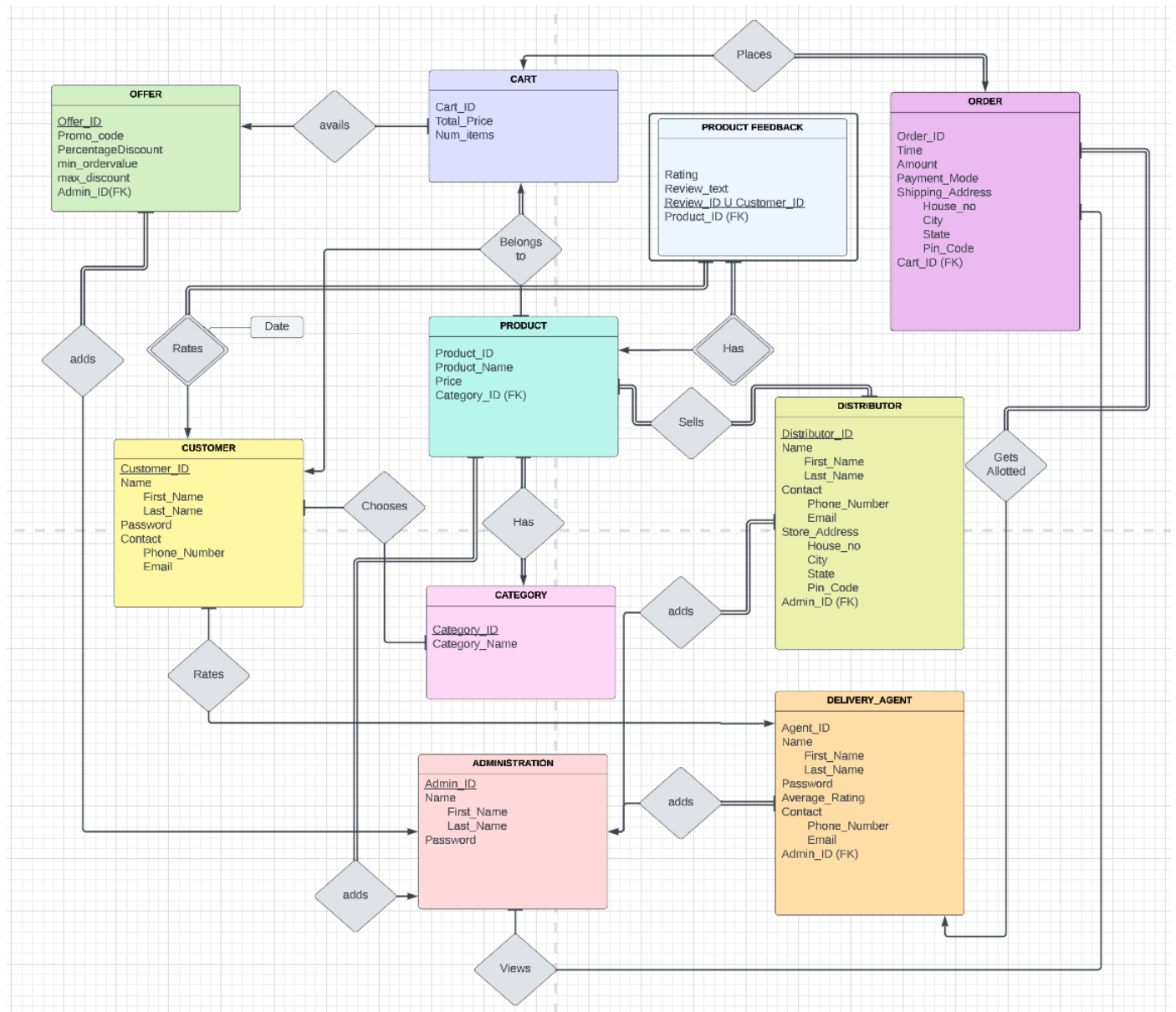# ONLINE RETAIL STORE

Group 50
Samanyu Kamra 2021487
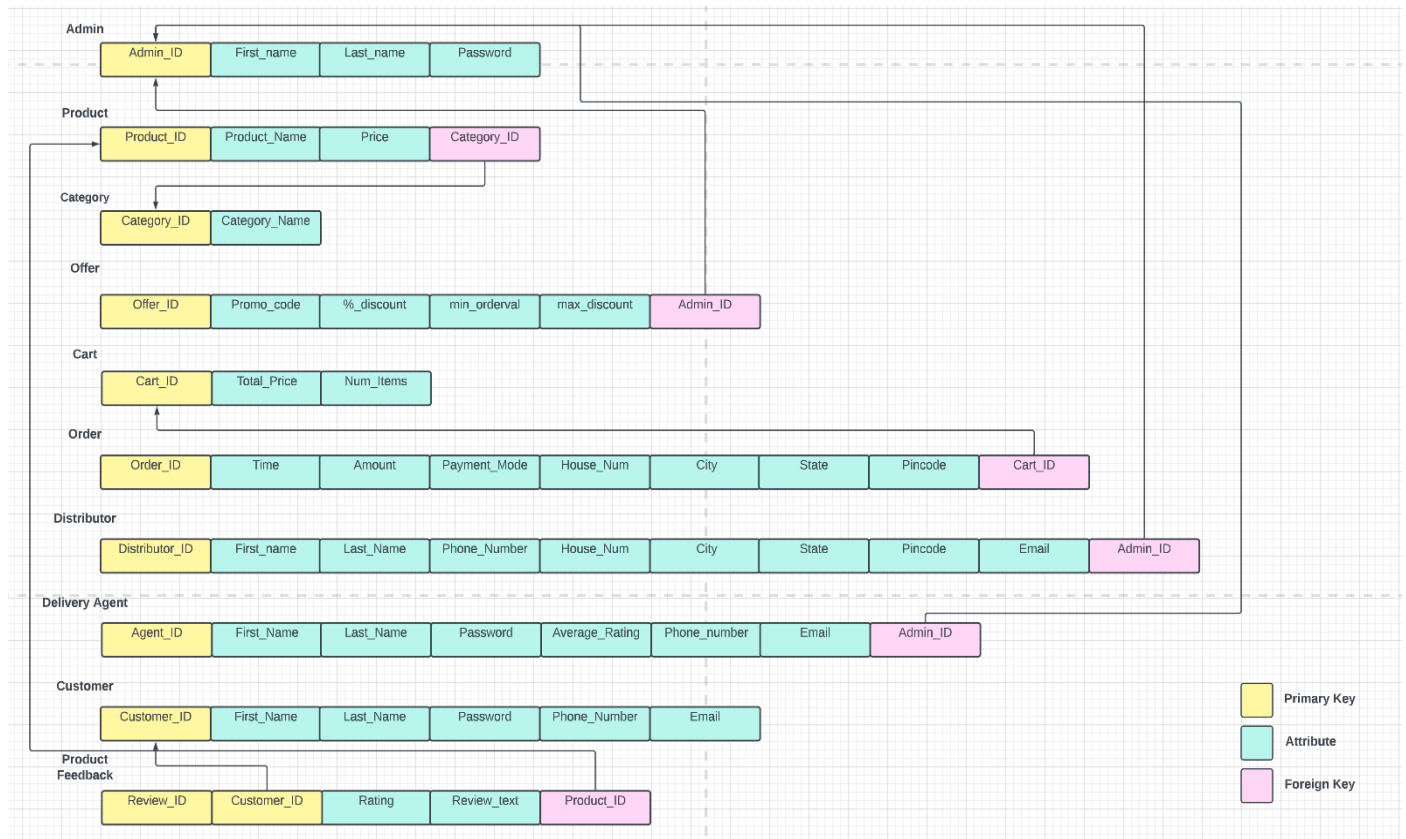**Shriya Verma 2021490**

ER Model :

Link to ER model and Relational model

Relational Model :

Admin

Admin_ID	First_name	Last_name	Password

Product

Product_ID	Product_Name	Price	Category_ID

Category

Category_ID	Category_Name

Offer

Offer_ID	Promo_code	%_discount	min_orderval	max_discount	Admin_ID

Cart

Cart_ID	Total_Price	Num_Items

Order

Order_ID	Time	Amount	Payment_Mode	House_Num	City	State	Pincode	Cart_ID

Distributor

Distributor_ID	First_name	Last_Name	Phone_Number	House_Num	City	State	Pincode	Email	Admin_ID

Delivery Agent

Agent_ID	First_Name	Last_Name	Password	Average_Rating	Phone_number	Email	Admin_ID

Customer

Customer_ID	First_Name	Last_Name	Password	Phone_Number	Email

Product Feedback

| Review_ID	Customer_ID	Rating	Review_text	Product_ID

Legend:
- Primary Key
- Attribute
- Foreign Key

Conceptual Model :

1) **Customers**(<u>customer_id: string</u> , first_name: string , last_name: string , password: string , phone_number: varchar , email: string)
2) **Admin**(<u>admin_id: string</u> , password: string , first_name: string , last_name: string)
3) **Delivery Agent**(<u>agent_id: string</u> , first_name: string , last_name: string, password: string , phone_number: varchar , email: string , average_rating: real)
4) **Distributor**(<u>distributor_id: string</u> , first_name: string , last_name: string, house_no: int , city: string , state: string , pincode: int, Phone_Number: varchar , email: string)
5) **Order**(<u>order_id: string</u> , payment_mode: string , amount: int , time: datetime , house_no: int , city: string , state: string , pincode: int)
6) **Cart**(<u>cart_id: string</u> , total_price: int , num_items: int)
7) **Category**(<u>category_id: string</u> , category_name: string)
8) **Products**(<u>product_id: string</u> , price: int ,product_name: string)

9) **Offers**(<u>offer_id: string</u> , Discount_percentage: int , promo_code: string , min_orderValue: int , max_DiscountValue: int)

Explanation of Ternary Relationship:
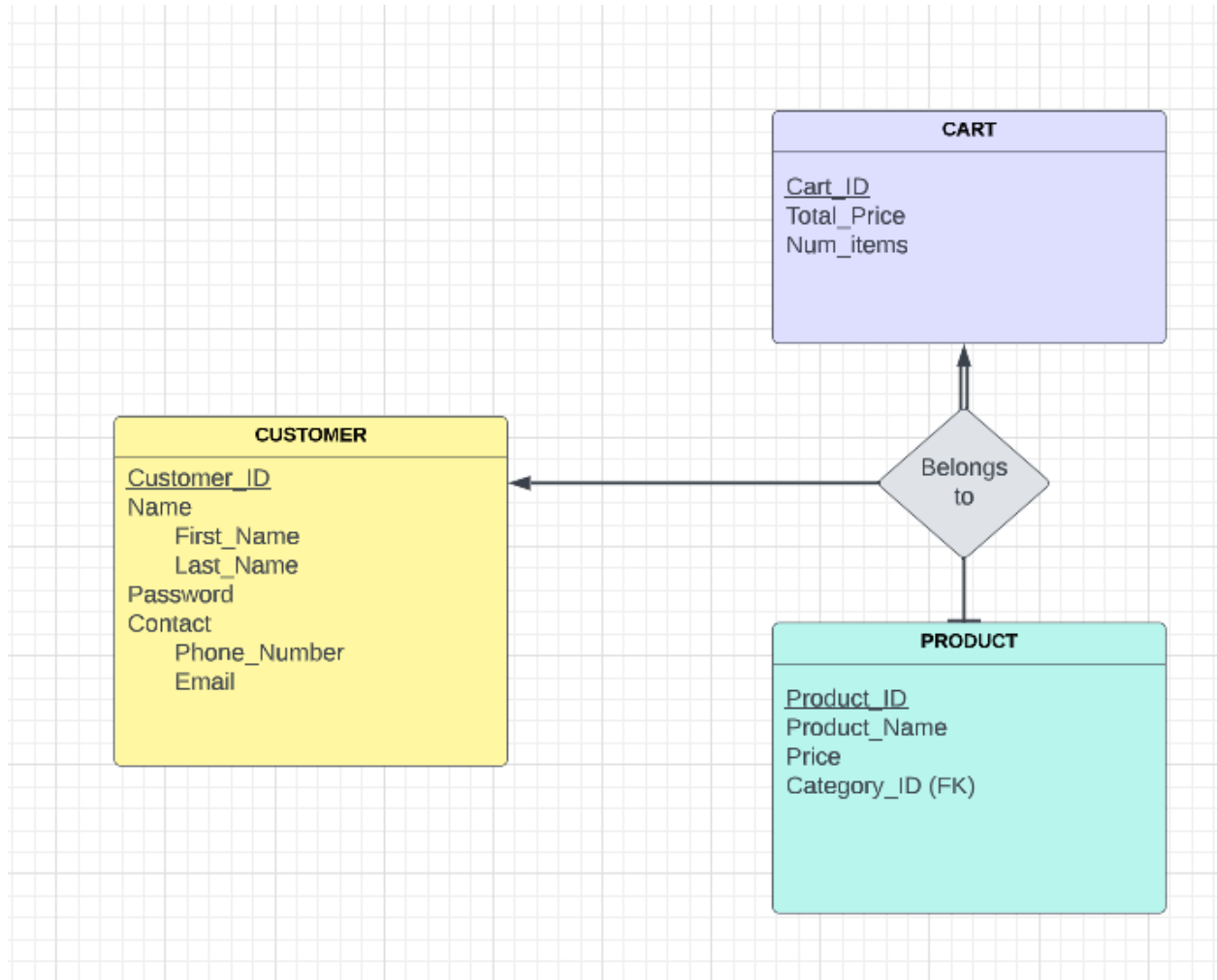
- **Cart and Product :**
  Relationship Type: 1 to N
  Participation: Partial participation for Product, total participation for Cart

- **Customer and Cart :**
  Relationship Type: 1 to 1
  Participation: Partial participation for Customer, total participation for Cart

- **Customer and Product :**
  Relationship Type: 1 to N

Participation: Partial participation for Product and Cart

Explanation for Weak Entity:
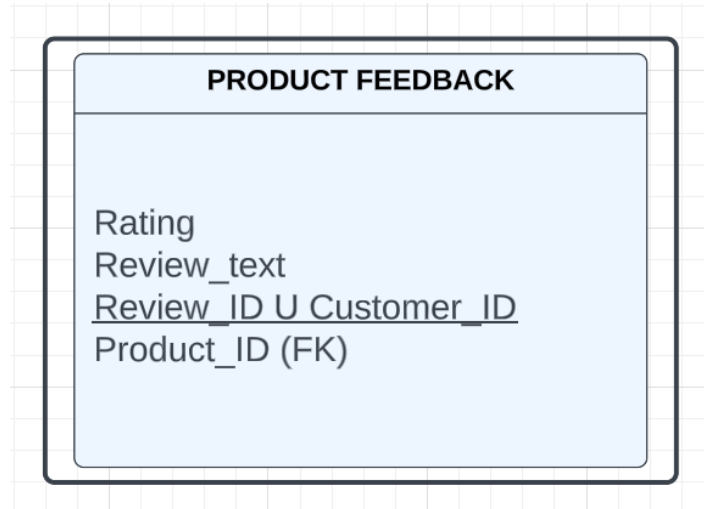
We have taken product feedback to be a weak entity as it is entirely **dependent on the product entity**. We can never have product feedback for a product that has not been added to the database.

This entity has a composite key - formed by the union of the Review ID and the Customer ID.

The product Feedback entity will have total participation with the product entity where each feedback is associated with a product.