EShop

The EShop Database Management System (EDMS) is a relational database schema that manages the information of an online shop. The EDMS includes data related to users, products, orders, addresses, reviews, payments, and product categories.

The Users table stores information about the customers who use the online shop, including their names, email addresses, mobile_no and billing address.

The Product table contains data about the items that are available for purchase, such as their names, prices, and stock levels.

The Orders table stores information about each customer's purchase history, including the products they bought, the quantities purchased, and the date of the order.

The Address table contains data related to shipping and billing addresses, including the customer's address, city, pincode, state.

The Reviews table includes information about customer reviews of products, including the product id of the product they reviewed, the customer id who wrote the review, and the ratings.

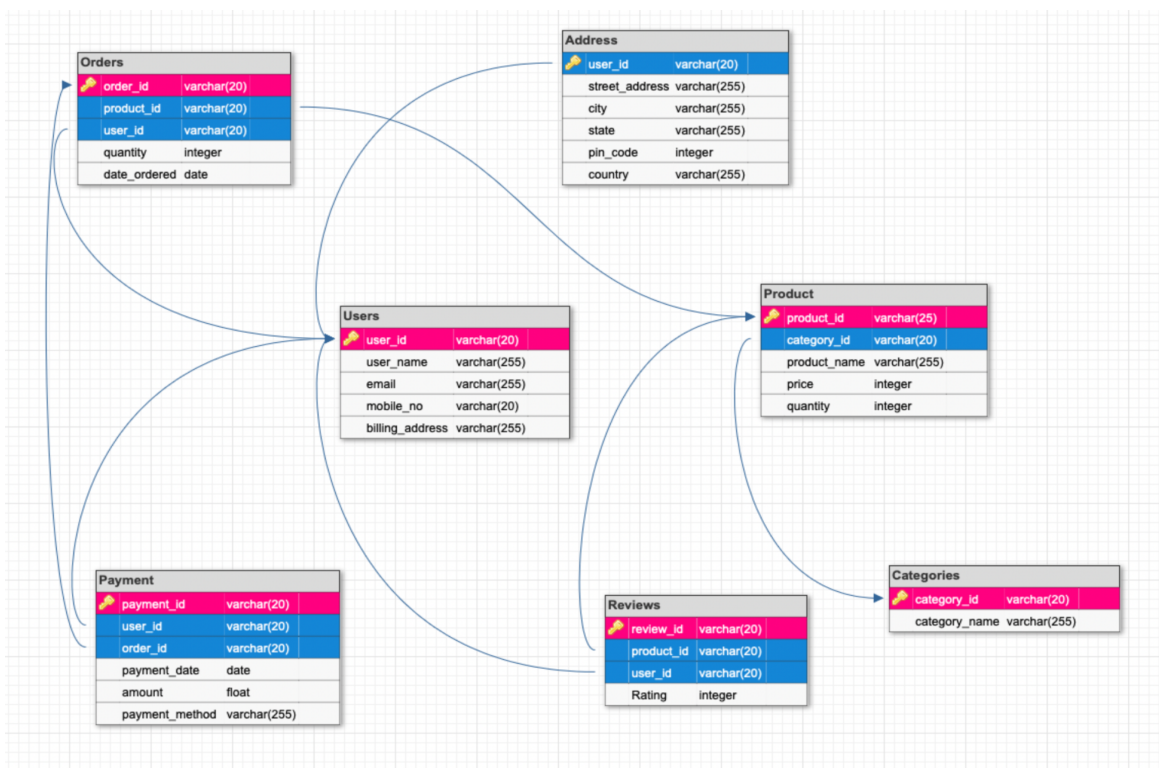The Payment table stores data about the payment methods used by customers, amount, payment date.

Finally, the Categories table stores data about the product categories offered by the online shop, such as clothing, electronics, or home goods. This table can be used to group similar products together and make it easier for customers to find what they are looking for.

Certain Rules have to be followed in EDMS:

Each product can be associated with one category, but one category can have many products.

● Each user can have many orders, but each order can only be associated with one user.

● Each payment should only be associated only with one order.

● Each review can only be associated with one product and one user.

● Each address can only be associated with one user.

● Each product can have multiple reviews.

● Each order should contain one product.

● Each order must have a unique order ID.

● Each payment must have a unique payment ID.

● Each category must have a unique category ID.

● Each user must have a unique user ID.

● Each product must have a unique product ID.

Orders

order_id	varchar(20)
product_id	varchar(20)
user_id	varchar(20)
quantity	integer
date_ordered	date

Address

user_id	varchar(20)
street_address	varchar(255)
city	varchar(255)
state	varchar(255)
pin_code	integer
country	varchar(255)

Users

user_id	varchar(20)
user_name	varchar(255)
email	varchar(255)
mobile_no	varchar(20)
billing_address	varchar(255)

Product

product_id	varchar(25)
category_id	varchar(20)
product_name	varchar(255)
price	integer
quantity	integer

Payment

payment_id	varchar(20)
user_id	varchar(20)
order_id	varchar(20)
payment_date	date
amount	float
payment_method	varchar(255)

Reviews

review_id	varchar(20)
product_id	varchar(20)
user_id	varchar(20)
Rating	integer

Categories

category_id	varchar(20)
category_name	varchar(255)

Users table: (**PK: user_id**)

- user_id: Unique identifier for the user, e.g., U0001, U0002

- user_name: Name of the user

- email: Email address of the user

- mobile_no: Mobile number of the user

- billing_address: Billing address of the user

Product table: (**PK: product_id**)

- product_id: Unique identifier for the product, e.g., P0001, P0002

- category_id: Category ID of the product

- product_name: Name of the product

- price: Price of the product

- quantity: Quantity of the product

Orders table: (**PK: order_id**)

- order_id: Unique identifier for the order, e.g., O0001, O0002

- product_id: ID of the product associated with the order

- user_id: ID of the user who placed the order

- quantity: Quantity of the product ordered

- date_ordered: Date when the order was placed

Payment table: (**PK: payment_id**)

- payment_id: Unique identifier for the payment, e.g., PAY001, PAY002

- user_id: ID of the user who made the payment

- order_id: ID of the order associated with the payment

- payment_date: Date when the payment was made

- amount: Amount paid for the order

- payment_method: Payment method used

Address table: (**PK: user_id**)

- user_id: ID of the user associated with the address

- street_address: Street address of the user

- city: City of the user

- state: State of the user

- pin_code: Pin code of the user

- country: Country of the user

Categories table: (**PK: category_id**)

- category_id: Unique identifier for the category, e.g., C0001, C0002

- category_name: Name of the category

Reviews table: (**PK: review_id**)

- review_id: Unique identifier for the review, e.g., R0001, R0002

- product_id: ID of the product associated with the review

- user_id: ID of the user who wrote the review

- rating: Rating given by the user for the product (out of 5)