Beetle Prime Database Design

Group Members:

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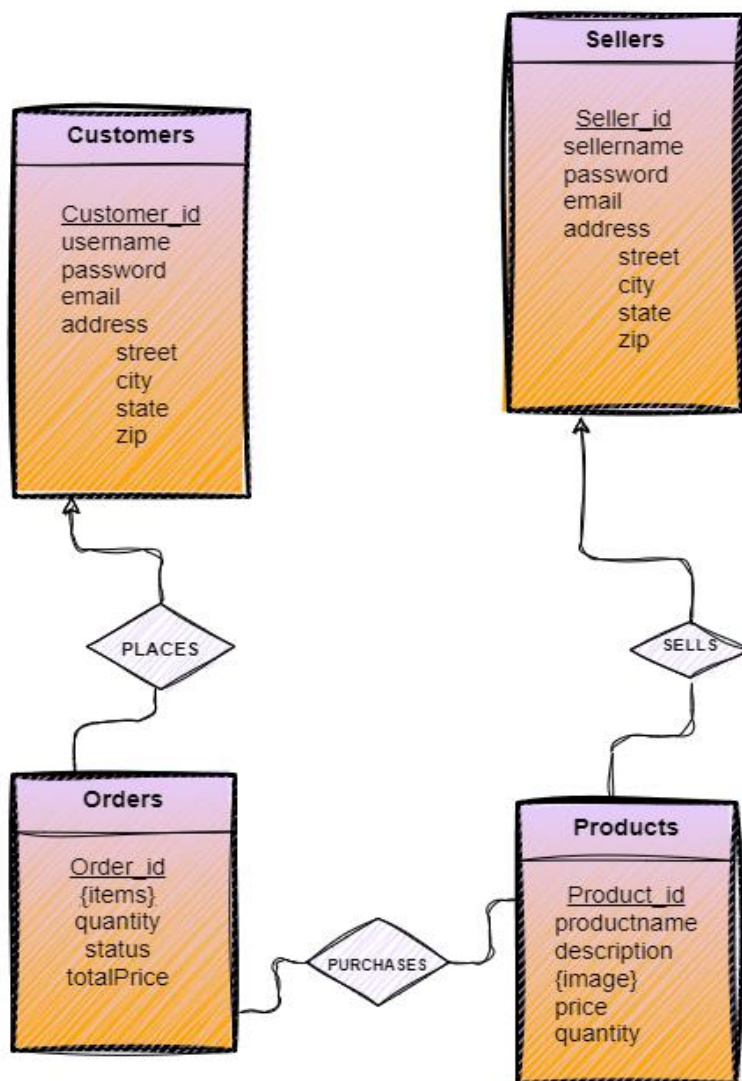Joseph Morell

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1. **E-R Diagram:**

2. Database Schema:

Customers (Customer_ID, Username, Password, Email, Street, City, State, Zip_Code)

Products (Product_ID, Seller_ID, Name, Description, Price, Product_Quantity)

Orders (Order_num, Customer_ID, Order_Quantity, Order Status, Price_Total)

Sellers (Seller_ID, Name, Password, Email, Street, City, State, Zip_Code)

Purchases (Order_num, Product_ID)

Product_Images (Product_ID, Image)

Order_Items (Order_num, Item)

3. Queries for Business Processes:

Customer Account Creation:

```
INSERT INTO Customers

VALUES ('1', 'theBobster1', 'password', 'email@gmail.com', '1234
Street', 'Kent', 'Ohio', 44242);
```

Customer Account Update:

```
UPDATE Customer

SET Password = 'newPassword'

WHERE Customer_ID = '1';
```

Load product listings:

```
SELECT Name, Description, Price

FROM Products;
```

Add new product listing:

```
INSERT INTO Products

VALUES ('1', '1', 'product name', 'product description', '19.99',
'3');
```

Search bar:

```
SELECT Name, Description, Price

FROM Products

WHERE Name LIKE '%userinputproductname%';
```

List items in cart (order items):

```
SELECT *

FROM Orders

WHERE Order_num = 'currentOrder_num';
```

Delete/Remove Product After Run out of Inventory:

```
DELETE FROM Products

WHERE Product_Quantity = 0;
```

Product Quantity Update:

```
UPDATE Products

SET Product_Quantity = Product_Quantity-1

WHERE Product_ID = '1';
```

Calculation of Product total on specific order:

```
UPDATE Orders

SET Price_Total = (SELECT SUM(Price * Order_Quantity)

FROM Orders NATURAL JOIN Purchases NATURAL JOIN Products

WHERE Order_num = 'Specific_Order_Num');
```

Update Order Status:

```
UPDATE Orders

SET Order_Status = 'Shipped'

WHERE Order_num = '1';
```