**Retail Sales Database Web Application**

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Project Video Demo: <https://iu.mediaspace.kaltura.com/media/t/1_yj4egl6z>

GitHub Link: <https://github.com/patmartIU/AppliedDatabaseTechnologies>

**Description**

This project takes a csv file of transactions for a UK-based ecommerce retailer between certain dates, creates an sqlite3 database of those transactions with three separate tables (Product, Transactions, Customer), and ultimately launches a web database application that allows for CRUD operations on the database using the sqlite-web python library.

Kaggle Dataset: Online Retail Dataset: <https://www.kaggle.com/datasets/lakshmi25npathi/online-retail-dataset>

The dataset is the transactions for a UK-based ecommerce retailer between 01/12/2009 and 09/12/2011.

Database Schema



See Database Schema.docx file for detailed schema breakdown

Web Application

Sqlite-web is the python library utilized to generate a live web application with the database file embeded. See Sqlite-Web GitHub for detailed information of the library.

Sqlite-web GitHub: <https://github.com/coleifer/sqlite-web>

**Instructions**

1. Download Online Retail Script.ipynb from GitHub (<https://github.com/patmartIU/AppliedDatabaseTechnologies/blob/main/Online%20Retail%20Script.ipynb>).

2. Download Online\_Retail.zip file from project GitHub and extract the Online\_Retail.csv file from within.

3. Confirm that the Online Retail Script.ipynb and the exttracted Online\_Retail.csv are located in the same file folder.

4. Run the Python Scipt using Jupyter Notebook. The script will prompt you to input the name of the csv file (Online\_Retail.csv).

5. Running the Python script generates the database file (retailProject.db).

6. Install sqlite-web using the command prompt. See sqlite-web GitHub for detailed installation instructions

7. Run sqlite-web function on the retailProject.db to generate the interactive web application.

8. Enjoy the interactive database web application