RAMAIAH
Institute of Technology

Department of
Information Science and Engneering

NAME OF THE PROJECT:-

E-COMMERCE MANAGEMENT

TEAM MEMBERS ALONG WITH USN:-

SANJANA SR – 1MS19IS408

SHAM H– 1MS19IS409

SHOBHA D – 1MS19IS410

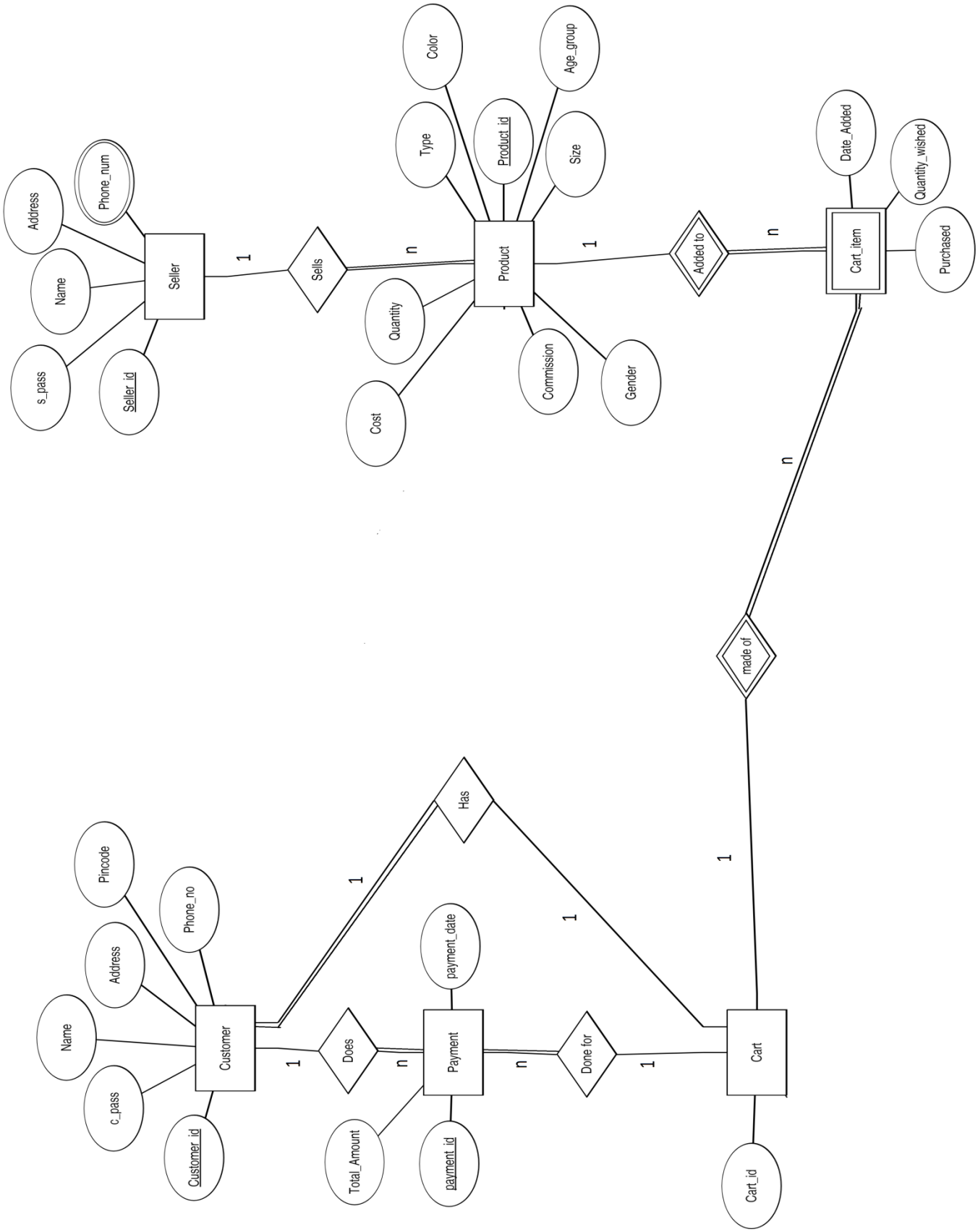
SUBECT NAME WITH CODE:-

DATABASE MANAGEMENT SYSTEM [IS52]

ACADEMIC TERM:-

AUGUST-2020 TO DECEMBER-2020

Entity Relation Diagram:-



Relational Database Schema:-

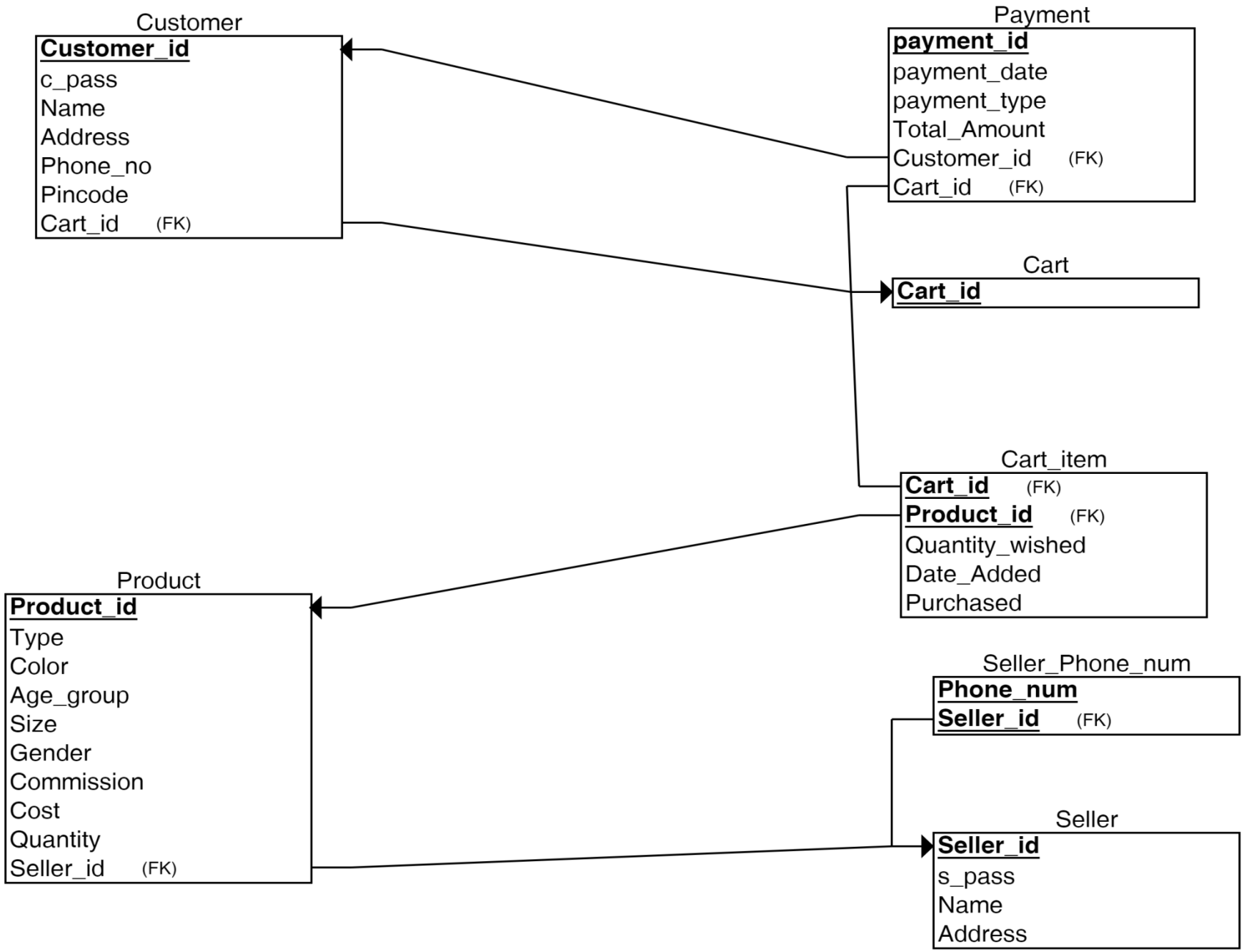


TABLE CREATION:

```
CREATE TABLE Cart (
    Cart_id VARCHAR(7) NOT NULL,
    PRIMARY KEY(Cart_id)
  );

CREATE TABLE Customer   (
    Customer_id VARCHAR(6) NOT NULL,
    Name VARCHAR(20) NOT NULL,
    Address VARCHAR(20) NOT NULL,
    Pincode DECIMAL(6) NOT NULL,
    Phone_number DECIMAL(10) NOT NULL,
    PRIMARY KEY (Customer_id),
    Cart_id VARCHAR(7) NOT NULL,
    FOREIGN KEY(Cart_id) REFERENCES cart(Cart_id)
  );

CREATE TABLE Seller (
    Seller_id VARCHAR(6) NOT NULL,
    Name VARCHAR(20) NOT NULL,
    Address VARCHAR(10) NOT NULL,
    PRIMARY KEY (Seller_id)
  );
```

```
CREATE TABLE Payment    (
   payment_id VARCHAR(7) NOT NULL,
   payment_date DATE NOT NULL,
   Payment_type VARCHAR(10) NOT NULL,
   Customer_id VARCHAR(6) NOT NULL,
   Cart_id VARCHAR(7) NOT NULL,
   PRIMARY KEY (payment_id),
   FOREIGN KEY (Customer_id) REFERENCES Customer(Customer_id),
   FOREIGN KEY (Cart_id) REFERENCES Cart(Cart_id),
   total_amount DECIMAL(6)
);

CREATE TABLE Product    (
   Product_id VARCHAR(7) NOT NULL,
   Type VARCHAR(7) NOT NULL,
   Color VARCHAR(15) NOT NULL,
   P_Size VARCHAR(2) NOT NULL,
   Gender CHAR(1) NOT NULL,
   Commission DECIMAL(2) NOT NULL,
   Cost DECIMAL(5) NOT NULL,
   Quantity DECIMAL(2) NOT NULL,
   Seller_id VARCHAR(6),
   PRIMARY KEY (Product_id),
   FOREIGN KEY (Seller_id) REFERENCES Seller(Seller_id)
   ON DELETE SET NULL
```

```
);
CREATE TABLE Cart_item (
    Quantity_wished DECIMAL(1) NOT NULL,
    Date_Added DATE NOT NULL,
    Cart_id VARCHAR(7) NOT NULL,
    Product_id VARCHAR(7) NOT NULL,
    FOREIGN KEY (Cart_id) REFERENCES Cart(Cart_id),
    FOREIGN KEY (Product_id) REFERENCES Product(Product_id),
    Primary key(Cart_id,Product_id)
);
```

INSERTION TO TABLE:

Cart Table:

```
>insert into Cart values('CART100');
>insert into Cart values('CART200');
>insert into Cart values('CART300');
```

Customer Table:

```
>insert into Customer values('CID100','ABC','BANGLORE','560010',7411183868,
'CART100');
>insert into Customer values('CID200','DEF','MANGLORE','560058',6362470725,
'CART200');
>insert into Customer values('CID300','PQR','UDUPI','560043',8152921198,
'CART300');
```

Seller Table:

>insert into Seller values('SID100','XYZ','BENGALURU');

Product Table:

>insert into Product values('PID100','SHIRT','RED','30','M',10,1000,20,'SID100');

>insert into Product values('PID200','JEANS','BLACK','30','M',10,2000,20,'SID100');

Cart_item Table:

>insert into Cart_item values(3,'2015-12-05','CART100','PID100','YES');

>insert into Cart_item values(3,'2015-11-05','CART200','PID200','YES');

>insert into Cart_item values(5,'2015-10-05','CART300','PID100','NO');

Payment Table:

>insert into Payment values('PAY100','2015-12-05','CASH','CID100','CART100',3000);

>insert into Payment values('PAY200','2015-11-05','CHEQUE','CID200','CART200',6000);

>insert into Payment values('PAY300','2015-01-24','ONLINE','CID300','CART300',5000);

>insert into Payment values('PAY400','2015-01-24','ONLINE','CID300','CART300',10000);

Customer:

```
MariaDB [user]> select * from customer;
+-------------+------+----------+---------+--------------+---------+
| Customer_id | Name | Address  | Pincode | Phone_number | Cart_id |
+-------------+------+----------+---------+--------------+---------+
| CID100      | ABC  | BANGLORE |  560010 |   7411183868 | CART100 |
| CID200      | DEF  | MANGLORE |  560058 |   6362470725 | CART200 |
| CID300      | PQR  | UDUPI    |  560043 |   8152921198 | CART300 |
+-------------+------+----------+---------+--------------+---------+
```

Cart

```
MariaDB [user]> select * from Cart;
+---------+
| Cart_id |
+---------+
| CART100 |
| CART200 |
| CART300 |
| crt1011 |
+---------+
```

Product

```
MariaDB [user]> select * from product;
+------------+-------+-------+--------+--------+------------+------+----------+-----------+
| Product_id | Type  | Color | P_Size | Gender | Commission | Cost | Quantity | Seller_id |
+------------+-------+-------+--------+--------+------------+------+----------+-----------+
| PID100     | SHIRT | RED   | 30     | M      |         10 | 1000 |       20 | NULL      |
| PID200     | JEANS | BLACK | 30     | M      |         10 | 2000 |       20 | NULL      |
+------------+-------+-------+--------+--------+------------+------+----------+-----------+
```

Payment

```
MariaDB [user]> select * from payment;
+------------+--------------+--------------+-------------+---------+--------------+
| payment_id | payment_date | Payment_type | Customer_id | Cart_id | total_amount |
+------------+--------------+--------------+-------------+---------+--------------+
| PAY100     | 2015-12-05   | CASH         | CID100      | CART100 |         3000 |
| PAY200     | 2015-11-05   | CHEQUE       | CID200      | CART200 |         6000 |
| PAY300     | 2015-01-24   | ONLINE       | CID300      | CART300 |         5000 |
| PAY400     | 2015-01-24   | ONLINE       | CID300      | CART300 |        10000 |
+------------+--------------+--------------+-------------+---------+--------------+
```

Cart_item:

```
MariaDB [user]> select * from cart_item;
+-----------------+------------+---------+------------+-----------+
| Quantity_wished | Date_Added | Cart_id | Product_id | purchased |
+-----------------+------------+---------+------------+-----------+
|               3 | 2015-12-05 | CART100 | PID100     | YES       |
|               3 | 2015-11-05 | CART200 | PID200     | YES       |
|               5 | 2015-10-05 | CART300 | PID100     | NO        |
+-----------------+------------+---------+------------+-----------+
```

Seller :

```
MariaDB [user]> select * from seller;
+-----------+------+-----------+
| Seller_id | Name | Address   |
+-----------+------+-----------+
| SID100    | XYZ  | BENGALURU |
+-----------+------+-----------+
```

QUERIES:

SQL & RELATIONAL ALGEBRA:

→ Ret the details of seller and product who sold the product;

>select * from product,seller

where product.seller_id=seller.seller_id;

> ρ (product × seller)

product.seller_id = sellerseller_id

➔ *Ret the details of payment details who payed amount through 'online';*

```
>select payment_id,payment_type from payment
  where payment_type='Online';
```

> π (σ product_type=Online (product))
>
> payment_id

➔ *Ret min payment details for cart_id=CID100.*

```
>select min() from payment
    Where cart_id='CID100';
```

➔ *Ret details of employee whose product_id is PID100.*

```
>select product_id,type,cost from product
  -> where product_id='PID100';
```

>π (σ product_id=PID100 (product))
>
> product_id,type,cost

➔ *Display the maximum cost in the give product.*

```
>select max(cost)
   from product;
```

>τ (product)

max cost

➔ *Display the name of customer who doesnot belong to cart id=101*

```
>select name,customer_id from customer
  Minus
  Select name,customer_id from customer
     Where cart_id='CID100';
```

> R1 ← π name,customer_id(customer)

R2 ← π name,customer_id(σ customer_id='CID100' (customer)

Result ← R1 - R2

➔ *How much product sold on the particular date*

```
>select count(product_id) count_pid,date_added
        from Cart_item
        where purchased='Yes'  group by(date_added);
```

➔ *Retrive the product details with repective seller details*

```
>select * from
    Product NATURAL JOIN seller;
```

*> R1 ← product * seller*

MONGO DB:

Retrieve all customer details

->db.customer.find().pretty()

List the product details belongs to cart number 100

-->db.cart_item.find({"cart_id":'cid100'}).pretty()

Update the customer phone no where customer id=200

->db.customer.update({"customer_id":200},{$ Set:{"Phone_Number":7760798437}},multi:true})

-->->db.customer.find().pretty()

List the Products in each cart

-->db.cart.aggregate([{$group:{id:"$cart_id",total:{$sum:"Product_id"}}}])

Find Customer Id who made payment on 05/11/2015 and payment type is cheque

-->d.payment.find({"payment_date":'05/11/2015',"Payment_type":'Online'})