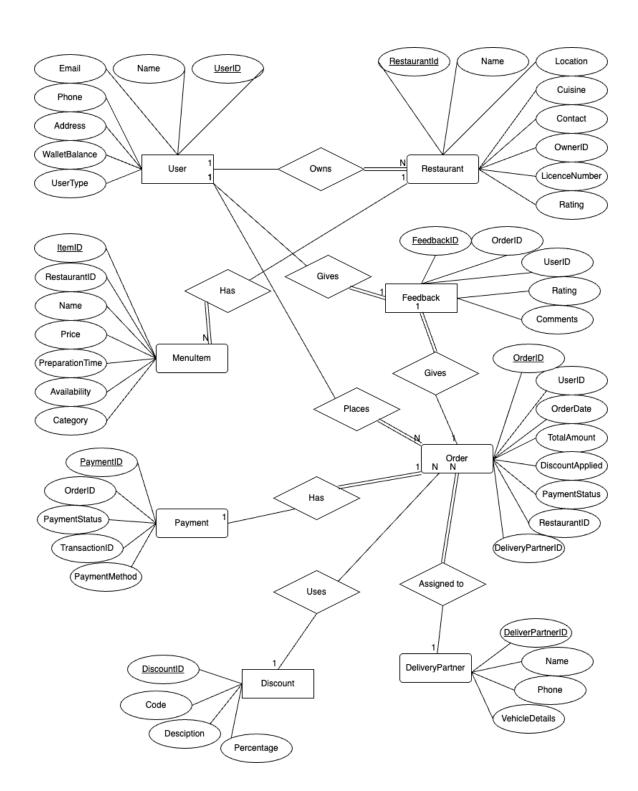
DBMS ASSIGNMENT

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Question 1:

Part A: Tool Used: draw.io



Entities and Attributes:

1. User

• **Attributes**: userid (PK), name, email, phone, address, usertype (Customer/RestaurantOwner/DeliveryPartner)

2. Restaurant

• **Attributes**: restaurantid (PK), name, location, cuisine, rating, contact, ownerid (FK)

3. MenuItem

• Attributes: itemid (PK), restaurantid (FK), name, price, preparationtime, availability, category

4. Order

• Attributes: orderid (PK), userid (FK), restaurantid (FK), orderdate, totalamount, discountapplied (FK), paymentstatus, deliverypartnerid (FK)

5. Discount

• Attributes: discountid (PK), description, percentage, code

6. DeliveryPartner

• Attributes: deliverypartnerid (PK), name, phone, vehicledetails

7. Feedback

• Attributes: feedbackid (PK), userid (FK), orderid (FK), rating, comments

8. Payment

• Attributes: paymentid (PK), orderid (FK), paymentmethod (e.g., Card, UPI, Wallet), paymentstatus, transactionid

Relationships:

- 1. User \leftrightarrow Restaurant
 - Relation: "Owns"
 - Cardinality: 1:N
 - Totally Participating Entity: Restaurant
 - Description: A user (RestaurantOwner) can own multiple restaurants.
- 2. Restaurant ↔ MenuItem
 - Relation: "Has"
 - Cardinality: 1:N
 - Totally Participating Entity: MenuItem
 - Description: A restaurant has multiple menu items.
- 3. User \leftrightarrow Order
 - Relation: "Places"
 - Cardinality: 1:N
 - Totally Participating Entity: Order
 - Description: A user can place multiple orders.
- 4. Order ↔ DeliveryPartner
 - Relation: "Assigned to"
 - Cardinality: 1:1
 - Totally Participating Entity: Order
 - Description: Each order is assigned to one delivery partner.
- 5. Order \leftrightarrow Discount
 - **Relation**: "Uses"
 - Cardinality: M:N
 - Totally Participating Entity: Order
 - Description: An order can use multiple discounts, and a discount can apply to multiple orders.
- 6. Order \leftrightarrow Feedback
 - Relation: "Gives"
 - Cardinality: 1:1
 - Totally Participating Entity: Feedback
 - Description: Feedback is provided for a specific order by the user who placed it.

7. Order \leftrightarrow MenuItem

• Relation: "Contains"

• Cardinality: M:N

• Totally Participating Entity: Order

• Description: An order can contain multiple menu items, and a menu item can belong to multiple orders.

8. Order \leftrightarrow Payment

• **Relation**: "Has"

• Cardinality: 1:1

• Totally Participating Entity: Order

• Description: Each order is associated with one payment.