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## **Fresh Threads Clothing Shop**

**Project Overview:** This is clothing e-commerce web application that was conceptualise, design, and developed using Django, an open-source online framework based on Python, that not only fits with current market trends but also fulfils the varied needs and expectations of modern consumers. It is perfect for building web pages and offers an excellent advantage of a dependable database access component. My project's main objective is to develop a user-friendly and intuitive platform that enables clients to easily explore, find, and buy apparel goods. I used Kaggle, a community platform for practitioners, researchers, and enthusiasts interested in data science and machine learning.

### **Design:**

#### Category Model

- Represents different categories of clothing items.
- Ensures that each category name is unique to prevent duplicates.

#### Product Model

- Contains the detailed information about each clothing item, including its association with a specific category.
- Unique product names are enforced to maintain a distinct product catalogue.
- Each product has an associated price, potential discount, description, and image URL.
- A timestamp of when the product was added to the database is automatically maintained.

#### Order Model

- Tracks the details of each customer's order.
- Links to the Django User model to associate the order with a customer.
- Each order is timestamped and has a unique transaction identifier.

#### OrderProduct Model

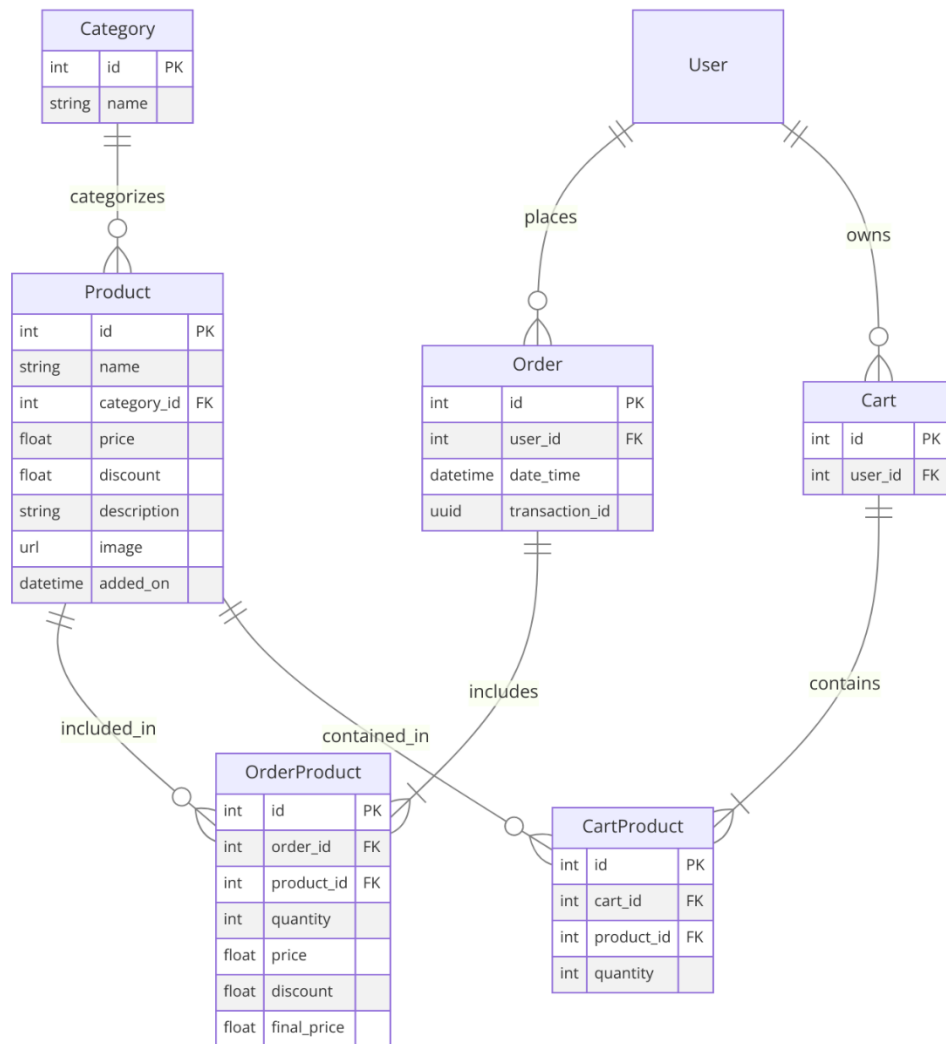
- A junction table that connects products with orders, allowing multiple products to be included in a single order.
- Tracks the quantity, price, discount, and final price for each product within an order.

#### Cart Model

- Represents a shopping cart for a user.
- Directly linked to the User model to ensure that each user has their own cart

## CartProduct Model

- Links products to a shopping cart, with a quantity for each product
- The combination of product and cart is unique to prevent duplicate entries in a single cart.



## Data and Processing:

I utilised a collection of available data from Kaggle that included details about various clothing items in a range of sizes. The task limit is between 2,000 and 7,000 sets of data, therefore utilising all of the data will go much beyond what is needed. In order to counter this, I selected the dataset's 2566 records and eliminated the rest, making sure the sample size of data is just inside the allowed parameters. To process the data I created the file `parse_csv.py` which is used to open the CSV file, read the data in it and split each row into fields. I then ran the above file with the code `'python3 manage.py parse_csv'`.

**Development:**

**The technologies that were used in this project are:** Django Framework, Python Programming language, HTML markup language, CSS, Javascript, Git, Codio, Bootstrap, and Sqlite3 Database.

**Features Implemented:****Installation:**

- Prerequisites and Installation: Every dependency will be outlined in the README.md file as well as the requirements.txt file

**How to use:**

Start your shopping adventure by creating an Fresh Threads account or logging in to see a wide range of clothing options. Make use of the search feature to quickly find particular products that suit your needs. You may easily add the things you want to your basket and then check out to complete your transaction.