***Retail Management System***

1. **Objectives:**

Our main objective is to keep record of all the processing starting from customer’s order till customer’s transaction. In between we keep track on customer’s order details from which staff member manages that particular order and customer transaction history and archive details.

* 1. Customers
  2. Orders
  3. Category
  4. Staff
  5. Transaction
  6. Delivery Details
  7. Archive

1. **Entities:**
   1. **Customers:**

It keeps all the customer details and records such as customer’s id, customer’s name, customer’s age, customer’s contact, customer’s email and gender.

* 1. **Orders:**

It keeps all customer’s order details such as order’s id, order’s name, order’s date etc.

* 1. **Staff:**

It keeps all record related to staff such as staff’s id, staff’s designation, staff’s name, staff’s age etc. This entity is link with order’s entity so that it regulates the process of customer’s order.

* 1. **Transaction:**

It keeps the record of customer’s transactions.

1. **Relations:**
2. **Customers:**

Customers \_\_\_\_\_\_\_\_\_\_Orders

1. **Orders:**

Orders \_\_\_\_\_\_\_\_\_\_ Customers

Orders \_\_\_\_\_\_\_\_\_\_ Category

Orders \_\_\_\_\_\_\_\_\_\_ Transaction

1. **Staff:**

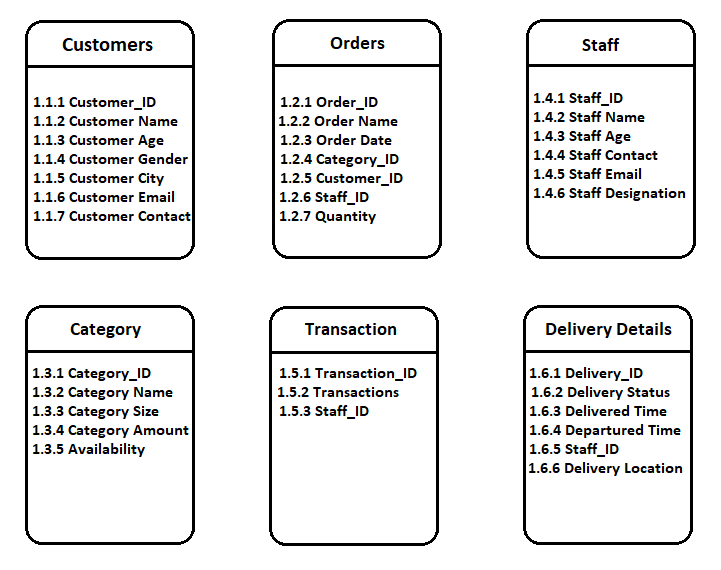
Staff \_\_\_\_\_\_\_\_\_\_ Orders

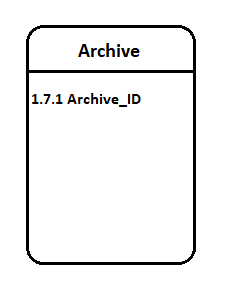
Staff \_\_\_\_\_\_\_\_\_\_ Delivery Details

1. **Transaction:**

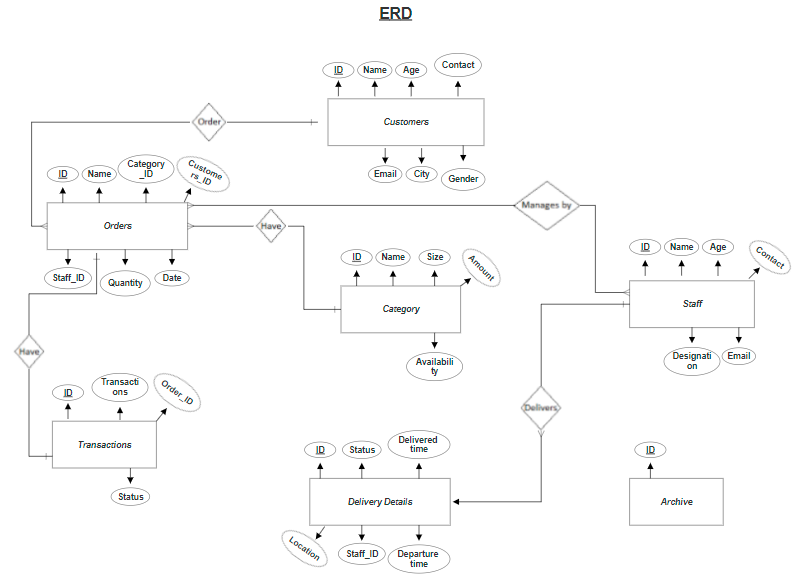
Transaction \_\_\_\_\_\_\_\_\_ Orders

1. **Attributes:**

****



1. **Entity Relationship Diagram (ERD):**



***RMS QUERIES***

--CREATE SCHEMA RMS --creating schema

--CREATE TABLE RMS.Customers -- creating customer table

--(

-- Customer\_ID INT PRIMARY KEY IDENTITY(1,1),

-- Name VARCHAR(50),

-- Age VARCHAR(2),

-- Gender VARCHAR(50),

-- City VARCHAR(50),

-- Email VARCHAR(50),

-- Contact VARCHAR(50)

-- )

-- INSERT INTO RMS.Customers -- insert data into customer table

-- (

-- Name,

-- Age,

-- Gender,

-- City,

-- Email,

-- Contact

--)

--VALUES

--(

-- 'Ayesha Aslam',

-- 23,

-- 'Female',

-- 'Lahore',

-- 'ayeshaaslam986@gmail.com',

-- '0321956781'

-- )

--CREATE TABLE RMS.Staff -- creating staff table

--(

-- Staff\_ID INT PRIMARY KEY IDENTITY(1,1),

-- Name VARCHAR(50),

-- Age INT,

-- Contact VARCHAR(50),

-- Email VARCHAR(50),

-- Designation VARCHAR(50)

-- )

-- INSERT INTO RMS.Staff -- insert data into staff table

-- (

-- Name,

-- Age,

-- Contact,

-- Email,

-- Designation

--)

--VALUES

--(

-- 'Ahmed',

-- 21,

-- '0322-844707-8',

-- 'ahmed997@gmail.com',

-- 'Order Man'

--)

--CREATE TABLE RMS.Category -- creating category table

--(

-- Category\_ID INT PRIMARY KEY IDENTITY(1,1),

-- Name VARCHAR(50),

-- Size VARCHAR(50),

-- Amount VARCHAR(50),

-- Availability VARCHAR(12)

-- )

-- INSERT INTO RMS.Category -- insert data into category table

-- (

-- Name,

-- Size,

-- Amount,

-- Availability

--)

--VALUES

--(

-- 'Shirts',

-- 'M',

-- 2000,

-- 'In Stock'

--)

----TRUNCATE Table RMS.CATEGORY;

--CREATE TABLE RMS.[Delivery Details] -- creating Delivery Details table

--(

-- Delivery\_ID INT PRIMARY KEY IDENTITY(1,1),

-- Status BIT,

-- [Delivered Time] datetime,

-- Location VARCHAR(50),

-- [Departure Time] datetime,

-- Staff\_ID INT UNIQUE FOREIGN KEY REFERENCES RMS.Staff(Staff\_ID)

--)

-- INSERT INTO RMS.[Delivery Details] -- insert data into Delivery Details table

-- (

-- Status,

-- [Delivered Time],

-- Location,

-- [Departure Time],

-- Staff\_ID

--)

--VALUES

--(

-- 0,

-- NULL,

-- 'Lahore',

-- NULL,

-- 1

--)

--CREATE TABLE RMS.Orders -- creating Orders table

--(

-- Order\_ID INT PRIMARY KEY IDENTITY(1,1),

-- Name VARCHAR(50),

-- Date date,

-- Quantity VARCHAR(1),

-- Staff\_ID INT FOREIGN KEY REFERENCES RMS.Staff(Staff\_ID),

-- Customer\_ID INT UNIQUE FOREIGN KEY REFERENCES RMS.Customers(Customer\_ID),

-- Category\_ID INT UNIQUE FOREIGN KEY REFERENCES RMS.Category(Category\_ID)

--)

-- INSERT INTO RMS.Orders -- insert data into Order table

-- (

-- Name,

-- Date,

-- Quantity,

-- Staff\_ID,

-- Customer\_ID,

-- Category\_ID

--)

--VALUES

--(

-- 'Lhr9262021',

-- '9/26/2021',

-- 3,

-- 2,

-- 1004,

-- 70

--)

--CREATE TABLE RMS.Transactions -- creating Transactions table

--(

-- Transactions\_ID INT PRIMARY KEY IDENTITY(1,1),

-- Transactions\_Amount decimal(18, 2),

-- Status BIT,

-- Order\_ID INT UNIQUE FOREIGN KEY REFERENCES RMS.Orders(Order\_ID)

--)

-- INSERT INTO RMS.Transactions -- insert data into Transactions table

-- (

-- Transactions\_Amount,

-- Status,

-- Order\_ID

--)

--VALUES

--(

-- 0,

-- 0,

-- 1

--)

--CREATE SCHEMA RMSA --creating schema

--CREATE TABLE RMSA.Archive -- creating Archive table

--(

-- Archive\_ID INT PRIMARY KEY IDENTITY(1,1)

--)

-------------------------------------------------------------

-- INSERT INTO RMS.Customers -- insert data into customer table

-- (

-- Name,

-- Age,

-- Gender,

-- City,

-- Email,

-- Contact

--)

--SELECT TOP 68 \* FROM MOCK\_DATA

-------------------------------------------------------------

-- INSERT INTO RMS.Staff -- insert data into staff table

-- (

-- Name,

-- Age,

-- Contact,

-- Email,

-- Designation

--)

--SELECT TOP 998 \* FROM MOCK\_DATA;

-------------------------------------------------------------

-- INSERT INTO RMS.Category -- insert data into category table

-- (

-- Name,

-- Size,

-- Amount,

-- Availability

--)

--SELECT TOP 999 \* FROM MOCK\_DATA;

-------------------------------------------------------------

--INSERT INTO RMS.[Delivery Details] -- insert data into Delivery Details table

-- (

--Status,

--[Departure Time],

--[Delivered Time],

--Location,

--Staff\_ID

-- )

--SELECT

--1 AS [Status],

--getutcdate() AS [Departure Time],

--getutcdate()+2 AS [Delivered Time],

--RMS.Customers.City,RMS.Orders.Staff\_ID

--FROM

--(

-- RMS.Customers

-- INNER JOIN RMS.Orders ON RMS.Customers.Customer\_ID = RMS.Orders.Customer\_ID

-- INNER JOIN RMS.Transactions ON RMS.Orders.Order\_ID = RMS.Transactions.Order\_ID

--)

--SELECT \* FROM MOCK\_DATA

--WHERE Staff\_ID != 1;

-------------------------------------------------------------

--DROP TABLE RMS.Category;

--ALTER TABLE RMS.Orders

--ADD Category\_ID INT UNIQUE FOREIGN KEY REFERENCES RMS.Category(Category\_ID);

--UPDATE RMS.Orders

--SET Category\_ID = 1

--WHERE Order\_ID = 1;

-------------------------------------------------------------

-- INSERT INTO RMS.Orders -- insert data into Order table

-- (

-- Name,

-- Date,

-- Staff\_ID,

-- Quantity,

-- Customer\_ID,

-- Category\_ID

--)

--SELECT

-- MD.[Name],

-- MD.[Date],

-- RS.Staff\_ID,

-- MD.Quantity,

-- MD.Customer\_ID,

-- MD.Category\_ID

--FROM

-- MOCK\_DATA AS MD

-- INNER JOIN RMS.Staff AS RS ON MD.Staff\_ID= RS.Staff\_ID

--WHERE

-- Designation = 'Order Man';

-------------------------------------------------------------

--UPDATE RMS.Category

--SET

-- Amount = REPLACE(Amount,'$','')

-------------------------------------------------------------

--UPDATE

-- RMS.Transactions

--SET

-- Status = 1

--WHERE

-- Transactions\_ID = 1;

-------------------------------------------------------------

--CREATE PROCEDURE Calc\_Transactions -- SP of No Of Transactions

--AS

--SELECT

-- COUNT(\*) AS [No Of Transactions]

--FROM RMS.Transactions

-------------------------------------------------------------

Alter PROCEDURE Move\_Arc

AS

INSERT INTO RMSA.Archive

(

Status,

[Delivered Time],

Location,

[Departure Time],

Staff\_ID

)

SELECT

Status,

[Delivered Time],

Location,

[Departure Time],

Staff\_ID

FROM

RMS.[Delivery Details]

WHERE

Status = 1;

DELETE FROM

RMS.[Delivery Details]

WHERE

Status = 1;

--SELECT \* FROM RMS.Orders;

--SELECT \* FROM RMS.Category;

--SELECT \* FROM RMS.Transactions;

--SELECT \* FROM RMS.[Delivery Details];

--SELECT \* FROM RMS.Customers;

--Select \* from RMSA.Archive;

TRIGGERS

USE [RETAIL DB]

GO

/\*\*\*\*\*\* Object: Trigger [RMS].[OrderafterCRUD] Script Date: 9/25/2021 3:41:16 AM \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

ALTER TRIGGER [RMS].[OrderafterCRUD]

ON [RMS].[Orders]

AFTER INSERT,DELETE,UPDATE

AS

BEGIN

SET NOCOUNT ON;

INSERT INTO RMS.Transactions

(

Transactions\_Amount,

Status,

Order\_ID

)

SELECT

(SELECT

Category.Amount

FROM

inserted

INNER JOIN RMS.Category ON (inserted.Category\_ID = Category.Category\_ID)

WHERE

Category.Availability = 'In Stock'

) AS Transactions\_Amount,

1 AS [Status],

Order\_ID

FROM

inserted

INSERT INTO RMS.[Delivery Details]

(

Status,

[Departure Time],

[Delivered Time],

Location,

Staff\_ID

)

SELECT

1 AS [Status],

getutcdate() AS [Departure Time],

getutcdate()+2 AS [Delivered Time],

RMS.Customers.City,RMS.Orders.Staff\_ID

FROM

(

RMS.Customers

INNER JOIN RMS.Orders ON RMS.Customers.Customer\_ID = RMS.Orders.Customer\_ID

INNER JOIN RMS.Transactions ON RMS.Orders.Order\_ID = RMS.Transactions.Order\_ID

)

--------------------------------------------------------------------

END

