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**Database Project: Restaurant Management System Documentation**

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CSCI305: Database Systems

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**Project Idea:**

The restaurant keeps a catalogue of the food and beverage products that it offers. In addition to delivering cuisine on their own premises, the restaurant accepts orders online via their website. We have delivery boys that help us deliver the orders. Each delivery boy is allocated a different area code. The delivery boy cannot deliver outside of the area that has not been given to him (each delivery boy may only have one area assigned to him). The client record is kept so that premium customers can receive discounts.

**Project Objective:**

The project's goal is to provide a complete restaurant management system that simplifies operations, enhances customer experience, and gives important insights through data analysis. A digital catalogue with detailed information about food and beverage items, an online ordering system with a user-friendly interface, a delivery management system with delivery boys assigned to specific area codes, a customer record management system to maintain customer profiles, and a discount management system to provide discounts to eligible customers will all be part of the system. The technology will also allow premium clients to be identified and recognized for special incentives and discounts.

**Entities Description:**

* Customer
  + CustomerID (PK)
  + customer\_name
  + email
  + phone\_number
  + address
  + premium\_status
  + discounts
* DeliveryArea
  + AreaCode (PK)
  + area\_name
* Restaurant
  + RestaurantID (PK)
  + restaurant\_name
  + city
  + addressLine1
  + restaurant\_category
  + phone
  + ContactInfo
* MenuItem
  + MenuItemID (PK)
  + Name
  + RestaurantID (FK)
  + Description
  + Price
  + Picture
  + Category
* DeliveryBoy
  + BoyID (PK)
  + BoyName
  + BoyEmail
  + BoyPhone
  + DeliveryArea (FK)
  + BoyAvailable
* Orders
  + OrderID (PK)
  + CustomerID (FK)
  + RestaurantID (FK)
  + DeliveryBoyID (FK)
  + delivery\_area (FK)
  + OrderDate
  + Orderstatus
  + total\_amount
* Payment
  + PaymentID (PK)
  + OrderID (FK)
  + Amount
  + PaymentDate
* Request
  + RequestID (PK)
  + RequestName
  + RequestDetails
  + RequestStatus
  + CustomerID (FK)
  + DeliveryBoyID (FK)
* Report
  + ReportID (PK)
  + ReportDate
  + DeliveryAreaCode (FK)
* GeoLocation
  + LocationID (PK)
  + LocationName
  + Latitude
  + Longitude
* CustomerRefund
  + RefundID (PK)
  + OrderID (FK)
  + RefundAmount
  + RefundDate
  + Reason

**Dependencies:**

* MenuItem:
  + Depends on Restaurant through the foreign key RestaurantID.
* DeliveryBoy:
  + Depends on DeliveryArea through the foreign key DeliveryArea.
* Orders:
  + Depends on Customer through the foreign key CustomerID.
  + Depends on Restaurant` through the foreign key RestaurantID.
  + Depends on DeliveryBoy` through the foreign key DeliveryBoyID.
  + Depends on DeliveryArea` through the foreign key delivery\_area.
* Payment:
  + Depends on Orders through the foreign key OrderID.
* Request:
  + Depends on Customer
  + through the foreign key CustomerID.
  + Depends on DeliveryBoy through the foreign key DeliveryBoyID.
* Report:
  + Depends on DeliveryArea through the foreign key DeliveryAreaCode.
* CustomerRefund:
  + Depends on Orders through the foreign key OrderID.

**Normalization:**

1. First Normal Form (1NF):

* All tables have a primary key (CustomerID, AreaCode, RestaurantID, MenuItemID, BoyID, OrderID, PaymentID, RequestID, ReportID, LocationID, RefundID).
* All tables in the schema are on 1NF.

1. Second Normal Form (2NF):

* Customer Table: This table is in 2NF as every non-key attribute (customer\_name, email, phone\_number, address, premium\_status, discounts) is fully functionally dependent on the primary key (CustomerID).
* DeliveryArea Table: This table is in 2NF as the non-key attribute (area\_name) is fully functionally dependent on the primary key (AreaCode).
* Restaurant Table: This table is in 2NF as every non-key attribute (restaurant\_name, city, addressLine1, restaurant\_category, phone, ContactInfo) is fully functionally dependent on the primary key (RestaurantID).
* MenuItem Table: This table is in 2NF as every non-key attribute (Name, RestaurantID, Description, Price, Picture, Category) is fully functionally dependent on the primary key (MenuItemID).
* DeliveryBoy Table: This table is in 2NF as every non-key attribute (BoyName, BoyEmail, BoyPhone, DeliveryArea, BoyAvailable) is fully functionally dependent on the primary key (BoyID).
* Orders Table: This table is in 2NF as every non-key attribute (CustomerID, RestaurantID, DeliveryBoyID, delivery\_area, OrderDate, Orderstatus, total\_amount) is fully functionally dependent on the primary key (OrderID).
* Payment Table: This table is in 2NF as the non-key attribute (Amount, PaymentDate) is fully functionally dependent on the primary key (PaymentID).
* Request Table: This table is in 2NF as every non-key attribute (RequestName, RequestDetails, RequestStatus, CustomerID, DeliveryBoyID) is fully functionally dependent on the primary key (RequestID).
* Report Table: This table is in 2NF as the non-key attribute (ReportDate, DeliveryAreaCode) is fully functionally dependent on the primary key (ReportID).
* GeoLocation Table: This table is in 2NF as every non-key attribute (LocationName, Latitude, Longitude) is fully functionally dependent on the primary key (LocationID).
* CustomerRefund Table: This table is in 2NF as every non-key attribute (OrderID, RefundAmount, RefundDate, Reason) is fully functionally dependent on the primary key (RefundID).re in 2NF.
* So, all the tables in the schema are in 2NF.

1. Third Normal Form (3NF):

* Customer (CustomerID, customer\_name, email, phone\_number, address, premium\_status, discounts)
* DeliveryArea (AreaCode, area\_name)
* Restaurant (RestaurantID, restaurant\_name, city, addressLine1, restaurant\_category, phone, ContactInfo)
* MenuItem (MenuItemID, Name, RestaurantID, Description, Price, Picture, Category)
* DeliveryBoy (BoyID, BoyName, BoyEmail, BoyPhone, DeliveryArea, BoyAvailable)
* Orders (OrderID, CustomerID, RestaurantID, DeliveryBoyID, delivery\_area, OrderDate, Orderstatus, total\_amount)
* Payment (PaymentID, OrderID, Amount, PaymentDate)
* Request (RequestID, RequestName, RequestDetails, RequestStatus, CustomerID, DeliveryBoyID)
* Report (ReportID, ReportDate, DeliveryAreaCode)
* GeoLocation (LocationID, LocationName, Latitude, Longitude)
* CustomerRefund (RefundID, OrderID, RefundAmount, RefundDate, Reason)
* So, all the tables are in 3NF.

**ERD:**

A diagram of a complex network

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**Schema:**

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**MYSQL Source Code:**

CREATE DATABASE Restaurant1;

USE Restaurant1;

CREATE TABLE Customer (

CustomerID INT PRIMARY KEY,

customer\_name VARCHAR(255) NOT NULL,

email VARCHAR(255) NOT NULL,

phone\_number VARCHAR(255) NOT NULL,

address VARCHAR(255) NOT NULL,

premium\_status BOOLEAN DEFAULT FALSE,

discounts DECIMAL(5,2) DEFAULT 0.00

);

CREATE TABLE DeliveryArea (

AreaCode INT PRIMARY KEY,

area\_name VARCHAR(255) NOT NULL

);

CREATE TABLE Restaurant (

RestaurantID INT PRIMARY KEY,

restaurant\_name VARCHAR(255) NOT NULL,

city VARCHAR(255) NOT NULL,

addressLine1 VARCHAR(100) NOT NULL,

restaurant\_category VARCHAR(255) NOT NULL,

phone VARCHAR(50) NOT NULL,

ContactInfo VARCHAR(255)

);

CREATE TABLE MenuItem (

MenuItemID INT PRIMARY KEY,

Name VARCHAR(50) NOT NULL,

RestaurantID int,

Description VARCHAR(255),

Price DECIMAL(10, 2) NOT NULL,

Picture BLOB,

Category VARCHAR(255),

FOREIGN KEY (RestaurantID) REFERENCES Restaurant(RestaurantID)

);

CREATE TABLE DeliveryBoy (

BoyID INT PRIMARY KEY,

BoyName VARCHAR(255),

BoyEmail VARCHAR(255) NOT NULL,

BoyPhone VARCHAR(255) NOT NULL,

DeliveryArea INT,

BoyAvailable BOOLEAN DEFAULT TRUE,

FOREIGN KEY (DeliveryArea) REFERENCES DeliveryArea(AreaCode)

);

CREATE TABLE Orders (

OrderID INT PRIMARY KEY AUTO\_INCREMENT,

CustomerID INT,

RestaurantID INT,

DeliveryBoyID INT,

delivery\_area INT,

OrderDate TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

Orderstatus ENUM('Placed', 'Confirmed', 'In Transit', 'Delivered', 'Canceled') DEFAULT 'Placed',

total\_amount DECIMAL(10, 2),

FOREIGN KEY (CustomerID) REFERENCES Customer(CustomerID),

FOREIGN KEY (RestaurantID) REFERENCES Restaurant(RestaurantID),

FOREIGN KEY (DeliveryBoyID) REFERENCES DeliveryBoy(BoyID),

FOREIGN KEY (delivery\_area) REFERENCES DeliveryArea(AreaCode)

);

CREATE TABLE Payment (

PaymentID INT PRIMARY KEY,

OrderID INT,

Amount DECIMAL(10, 2),

PaymentDate TIMESTAMP,

FOREIGN KEY (OrderID) REFERENCES Orders(OrderID)

);

CREATE TABLE Request (

RequestID INT PRIMARY KEY,

RequestName DATETIME,

RequestDetails VARCHAR(255),

RequestStatus BOOLEAN DEFAULT FALSE,

CustomerID INT,

DeliveryBoyID INT,

FOREIGN KEY (CustomerID) REFERENCES Customer(CustomerID),

FOREIGN KEY (DeliveryBoyID) REFERENCES DeliveryBoy(BoyID)

);

CREATE TABLE Report (

ReportID INT PRIMARY KEY,

ReportDate DATETIME,

DeliveryAreaCode INT,

FOREIGN KEY (DeliveryAreaCode) REFERENCES DeliveryArea(AreaCode)

);

CREATE TABLE GeoLocation (

LocationID INT PRIMARY KEY,

LocationName VARCHAR(255),

Latitude DECIMAL(10, 6),

Longitude DECIMAL(10, 6)

);

CREATE TABLE CustomerRefund (

RefundID INT PRIMARY KEY AUTO\_INCREMENT,

OrderID INT,

RefundAmount DECIMAL(10, 2),

RefundDate TIMESTAMP,

Reason VARCHAR(255),

FOREIGN KEY (OrderID) REFERENCES Orders(OrderID)

);

INSERT INTO Customer (CustomerID, customer\_name, email, phone\_number, address,premium\_status,discounts)

VALUES

(100, 'Yasmeen', 'Y.Mostafa@gmail.com', '01034526700', '6th of October', true,0.1),

(101, 'Jana', 'jana.smith@gmail.com', '01034528867', 'Faisal', false,0),

(102, 'Maha', 'Maha@gmail.com', '01034526767', 'Nasr city', true,0.15),

(103, 'Salma', 'michael.brown@gmail.com', '01035526767','Haram',false, 0),

(104, 'Sophia', 'sophia.MO@gmail.com', '01554526767', 'Sharqya',true, 0.1),

(105, 'Andrew', 'Andrew.anderson@gmail.com', '01134526767', 'Aswan',false, 0);

INSERT INTO Restaurant (RestaurantID, restaurant\_name, city, addressLine1, restaurant\_category, phone, ContactInfo)

VALUES

(5, 'Restaurant 5', 'Cairo', 'Cairo 5', 'Category 5', '0119633792', '9288972032'),

(6, 'Restaurant 6', 'new cairo', 'new cairo 6', 'Category 6', '0119363442', '9288972099'),

(7, 'Restaurant 7', 'giza', 'giza 6', 'Category 7', '0119637621', '9288972055'),

(8, 'Restaurant 8', 'aswann', 'aswann 6', 'Category 8', '011963111', '92889720877'),

(9, 'Restaurant 9', 'Sharqya', 'Sharqya 9', 'Category 9', '0119630000', '9288973232');

INSERT INTO MenuItem (MenuItemID, Name, RestaurantID ,Description, Price,Picture,Category)

VALUES (1, 'SHITAKE MUSHROOOM', 5 ,'Delicious Mushroom beef burger.',120,'https://buffaloburger.com/\_next/image?url=https%3A%2F%2Fbuffalonlineorderingprod.s3-accelerate.amazonaws.com%2Fmenu\_items%2Fa76de047b66f2511962b600232c60769.png&w=640&q=75','Burgers'),

(2, 'BACON MUSHROOM JACK', 6,'Delicious Mushroom and Bacon burger.',150 ,'https://buffaloburger.com/\_next/image?url=https%3A%2F%2Fbuffalonlineorderingprod.s3-accelerate.amazonaws.com%2Fmenu\_items%2Fd845c9309b0d95d8c5d945b6b2552491.png&w=640&q=75' ,'Burgers'),

(3, 'OLD SCHOOL', 7 ,'Pure beef burger topped with our Buffalo sauce and cheddar cheese.' ,115,'https://buffaloburger.com/\_next/image?url=https%3A%2F%2Fbuffalonlineorderingprod.s3-accelerate.amazonaws.com%2Fmenu\_items%2Fb4a9bce0163404b97f76e9cec638bb08.png&w=640&q=75' , 'Burgers' ),

(4, 'TRIPLE', 8 ,'Three 100% British and Irish beef patties, onions, pickles, ketchup, mustard and cheese in a soft, toasted bun.',215, 'https://buffaloburger.com/\_next/image?url=https%3A%2F%2Fbuffalonlineorderingprod.s3-accelerate.amazonaws.com%2Fmenu\_items%2F05706e0e9313fa2972b1fe878f17b990.png&w=640&q=75','Burgers'),

(5, 'BLUE CHEESE', 9, 'Crumbles of creamy French blue cheese top our famous burger patty with our signature mayonnaise sauce.',120,'https://buffaloburger.com/\_next/image?url=https%3A%2F%2Fbuffalonlineorderingprod.s3-accelerate.amazonaws.com%2Fmenu\_items%2Fb75ecb94aa633b1545de1318f9ca6d00.png&w=640&q=75', 'Burgers'),

(6, 'DOUBLE DOUBLE ', 5 ,'2 Juicy beef patties with 2 layers of cheddar cheese and our creamy Buffalo sauce', 190 ,'https://buffaloburger.com/\_next/image?url=https%3A%2F%2Fbuffalonlineorderingprod.s3-accelerate.amazonaws.com%2Fmenu\_items%2Fff183e68e89cbe5674dfb3c8e7b1a26b.png&w=640&q=75','Burgers'),

(7, 'THE RASTAFARI',6 ,'Crispy jalapeño bites, on a grilled burger patty with creamy Buffalo sauce.', 140,'https://buffaloburger.com/\_next/image?url=https%3A%2F%2Fbuffalonlineorderingprod.s3-accelerate.amazonaws.com%2Fmenu\_items%2F802131a7b4dd1d3a1ca23625a53082c3.png&w=640&q=75','Burgers'),

(8, '16Pc Signature Chicken',7, '16 signature chicken pieces with patty and sauce', 340, 'https://cdn.sanity.io/images/czqk28jt/prod\_plk\_us/d6a82f9cc83d7dba106bb7691973dbf719e3bed4-2000x1333.png?w=750&q=40&fit=max&auto=format', 'Chicken'),

(9,'2Pc Chicken Meal',8,'2 chicken pieces with patty and sauce ' ,50,'https://cdn.sanity.io/images/czqk28jt/prod\_plk\_us/47642b88e69bb5bbd75e285647c6df67aebe708c-2000x1333.png?w=750&q=40&fit=max&auto=format','Chicken'),

(10,'3Pc Chicken Meal',9, '3 chicken pieces with patty and sauce' ,75,'https://cdn.sanity.io/images/czqk28jt/prod\_plk\_us/dbf3ed316da22492677b6bd2285db51b288dc466-2000x1333.png?w=750&q=40&fit=max&auto=format','Chicken'),

(11,'4Pc Chicken Meal',5,'4 chicken pieces with patty and sauce' ,100,'https://cdn.sanity.io/images/czqk28jt/prod\_plk\_us/a412de33077dd22818675dbd6e095038f35e9e8c-2000x1333.png?w=750&q=40&fit=max&auto=format','Chicken'),

(12,'8Pc Chicken Meal',6, '8 chicken pieces with patty and sauce' ,160,'https://cdn.sanity.io/images/czqk28jt/prod\_plk\_us/86e795d2820f6ec8d19894a79f293b145932e66f-2000x1333.png?w=750&q=40&fit=max&auto=format','Chicken'),

(13,'12Pc Chicken Meal',7,'12 chicken pieces with patty and sauce' ,220,'https://cdn.sanity.io/images/czqk28jt/prod\_plk\_us/141e32d3e97fe639765882f1801f9bd87549f18d-2000x1333.png?w=750&q=40&fit=max&auto=format','Chicken'),

(14,'16Pc Chicken Meal',8, '16 chicken pieces with patty and sauce' ,300,'https://cdn.sanity.io/images/czqk28jt/prod\_plk\_us/7488145e368122d31621d45c6759719155f66533-2000x1333.png?w=750&q=40&fit=max&auto=format','Chicken'),

(15,'16Pc Signature Chicken',9,'16 signature chicken pieces with patty and sauce' ,340,'https://cdn.sanity.io/images/czqk28jt/prod\_plk\_us/d6a82f9cc83d7dba106bb7691973dbf719e3bed4-2000x1333.png?w=750&q=40&fit=max&auto=format','Chicken'),

(16,'Cheese Lovers',5,'Mixed cheese pizza' ,185,'https://images.phi.content-cdn.io/cdn-cgi/image/height=170,width=180,quality=50/https://martjackamstorage.azureedge.net/am-resources/c3877a59-69f7-40fa-bb17-ae5b9ac37732/Images/ProductImages/Large/Cheese-Lovers-p1.png','Pizza'),

(17,'Vegetarian',6,'Pizza topped with veggies' ,135,'https://images.phi.content-cdn.io/cdn-cgi/image/height=170,width=180,quality=50/https://martjackamstorage.azureedge.net/am-resources/c3877a59-69f7-40fa-bb17-ae5b9ac37732/Images/ProductImages/Large/CLASSIC-VEGETARIAN.png','Pizza'),

(18,'Chicken BBQ',7,'Pizza topped with chicken and barbecue sauce' ,135,'https://images.phi.content-cdn.io/cdn-cgi/image/height=170,width=180,quality=50/https://martjackamstorage.azureedge.net/am-resources/c3877a59-69f7-40fa-bb17-ae5b9ac37732/Images/ProductImages/Large/CLASSIC--BBQ-CHICKEN.png','Pizza'),

(19,'Pepperoni Supreme',8,'Pizza topped with pepperoni' ,150,'https://images.phi.content-cdn.io/cdn-cgi/image/height=170,width=180,quality=50/https://martjackamstorage.azureedge.net/am-resources/c3877a59-69f7-40fa-bb17-ae5b9ac37732/Images/ProductImages/Large/PEPPERONI%20Supreme.png','Pizza'),

(20,'Meat Lover',9,'Pizza topped with meat' ,135,'https://images.phi.content-cdn.io/cdn-cgi/image/height=170,width=180,quality=50/https://martjackamstorage.azureedge.net/am-resources/c3877a59-69f7-40fa-bb17-ae5b9ac37732/Images/ProductImages/Large/MEAT-LOVERS.png','Pizza'),

(21,'Spicy CHICKEN RANCH',5,'Pizza topped with spicy chicken and ranch sauce' ,185,'https://images.phi.content-cdn.io/cdn-cgi/image/height=170,width=180,quality=50/https://martjackamstorage.azureedge.net/am-resources/c3877a59-69f7-40fa-bb17-ae5b9ac37732/Images/ProductImages/Large/Spicy%20Chicken%20Ranch175x175.png','Pizza'),

(22,'Margherita',6,'Pizza topped with margherita' ,125,'https://images.phi.content-cdn.io/cdn-cgi/image/height=170,width=180,quality=50/https://martjackamstorage.azureedge.net/am-resources/c3877a59-69f7-40fa-bb17-ae5b9ac37732/Images/ProductImages/Large/Margherita-p1.png','Pizza'),

(23,'Super Supreme',7,'Pizza topped with Sausage, Pepperoni,Onions, Black Olives, Mushrooms, Mixed Peppers' ,160,'https://images.phi.content-cdn.io/cdn-cgi/image/height=170,width=180,quality=50/https://martjackamstorage.azureedge.net/am-resources/c3877a59-69f7-40fa-bb17-ae5b9ac37732/Images/ProductImages/Large/Super-Supreme-p1.png','Pizza');

INSERT INTO DeliveryArea (AreaCode, area\_name)

VALUES

(11, 'Downtown Area'),

(22, 'October Area'),

(33, 'Haram Area'),

(44, 'Fesail Area'),

(55, 'Naser District'),

(66, 'Zayed Area');

INSERT INTO DeliveryBoy (BoyID, BoyName, BoyEmail, BoyPhone, DeliveryArea, BoyAvailable)

VALUES

(1, 'Yousef', 'yousef@gmail.com', '01134526760', 11, true),

(2, 'Ahmed', 'ahmed@gmail.com', '011345267640', 33, false),

(3, 'Aly', 'aly@gmail.com', '01134526710', 44, true),

(4, 'Maged', 'maged@gmail.com', '01094526767', 55,false),

(5, 'Monzer', 'monzer@gmail.com', '01134500767', 66,true);

INSERT INTO Orders (OrderID, CustomerID, RestaurantID, DeliveryBoyID, delivery\_area, OrderDate, Orderstatus, total\_amount)

VALUES

(60, 100, 9, 1, 11, '2023-05-02', 'Placed', 250),

(61, 101, 8, 2, 22, '2023-05-03', 'Confirmed',730),

(62, 102, 7, 3, 33, '2023-05-03', 'Delivered',1500),

(63, 103, 6, 4, 44, '2023-05-05', 'Placed',85),

(64, 104, 5, 5, 55, '2023-05-07', 'In Transit',126);

INSERT INTO Payment (PaymentID, OrderID, Amount, PaymentDate)

values

(200, 60, 500, '2023-05-02'),

(201, 61, 1000, '2023-05-03'),

(202, 62, 700, '2023-05-03'),

(203, 63, 750, '2023-05-05'),

(204, 64, 400, '2023-05-07'),

(205, 62, 500, '2023-02-05');

INSERT INTO Orders (OrderID, CustomerID, RestaurantID, DeliveryBoyID, delivery\_area, OrderDate, Orderstatus, total\_amount)

VALUES (66, 100, 9, 1, 11, '2023-05-02', 'Placed', 250);

ALTER TABLE Request MODIFY RequestName VARCHAR(255);

INSERT INTO Request (RequestID, RequestName, RequestDetails, RequestStatus)

VALUES (1, 'Delivery Boy Allocation', 'Order Number 63', FALSE);

UPDATE DeliveryBoy

SET BoyAvailable = FALSE

WHERE BoyID = 1;

SELECT \* FROM Orders;

SELECT customer\_name, email, phone\_number, address FROM Customer;

SELECT \* FROM Customer WHERE discounts = 0;

SELECT \* FROM DeliveryBoy;

SELECT Name, Description, Price FROM MenuItem;

SELECT DISTINCT Address FROM Customer;

SELECT \* FROM Customer WHERE discounts = 0.1;

UPDATE MenuItem

SET Price = 200

WHERE Name = 'pizza';

UPDATE MenuItem SET Price = 170

WHERE MenuItemID = 11;

SELECT DeliveryBoy.BoyName, DeliveryArea.area\_name

FROM DeliveryBoy

INNER JOIN DeliveryArea ON DeliveryBoy.DeliveryArea = DeliveryArea.AreaCode;

INSERT INTO Restaurant (RestaurantID, restaurant\_name, city, addressLine1, restaurant\_category, phone, ContactInfo)

VALUES (2, 'Oat Restaurant', 'zayed', 'nile university street', 'Healthy Food', '9999999', 'esraa@nu.edu.eg');

INSERT INTO Payment (PaymentID, OrderID, Amount, PaymentDate)

VALUES (206, 60, 50, '2024-01-02');

-- Report: Available delivery boys per area

SELECT DeliveryArea.area\_name, COUNT(DeliveryBoy.BoyID) AS AvailableDeliveryBoys

FROM DeliveryArea

LEFT JOIN DeliveryBoy ON DeliveryArea.AreaCode = DeliveryBoy.DeliveryArea AND DeliveryBoy.BoyAvailable = TRUE

GROUP BY DeliveryArea.area\_name;

**GUI:**

1. **DeliveryBoy Entity:**

* **Insert**

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* **Display:**

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* **Update**

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* **Delete**

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1. **Customer Entity:**

* **Insert**

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* **Update**

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* **Display:**A screenshot of a computer

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* **Select:**

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1. **CustomerRefund Entity:**

* **Insert:**

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* **Display:**

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* **Delete:**

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1. **DeliveryArea**

* **Insert:**

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* **Display:**

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* **Update:**

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* **Delete:**

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1. **GeoLocation Entity:**

* **Insert:**

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* **display:**

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* **update:**

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* **delete:**

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1. **MenuItem:**

* **Insert:**

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* **display:**

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* **update:**

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* **delete:**

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1. **Orders Entity:**

* **Insert:**

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* **Display:**

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* **Update:**

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* **Delete:**

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1. **Payment Entity:**

* **Insert:**

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* **Display:**

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* **Update:**

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* **Delete:**

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1. **Report Entity:**

* **Insert:**

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* **Display:**

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**-update:**

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* **Delete:**

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1. **Request Entity:**

* **Insert:**

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* **Display:**

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* **Update:**

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* **Delete:**

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1. **Restaurant Entity:**

* **Insert:**

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* **Display:**

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* **Update:**

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* **Delete:**