Report On Database Setup

& Schema Design

Project Title: Shopease Database Design

Domain: E-Commerce

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DATABASE SETUP AND SCHEMA DESIGN

1. Introduction

This report provides the design and implementation of a database for Myntra, an e-commerce platform. The database includes essential entities such as User, Orders, OrderItem, and Product to handle customer data, order management, and product catalog. The project demonstrates how to create a well-structured schema, define relationships, and execute SQL commands.

2. Objective

The main objective of this task is to design and implement a relational database for Myntra that efficiently manages users, products, and orders while maintaining data integrity and reducing redundancy.

3. Tools Used

- MySQL Workbench - For database design and query execution
- GitHub - For submission and version control
- SQL - For database creation and management

4. Database Design

4.1 Entities

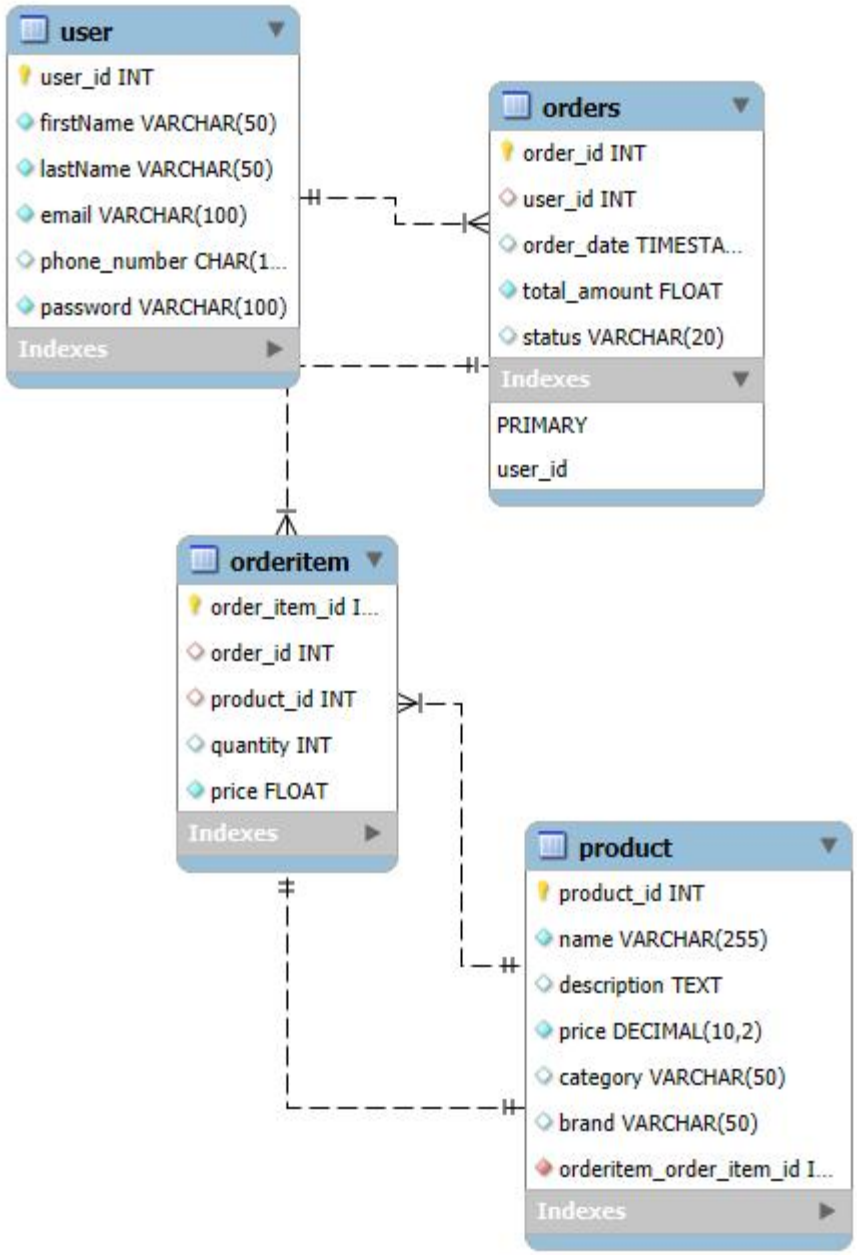
The following entities are included in the Myntra database:

1. User - Stores user account information such as name, email, and address.
2. Product- Contains details about products available on the platform.
3. Orders - Records information about customer orders.
4. OrderItem - Stores individual items within an order, linking products to specific orders.

4.2 Relationships

- A User can place multiple *Orders*(One-to-Many).
- An Order can contain multiple *OrderItems* (One-to-Many).
- Each OrderItem is linked to a single *Product* (Many-to-One).

5. ER Diagram

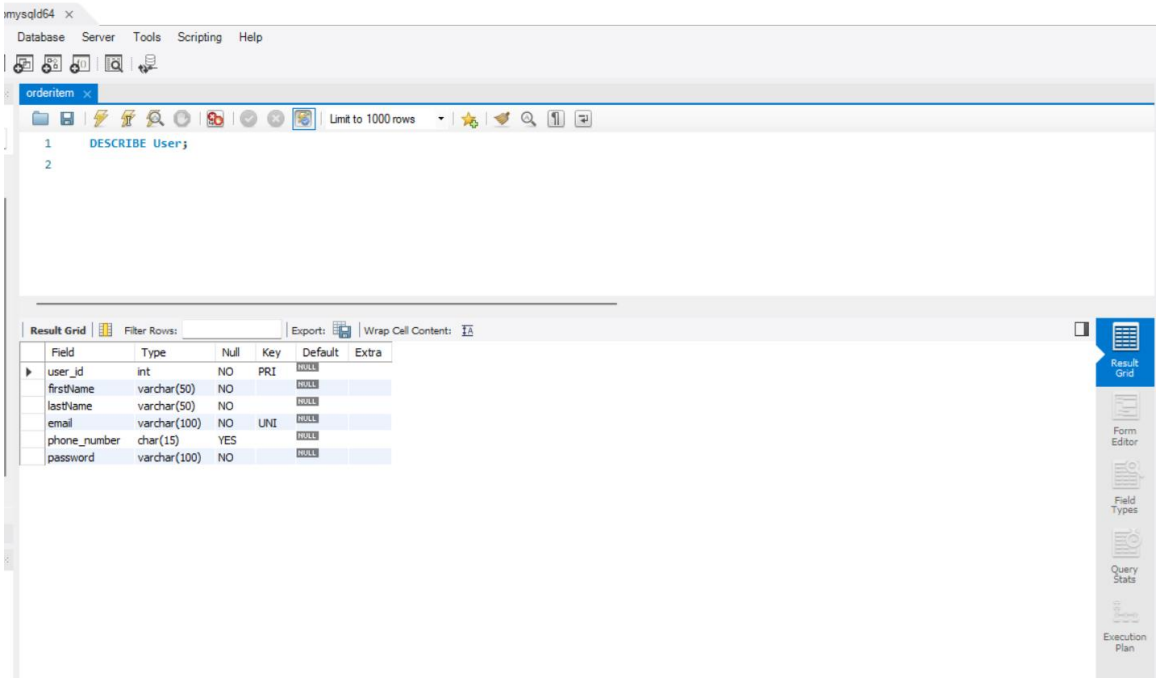


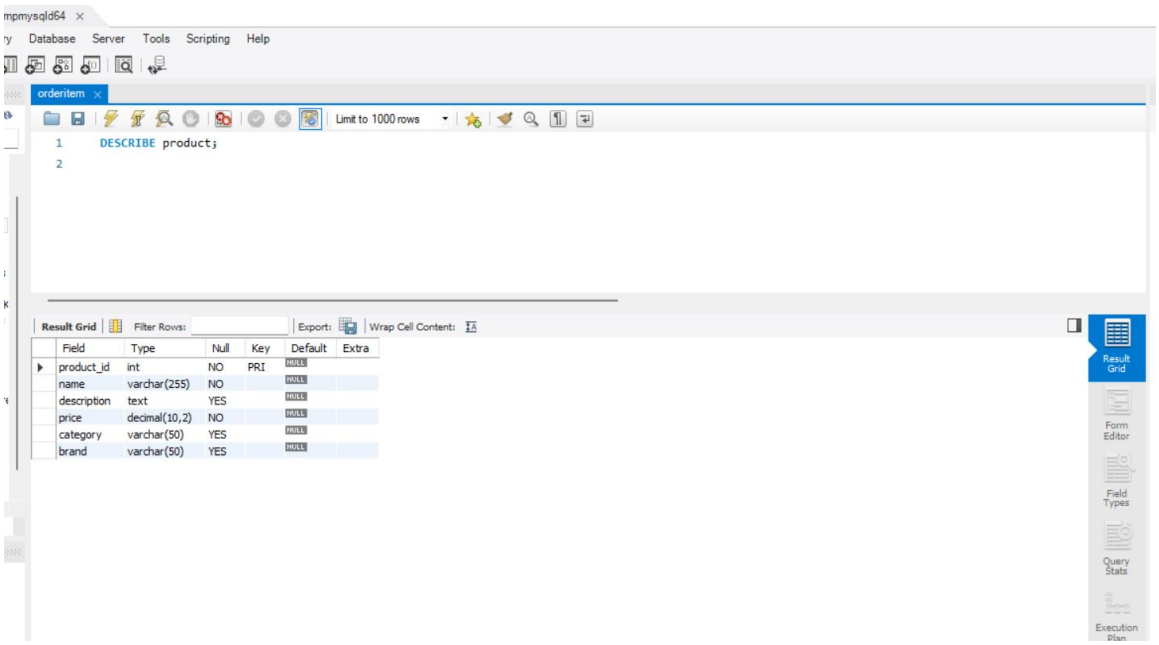
6. SQL Script

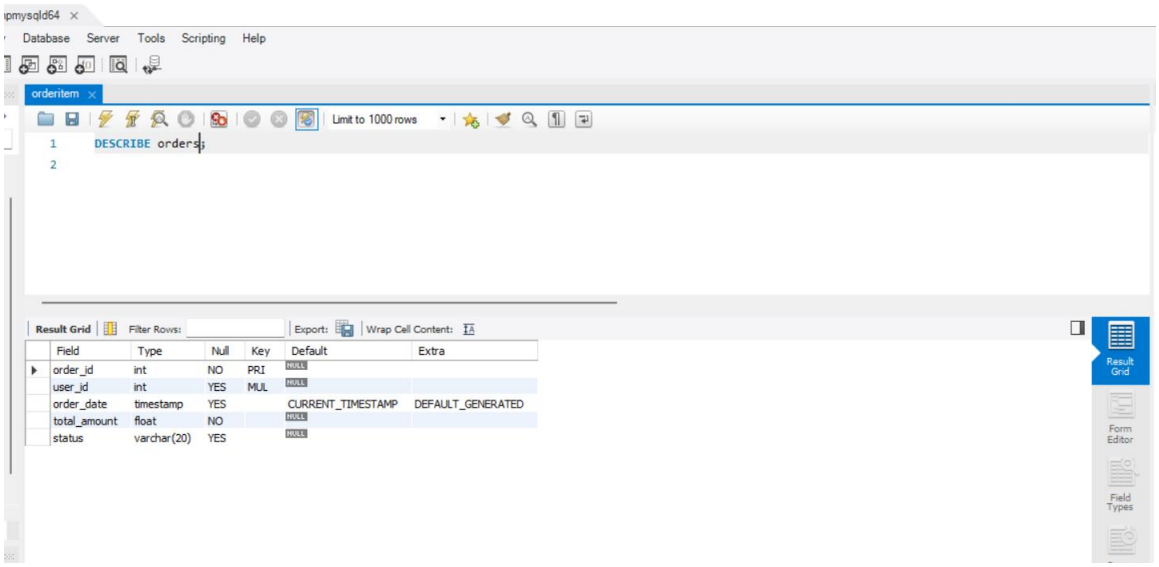
```
CREATE TABLE User (
   user_id INT PRIMARY KEY,
   firstName VARCHAR(50) NOT NULL,
   lastName VARCHAR(50) NOT NULL,
   email VARCHAR(100) NOT NULL UNIQUE,
   phone_number char(15),
   password VARCHAR(100) NOT NULL
);

CREATE TABLE Product (
   product_id INT PRIMARY KEY,
   name VARCHAR(255) NOT NULL,
   description TEXT,
   price DECIMAL(10, 2) NOT NULL,
   category VARCHAR(50),
   brand VARCHAR(50)
);

CREATE TABLE Orders (
   order_id INT PRIMARY KEY,
   user_id INT,
   order_date TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
   total_amount FLOAT NOT NULL,
```

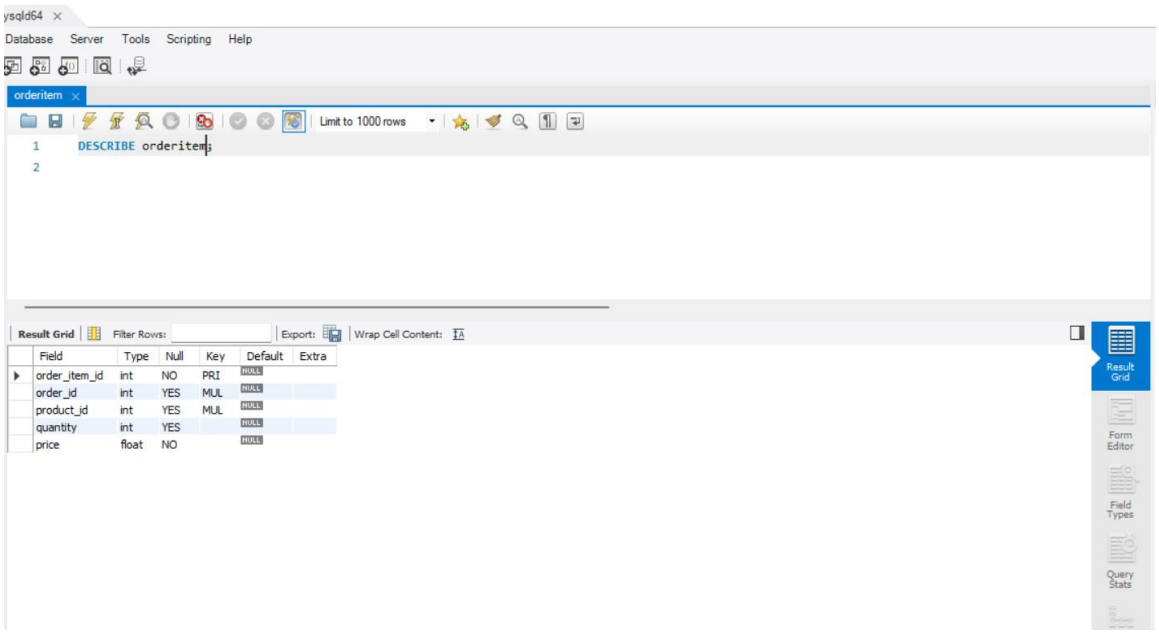
```
    status VARCHAR(20),
    FOREIGN KEY (user_id) REFERENCES User(user_id)
);

CREATE TABLE OrderItem (
    order_item_id INT PRIMARY KEY,
    order_id INT,
    product_id INT,
    quantity INT,
    price FLOAT NOT NULL,
    FOREIGN KEY (order_id) REFERENCES Orders(order_id),
    FOREIGN KEY (product_id) REFERENCES Product(product_id)
);
```

7. Screenshots









8. Conclusion

This project provided practical experience in designing and implementing a relational database. It demonstrated how to use primary keys, foreign keys, and relationships to create a normalized structure.