.order\_items

SELECT \* FROM sales.staffs

SELECT \* FROM sales.stores

--retrieve specific column

select email

from sales.customers;

--use concatenation fname,lname as fullname

select first\_name+' '+last\_name as customers\_name

from sales.customers;

--retreive data as unique

select distinct(product\_id)

from production.products ;

--use condition in select

select \* from production.products

where list\_price >=750;

Dcl code:

create login AbdelrahmanSami with password='1023##$102';

create login AhmedRamadan with password='225252#w20';

create login AbdelrahmanAhmed with password='3d22@nknc';

create user AbdelrahmanAhmed for login AbdelrahmanAhmed;

create user AhmedRamadan for login AhmedRamadan;

create user AbdelrahmanSami for login AbdelrahmanSami;

grant select, insert to AbdelrahmanSami ;

revoke select to AhmedRamadan ;

drop user AbdelrahmanAhmed;

drop user AbdelrahmanSami;

drop user AhmedRamadan;

drop login AbdelrahmanAhmed;

drop login AbdelrahmanSami;

drop login AhmedRamadan;

Tcl code:

-- TCL:

BEGIN TRANSACTION

UPDATE sales.customers

SET first\_name = 'Omar';

SAVE TRANSACTION A

BEGIN TRANSACTION

DELETE FROM production.brands;

SAVE TRANSACTION B

ROLLBACK TRANSACTION A;

ROLLBACK TRANSACTION B;