G01413212

G. John Stephen
Lastname: Gulam
jgulam@gmu.edu

Database Systems
CS550
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Entities:
We have 3 given entities. They are as below.
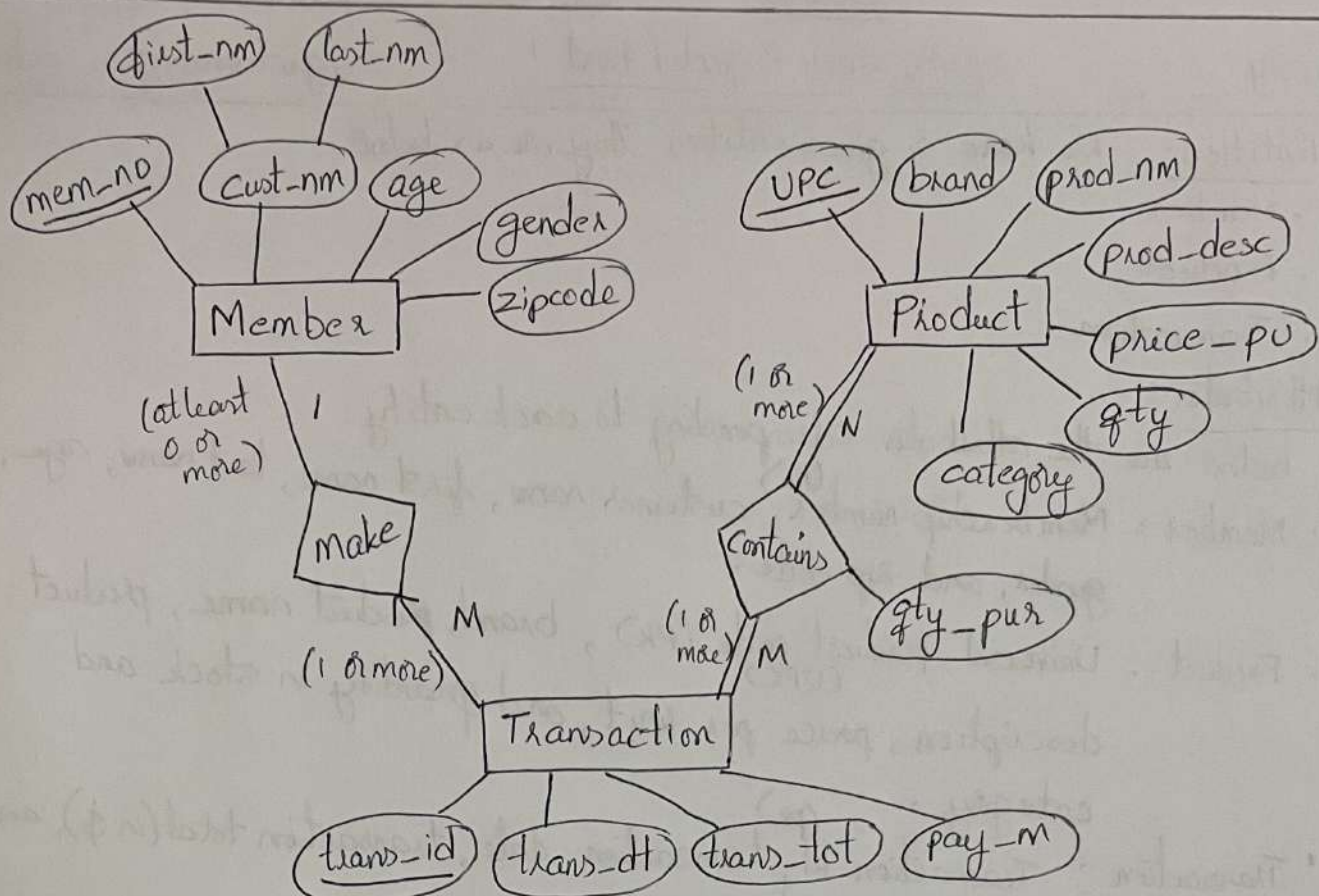- Member
- Product
- Transaction

Attributes:
Below are the attributes corresponding to each entity.
- Member : Membership number (Pk), customer name, first name, last name, age, gender, and zip code.
- Product : Universal Product code (PK) (UPC), brand, product name, product description, price per unit, and quantity in stock and category.
- Transaction : Transaction id (pk), transaction date, transaction total (in $), and payment method.

Relationships:
- Member makes Transaction (1:M)
  - Each member can make zero or more transactions.
  - Each transaction is made by exactly one Member.
- Transaction includes Product (M:N)
  - Each transaction includes one a more Products.
  - Each Product can be included in one or more Transactions.
  - The "QuantitiesPurchased" is with the relationship between Transaction and Product.

Assumptions for the Attributes:

Member
1. Membership number (mem_no)
2. Customer name (cust_nm)
3. first name (first_nm)
4. last name (last_nm)

Product
1. Universal Product code (UPC)
2. product name (prod_nm)
3. product description (prod_desc)
4. price per unit (price_pu)
5. quantity (qty)

Transaction
1. Transaction ID (trans_id)
2. Transaction date (trans_dt)
3. Transaction total (trans_tot)
4. payment method (pay_m)

1. Quantities purchased (qty_pur)