

# **E\_COMMERCE PLATFORM**

## **Problem statement**

Its a platform where customers can browse products, place orders, provide delivery addresses, and make secure payments.

The database should store customer details such as their ID and name, product information including product ID and name, and track orders placed by customers for specific products. Each order should be associated with a customer and a product, and the system should store the delivery details linking each order to a delivery record. Additionally, a view must be created to display comprehensive order details, including customer information, product names, and order IDs.

## **DESCRIPTION OF SQL COMMANDS**

### **1, DATABASE SELECTION**

- Use pl\_assignment;

### **2, TABLES CREATION**

- Create table customer (customer\_id int primary key, customer\_name varchar(20)) ;
- create table product (product\_id int primary key, product\_name varchar(20)) ;
- create table orders (orders\_id int primary key, customer\_id int, product\_id int, foreign key(customer\_id) references customer (customer\_id), foreign key(product\_id) references product (product\_id) ) ;
- create table delivery (delivery\_id int primary key, customer\_id int, orders\_id int, foreign key(customer\_id) references customer(customer\_id), foreign key(orders\_id) references orders(orders\_id) ) ;

### **3, INSERTING DATA INTO TABLES**

- insert into customer values (1,'mugisha julien'), (2,'kwizera sam'), (3,'hapa pacific') ;

- insert into product values (001,'mac'), (002,'hp'), (003,'dell') ;
- insert into orders values (10,1,001), (20,2,002), (30,3,003) ;
- insert into delivery values (100,1,10), (200,2,20), (300,3,30) ;

#### **4, SELECTION OF TABLES - SCREENSHOT**

```
mysql> select * from customer ;
+-----+-----+
| customer_id | customer_name |
+-----+-----+
| 1 | mugisha julien |
| 2 | kwizera sam |
| 3 | hapa pacific |
+-----+-----+
3 rows in set (0.01 sec)

mysql> select * from product ;
+-----+-----+
| product_id | product_name |
+-----+-----+
| 1 | mac |
| 2 | hp |
| 3 | dell |
+-----+-----+
3 rows in set (0.00 sec)

mysql> select * from orders ;
+-----+-----+-----+
| orders_id | customer_id | product_id |
+-----+-----+-----+
| 10 | 1 | 1 |
| 20 | 2 | 2 |
| 30 | 3 | 3 |
+-----+-----+-----+
3 rows in set (0.02 sec)

mysql> select * from delivery ;
+-----+-----+-----+
| delivery_id | customer_id | orders_id |
+-----+-----+-----+
| 100 | 1 | 10 |
| 200 | 2 | 20 |
| 300 | 3 | 30 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

#### **5, UPDATING AND DELETING A NEW CUSTOMER & SCREENSHOT**

- insert into customer values (4,'sam smith') ;
- update customer set customer\_id = 5 where customer\_id = 4 ;
- delete from customer where customer\_id = 5 ;

```
MySQL 8.0 Command Line Cli  X  +  -
mysql> insert into customer values (4,'sam smith');
Query OK, 1 row affected (0.07 sec)

mysql> select * from customer ;
+-----+-----+
| customer_id | customer_name |
+-----+-----+
|          1 | mugisha julien |
|          2 | kwizera sam   |
|          3 | hapa pacific  |
|          4 | sam smith     |
+-----+-----+
4 rows in set (0.00 sec)

mysql> update customer set customer_id = 5 where customer_id = 4 ;
Query OK, 1 row affected (0.06 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from customer ;
+-----+-----+
| customer_id | customer_name |
+-----+-----+
|          1 | mugisha julien |
|          2 | kwizera sam   |
|          3 | hapa pacific  |
|          5 | sam smith     |
+-----+-----+
4 rows in set (0.00 sec)

mysql> delete from customer where customer_id = 5 ;
Query OK, 1 row affected (0.04 sec)

mysql> select * from customer ;
+-----+-----+
| customer_id | customer_name |
+-----+-----+
|          1 | mugisha julien |
|          2 | kwizera sam   |
|          3 | hapa pacific  |
+-----+-----+
3 rows in set (0.00 sec)

mysql> |
```

## 6, VIEWS AND JOINS

- Create view orders\_details as select c.customer\_id, c.customer\_name, o.orders\_id, p.product\_id, p.product\_name from customer c join orders o on c.customer\_id = o.customer\_id join product p on o.product\_id = p.product\_id;

## 7, TABLE VIEWS AND JOINS - SCREENSHOT

```
mysql> Create view orders_details as select c.customer_id, c.customer_name, o.orders_id, p.product_id, p.product_name from customer c join orders o on c.customer_id = o.customer_id join product p on o.product_id = p.product_id;
Query OK, 0 rows affected (0.13 sec)

mysql> select * from orders_details ;
+-----+-----+-----+-----+-----+
| customer_id | customer_name | orders_id | product_id | product_name |
+-----+-----+-----+-----+-----+
|          1 | mugisha julien |         10 |          1 | mac          |
|          2 | kwizera sam   |         20 |          2 | hp           |
|          3 | hapa pacific  |         30 |          3 | dell         |
+-----+-----+-----+-----+-----+
3 rows in set (0.04 sec)

mysql> |
```

