Database Management Submission 2

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Aditya Gupta(2022031) , Chandan Sah(2022140),
Dhruv Sharma(2022170) ,Tanmay Singhal(2022535)

(Group - 5)

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1 Customer

1.1 Attributes

- CustomerID (Primary Key) - Unique identifier for each customer.

- Name of the customer - Full name of the customer.

- Contact Details of the customer - Phone number or email address of the customer.

- Delivery Address of the customer - Address where deliveries are made for this customer.

1.2 Relationships

- Customer **places** Order - A customer can place multiple orders.

- Customer **Rates** Delivery Partner - A customer can rate multiple delivery partners.

- Cusotmer **Has** a Shopping Cart .

2 Delivery Partner

2.1 Attributes

- PartnerID (Primary Key) - Unique identifier for each delivery partner.

- Name of the Partner - Full name of the delivery partner.

- Vehicle details - Information about the vehicle used by the delivery partner.

- Cumulative Rating - Overall rating based on feedback received from customers.

2.2 Relationships

- Delivery Partner **Delivers** Order - A delivery partner can deliver multiple orders.

- Delivery Partner **Rated By** Customer - A delivery partner can be rated by multiple customers.

3 Order

3.1 Attributes

- OrderID (Primary Key) - Unique identifier for each order.

- Pickup Location - Location from where the order is picked up.

- DropOff Location - Location where the order is to be delivered.

- Trip Distance - Distance of the trip from pickup to drop-off.

- Trip Duration - Duration of the trip from pickup to drop-off.

- Feedback of the order - Customer's feedback about the order, including comments and ratings.

- Mode of Payment - Method used for payment, such as credit card, cash on delivery, etc.

- Total Bill - Total amount charged for the order, including taxes and delivery charges.

- Trip Status - Current status of the trip (e.g., pending, completed, out for delivery).

- Notes - Additional notes or comments related to the order, such as special instructions for delivery.

3.2 Relationships

- Order **BelongsTo** Customer - An order belongs to a single customer.

- Order **AssignedTo** Delivery Partner - An order is assigned to a single delivery partner.

- Order **Involves** Vendor - An order involves a single vendor.

- Order **Contains** Item(s) - An order contains one or more items.

4 Vendor

4.1 Attributes

- VendorID (Primary Key) - Unique identifier for each vendor.

- Name of the Vendor - Full name of the vendor.

- Contact Details of the Vendor - Phone number or email address of the vendor.

- Shop Address - Address of the vendor's shop.

- Total Transactions - Total number of transactions conducted by the vendor, including both successful and unsuccessful ones.

- Feedback - Feedback received from customers, including comments and ratings.

- Current Rating - Current rating based on feedback, calculated as an average of all ratings received.

4.2 Relationships

- Vendor **Sells** Item - A vendor sells multiple items.

- Vendor **Part Of** Order - A vendor can be part of multiple orders.

5   Item

5.1   Attributes

- ProductID (Primary Key) - Unique identifier for each item.

- Name of the Item - Name or title of the item.

- Availability - Availability status of the item, indicating whether it is currently in stock or out of stock.

- Description - Description or details about the item, including features, specifications, etc.

- Category - Category or type of the item, such as electronics, clothing, groceries, etc.

5.2   Relationships

- Item **Belongs to** Order - An item belongs to a single order.

6   Admin

6.1   Attributes

- AdminID(Primary key) - Unique identifier for each admin.

- Admin name - Full name of the admin.

- Admin role - Role or position of the admin within the system, such as database administrator, system administrator, etc.

6.2   Relationships

- Admin **maintains** items - An admin maintains the records of items, including adding new items, updating existing ones, and removing outdated ones.

- Admin **Manages** Vendor - An admin updates vendor information, including contact details, shop address, etc.

- Admin **Manages** Customer - An admin updates customer information, including contact details, delivery address, etc.

- Admin **Manages** Delivery Partner - An admin updates delivery partner information, including contact details, vehicle details, etc.

7   Shopping Cart

7.1   Attributes

- Customer_name: The cart contains the name of the customer it belongs to . This is redundant data making it a weak entity .

- Iteam details: The cart contains the name of the items which the customer has added to be bought .

- Total Price: The cart contains the total price of the customer's items .

- Customer_Id: The cart contains the Customer id as the foriegn key to indicate the identifying relationship .

7.2   Relationships

- It only has one identifying relationship and it is a Weak entity .

8   General Things

- We have also added weak entities in our diagrams .

- We have added derived entites and multivalued attributes also wherever necessary .

9   Contributions

1. **Aditya Gupta(2022031)** - Contributed to the making of the documentation of the submission. Added the attributes for the Customer, Admin. Made the relationships in the ER diagram and contributed to the Entities in the ER diagram. Contributed in the making of relational schema .

2. **Chandan Sah(2022140)** - Contributed to the Entities in the ER diagram. Added attributes for the Delivery Partner, Order.

3. **Dhruv Sharma(2022170)** - Contributed to the Entities in the ER diagram. Added attributes for the Vendor. Made changes in the relationships. Contributed in the making of relational schema .

4. **Tanmay Singhal(2022535)** - Contributed to the Entities in the ER diagram. Added attributes for the Item.

SHOPPING CART

PK	Customer_name: varchar(50)
	Item_details: varchar(50)
	Total_price: int

Has — 1

CUSTOMER

PK	CustomerID: int
	Name of the customer: varchar(50)
	Contact Details of the customer: varchar(50)
	Delivery Address of the customer: varchar(50)
	{ Phone Number: varchar(50) }

Places/BelongsTo — N

ORDER

PK	OrderID: int
	PickupLocation: varchar(50)
	DropOffLocation: varchar(50)
	TripDistance: int
	TripDuration: int
	Feedback of the order: varchar(50)
	Mode of Payment : varchar(50)
	Total Bill: int
	TripStatus: int
	Notes: varchar(50)

Rates — N / M

Rated by — N / M

DELIVERY PARTNER

PK	PartnerID: int
	Name of the partner: varchar(50)
	Vehicle Details: varchar(50)
	Cumulative Rating: varchar(50)

Delivers/AssignedTo — N

Contain/BelongsTo — N / M

VENDOR

PK	VendorID: int
	Name of the vendor: varchar(50)
	Contact Details: varchar(50)
	Address: varchar(50)
	Total Transactions: varchar(50)
	Feedback: varchar(50)
	Current Rating: varchar(50)

Involves/PartOf — N / M

ITEM

PK	ProductID: int
	Name of the Item: varchar(50)
	Availability: int
	Description: varchar(50)
	Category: varchar(50)

Sells — N / M

Maintains — N / N

Updates — N

Admin

PK	AdminID: int
	Admin_name: varchar(50)
	Admin_role: varchar(50)

Manages — N

Manages — N

SHOPPING CART

PK	Customer_name: varchar(50)
	Item_details: varchar(50)
	Total_price: int
FK	Customer_id: int

CUSTOMER

PK	CustomerID: int
	Name of the customer: varchar(50)
	Contact Details of the customer: varchar(50)
	Delivery Address of the customer: varchar(50)
	{ Phone Number: varchar(50) }
	AdminID: int

RATES

PK,FK1	CustomerID:int
PK,FK2	PartnerID:int

ORDER

PK	OrderID: int
	PickupLocation: varchar(50)
	DropOffLocation: varchar(50)
	TripDistance: int
	TripDuration(): int
	Feedback of the order: varchar(50)
	Mode of Payment : varchar(50)
	Total Bill: int
	TripStatus: int
	Notes: varchar(50)
FK	CustomerID
FK	PartnerID

RATED BY

PK,FK1	CustomerID: int
PK,FK2	PartnerID:int

Text

DELIVERY PARTNER

PK	PartnerID: int
	Name of the partner: varchar(50)
	Vehicle Details: varchar(50)
	Cumulative Rating: varchar(50)
FK	AdminID: int

Involves/Part of

PK,FK1	VendorID: int
PK,FK2	OrderID: int

ContainsBelongsTo

PK,FK1	OrderID: int
PK,FK2	ProductID: int

VENDOR

PK	VendorID: int
	Name of the vendor: varchar(50)
	Contact Details: varchar(50)
	Address: varchar(50)
	Total Transactions: varchar(50)
	Feedback: varchar(50)
	Current Rating: varchar(50)
FK	AdminID: int

Sells

PK,FK1	VendorID
PK,FK2	ProductID

ITEM

PK	ProductID: int
	Name of the Item: varchar(50)
	Availability: int
	Description: varchar(50)
	Category: varchar(50)
FK	AdminID :int

Admin

PK	AdminID: int
	Admin_name: varchar(50)
	Admin_role: varchar(50)