ONLINE SHOPPING SYSTEM DATABASE

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1.Description

Following database schema is designed to function as backend Storage database for a web Application built to manage a online shopping.

This database contains 5 tables :

Tables :

1. Users : this table facilitates user registration,authentication and Account management.
2. Categories : organizes product into distinct categories .
3. Product : contain details about products such as name , price and associations with specific categories.
4. Order : manages information related to user transaction.
5. Orderdetails : associates product with specific orders and capture details like quantities.
6. Feedback : collects and store user feedback on order and product.

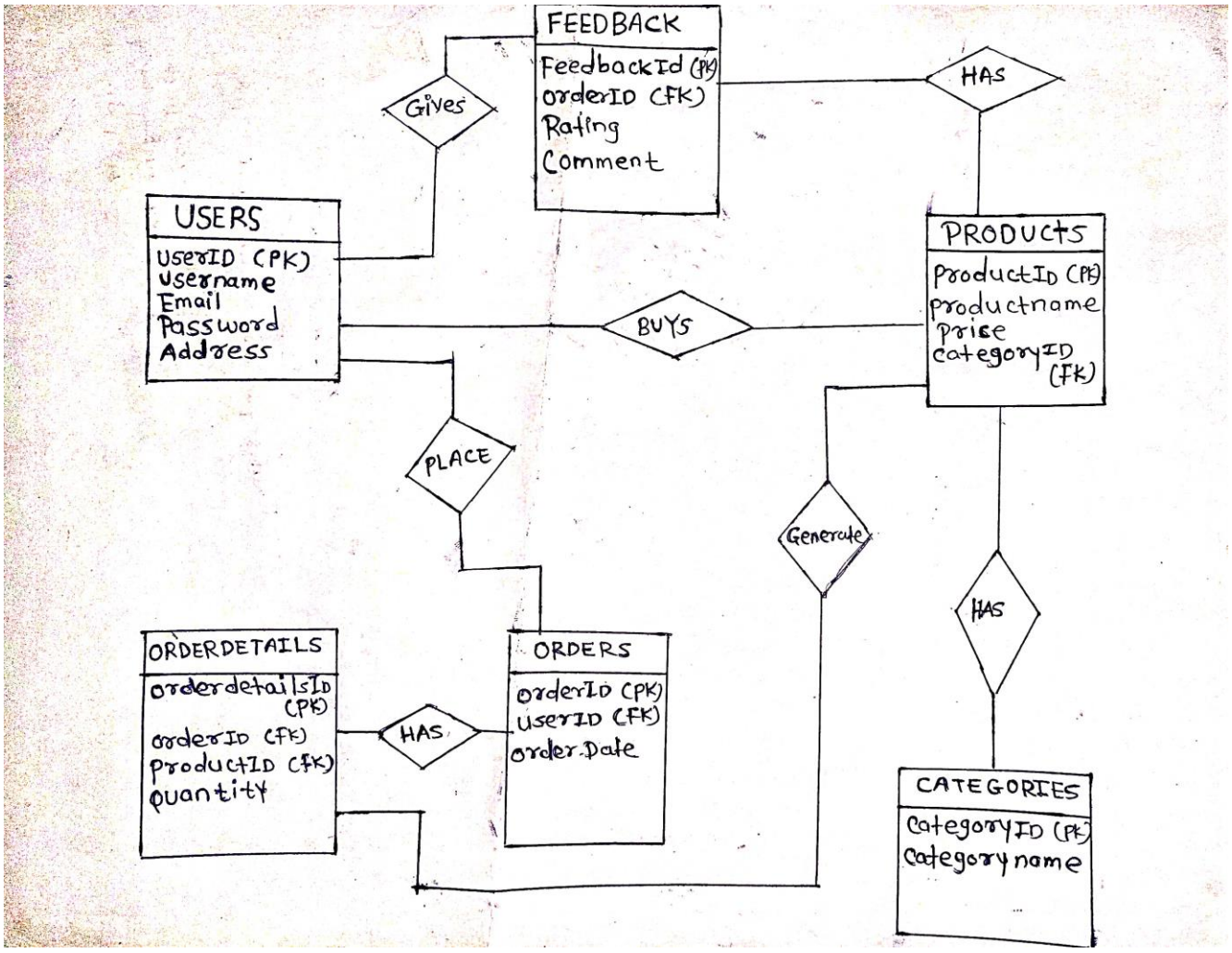
Entities :

1. Users : attributes include userid(pk),username,email,password, Address,
2. Categories : attribute include categoryid(pk),categoryname
3. Products : attributes include productid(pk),productname,price, categoryid(fk)
4. Orders : attributes include ordered(pk),userid(fk),orderdate
5. Orderdetails: attributes include orderdetail_id(pk),ordered(fk),

productid(fk),quantity

6. feedback : feed_id, ordered(fk),rating ,comment

2. ER DIAGRAM FOR ONLINE SHOPPING SYSTEM DATABASE



3.TABLE DESCRIPTION

1. User

```
MariaDB [project]> desc user;
+----------+--------------+------+-----+---------+-------+
| Field    | Type         | Null | Key | Default | Extra |
+----------+--------------+------+-----+---------+-------+
| userid   | int(11)      | NO   | PRI | NULL    |       |
| username | varchar(255) | YES  |     | NULL    |       |
| email    | varchar(255) | YES  |     | NULL    |       |
| password | varchar(255) | YES  |     | NULL    |       |
+----------+--------------+------+-----+---------+-------+
```

2. Category

```
MariaDB [project]> desc category;
+--------+--------------+------+-----+---------+-------+
| Field  | Type         | Null | Key | Default | Extra |
+--------+--------------+------+-----+---------+-------+
| cat_id | int(11)      | NO   | PRI | NULL    |       |
| name   | varchar(255) | YES  |     | NULL    |       |
+--------+--------------+------+-----+---------+-------+
```

3. Product

```
MariaDB [project]> desc product;
+-----------+--------------+------+-----+---------+-------+
| Field     | Type         | Null | Key | Default | Extra |
+-----------+--------------+------+-----+---------+-------+
| productid | int(11)      | NO   | PRI | NULL    |       |
| name      | varchar(255) | YES  |     | NULL    |       |
| price     | float        | YES  |     | NULL    |       |
| cat_id    | int(11)      | YES  | MUL | NULL    |       |
+-----------+--------------+------+-----+---------+-------+
```

4. Order1

```
MariaDB [casestudy]> desc orders;
+-----------+---------+------+-----+---------+-------+
| Field     | Type    | Null | Key | Default | Extra |
+-----------+---------+------+-----+---------+-------+
| orderid   | int(11) | NO   | PRI | NULL    |       |
| userid    | int(11) | YES  | MUL | NULL    |       |
| orderdate | date    | YES  |     | NULL    |       |
+-----------+---------+------+-----+---------+-------+
3 rows in set (0.051 sec)
```

5. Order_Details

```
MariaDB [casestudy]> desc orderdetails;
+---------------+---------+------+-----+---------+-------+
| Field         | Type    | Null | Key | Default | Extra |
+---------------+---------+------+-----+---------+-------+
| orderdetailid | int(11) | NO   | PRI | NULL    |       |
| orderid       | int(11) | YES  | MUL | NULL    |       |
| productid     | int(11) | YES  | MUL | NULL    |       |
| quantity      | int(11) | YES  |     | NULL    |       |
+---------------+---------+------+-----+---------+-------+
```

6. Feedback

```
MariaDB [casestudy]> desc feedback;
+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| feedbackid | int(11)      | NO   | PRI | NULL    |       |
| orderid    | int(11)      | YES  | MUL | NULL    |       |
| rating     | int(11)      | YES  |     | NULL    |       |
| comment    | varchar(255) | YES  |     | NULL    |       |
+------------+--------------+------+-----+---------+-------+
```

4.COMMANDS

- **Create database**
  Create database casestudy;
- **Select database**
  Use casestudy ;
- Create table named users:
  create table users(userid int primary key,username varchar(255), email varchar(255),password varchar(255), address varchar(255));

- Create table named categories:
  create table categories(categoryid int primary key, categoryname varchar(244));

- Create table named products:

  create table products(productid int primary key,productname varchar(255), price decimal(10, 2),categoryid int, foreign key(categoryid) references categories(categoryid));

- Create table named orders:

  create table orders(orderid int primary key,userid int,orderdate date,foreign key(userid) references users(userid));

- Create table named orderdetails :

  create table orderdetails(orderdetailid int primary key,orderid int, productid int, quantity int,foreign key(orderid) references orders(orderid),foreign key(productid) references products(productid));

- Create table Feedback
  create table feedback (feedbackid int primary key,orderid int,rating int,comment varchar(255), foreign key(orderid) references orders(orderid));

1) Insert values to users:

insert into users values (1,'rohit','rohit@email.com','pass123','near satara bus stop'),

(2,'omkar','om12@email.com','pass1223','nerul sector 10'),
(3,'pratham','pratham2@email.com','passs223','nerul sector 1'),

(4,'shubham','shubh12@email.com','shubh223','kurla mumbai'),

(5,'rohit','rohit12@email.com','rohit223',' jaipur rajastan'),

(6,'kiran','kiran112@email.com','password223',' koynanager patan'),

(8,'kiran','kl112@email.com','password3',' patan satara'),

(7,'chetan','chetanmore112@email.com','password433',' turbhe west'),

(9,'manoj','manojmore12@email.com','password',' kolkata'),

(10,'vedant','vedant2@email.com','pass321',' nagpur city'),

(11,'shwetali','shwetali22@email.com','shwetali5321',' chennai east'),

(12,'shwetali','shweta32@email.com','shwetali',' 123main station kurla east'),

(13,'minal','minal332@email.com','pass435',' dahanu near bus stop'),

(14,'ashutosh','ashu932@email.com','pass0987',' kalwa bus stop'),

(15,'vaishanavi','vaish932@email.com','vaish0987',' ratnagiri near railway st');

2) Insert values into categories:

insert into categories values (1,'electronics'),(2,'clothing'),(3,'home and kitchen'),(4,'books'),(5,'toys'),(6,'beauty'), (7,'sports and oudoors'),(8,'automotive'),(9,'health and wellness'),(10,'jewelary'),

(11,'furniture'),(12,'office supplies'),(13,'pet supplies'),(14,'food'),(15,'music');

3) Insert values into products :

```
insert into products values (1,'smartphone',15666.99,1);
insert into products values (2,'laptop',5666.99,1);
insert into products values (3,'headphones',666.99,1);
insert into products values (4,'Tshirts',199.99,2);
insert into products values (5,'jeanse',299.99,2);
insert into products values (6,'dress shirt',599.99,2);
insert into products values (7,'coffee maker',999.99,3);
insert into products values (8,'blender',799.99,3);
insert into products values (9,'toaster',499.99,3);
insert into products values (10,'novel',99.99,4);
insert into products values (11,'cook book',929.99,4);
insert into products values (12,'childrens book',129.99,4);
insert into products values (13,'action figure',99.99,5);
insert into products values (14,'board game',997.99,5);
insert into products values (15,'lipstick',997.99,6);
insert into products values (16,'shampoo',97.99,6);
```

4) Insert values into orders :

```
insert into orders values (1,1,’2024-03-08’),(2,2,’2024-03-09’) ,(3,3,'2024-03-
10'),(4,4,'2024-03-11'),(5,5,'2024-03-11'),(6,6,'2024-03-12'),(7,7,'2024-03-13'),
(8,8,'2024-03-14'),(9,9,'2024-03-15'),
(10,10,'2024-03-16'),(11,11,'2024-03-17'),(12,12,'2024-03-18'),
(13,13,'2024-03-19'),(14,14,'2024-03-20'),(15,15,'2024-03-21');
```

5) Insert values into orderdetails :

```
insert into orderdetails values(1,1,1,2),

insert into orderdetails values (2,1,3,1);

insert into orderdetails values (3,3,2,1);

insert into orderdetails values (4,2,5,3);

insert into orderdetails values (5,3,10,2);

insert into orderdetails values (6,3,12,1);

insert into orderdetails values (7,4,15,2);

insert into orderdetails values (8,4,13,1);

insert into orderdetails values (9,5,6,3);
```

```
insert into orderdetails values (10,5,8,2);
insert into orderdetails values (11,6,9,1);
insert into orderdetails values (12,6,11,2);
Insert into orderdetails values (13,7,14,1);
insert into orderdetails values (14,7,1,2);
insert into orderdetails values (15,8,7,1);
```

6) Insert values into feedback:

```
insert into feedback values (1,1,5,'Great service');
insert into feedback values (2,2,4,'product quality is good');
insert into feedback values  (3,3,3,'delivery on time');
insert into feedback values (4,4,5,'excellent experience');
insert into feedback values (5,5,2,'item was damage upon arrival');
insert into feedback values (6,6,4,'fast shipping');
insert into feedback values (7,7,5,'vary satisfied with the purchase');
insert into feedback values (8,8,3,'average product quality');
insert into feedback values  (9,9,5,'null');
insert into feedback values  (10,10,1,'terrible customer service');
insert into feedback values  (11,11,4,'packaging could be better');
insert into feedback values  (12,12,5,'null');
insert into feedback values (13,13,2,'highly recommended');
insert into feedback values  (14,14,4,'null');
insert into feedback values  (15,15,3,'difficult return process');
```

5) SUB-QUERIES:

1) To get all products in specific category :
    - Select productname ,price from products where categoryid =(categoryid);

```
MariaDB [casestudy]> Select productname ,price from products where categoryid =(categoryid);
+-----------------+----------+
| productname     | price    |
+-----------------+----------+
| smartphone      | 15666.99 |
| laptop          |  5666.99 |
| headphones      |   666.99 |
| Tshirts         |   199.99 |
| jeanse          |   299.99 |
| dress shirt     |   599.99 |
| coffee maker    |   999.99 |
| blender         |   799.99 |
| toaster         |   499.99 |
| novel           |    99.99 |
| cook book       |   929.99 |
| childrens book  |   129.99 |
| action figure   |    99.99 |
| board game      |   997.99 |
| lipstick        |   997.99 |
| shampoo         |    97.99 |
| yogamat         |   250.99 |
+-----------------+----------+
```

2) List all order with user details :
    - Select orders.orderid , orderdate ,username,email from orders join user on orders.userid = users.userid;

```
MariaDB [casestudy]> select orders.orderid,orderdate,username,email from orders join users on orders.userid = users.userid;
+---------+-----------+-----------+------------------------+
| orderid | orderdate | username  | email                  |
+---------+-----------+-----------+------------------------+
|       1 | 2024-03-08 | rohit     | rohit@email.com        |
|       2 | 2024-03-09 | omkar     | om12@email.com         |
|       3 | 2024-03-10 | pratham   | pratham2@email.com     |
|       4 | 2024-03-11 | shubham   | shubh12@email.com      |
|       5 | 2024-03-11 | rohit     | rohit12@email.com      |
|       6 | 2024-03-12 | kiran     | kiran112@email.com     |
|       7 | 2024-03-13 | chetan    | chetanmore112@email.com |
|       8 | 2024-03-14 | kiran     | kl112@email.com        |
|       9 | 2024-03-15 | manoj     | manojmore12@email.com  |
|      10 | 2024-03-16 | vedant    | vedant2@email.com      |
|      11 | 2024-03-17 | shwetali  | shwetali22@email.com   |
|      12 | 2024-03-18 | shwetali  | shweta32@email.com     |
|      13 | 2024-03-19 | minal     | minal332@email.com     |
|      14 | 2024-03-20 | ashutosh  | ashu932@email.com      |
|      15 | 2024-03-21 | vaishanavi | vaish932@email.com     |
+---------+-----------+-----------+------------------------+
```

3) To get feedback for orders
    - Select rating,comment from feedback where ordered = (orderid) ;

```
MariaDB [casestudy]> select rating , comment  from feedback where orderid = (orderid);
+--------+---------------------------------+
| rating | comment                         |
+--------+---------------------------------+
|      5 | Great service                   |
|      4 | product quality is good         |
|      3 | delivery on time                |
|      5 | excellent experience            |
|      2 | item was damage upon arrival    |
|      4 | fast shipping                   |
|      5 | vary satisfied with the purchase |
|      3 | average product quality         |
|      5 | null                            |
|      1 | terrible customer service       |
|      4 | packaging could be better       |
|      5 | null                            |
|      2 | highly recommended              |
|      4 | null                            |
|      3 | difficult return process        |
+--------+---------------------------------+
```

4) List order with feedback comment :
    - Select orders.orderid , rating,comment from feedback join orders on feedback.orderid = orders.orderid;

```
MariaDB [casestudy]> Select orders.orderid , rating,comment from feedback join orders on feedback.orderid = orders.orderid;
+---------+--------+---------------------------------+
| orderid | rating | comment                         |
+---------+--------+---------------------------------+
|       1 |      5 | Great service                   |
|       2 |      4 | product quality is good         |
|       3 |      3 | delivery on time                |
|       4 |      5 | excellent experience            |
|       5 |      2 | item was damage upon arrival    |
|       6 |      4 | fast shipping                   |
|       7 |      5 | vary satisfied with the purchase |
|       8 |      3 | average product quality         |
|       9 |      5 | null                            |
|      10 |      1 | terrible customer service       |
|      11 |      4 | packaging could be better       |
|      12 |      5 | null                            |
|      13 |      2 | highly recommended              |
|      14 |      4 | null                            |
|      15 |      3 | difficult return process        |
+---------+--------+---------------------------------+
```

5) Identity products with no feedback :

Select productname from products left join orderdetails on products.productid = orderdetails.productid left join feedback on orderdetails.orderid = feedback.orderid

Where feedback.feedbackid is NULL;