Online Retail Store Dashboard

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Project Goals

The modern “Mom and Pop Shop” is online retailers working from home. Sites like Etsy, Instagram, and others allow nearly anyone to establish an online retail business. Despite this new market, few platforms that are both low cost and intuitive exist. In this project, we attempted to create a simple sales dashboard allowing businesses to identify and understand trends in their sales.

Design Considerations

- Interactivity
- Holistic (Should allow many different insights)
- Easy to Understand and Extend
- Backwards Compatibility/ Extensibility in Data Pipelines
- Cheap [We aren’t charging :)]
- Real Time- No waiting for reports

Cumulative Statistics

We generated live, descriptive statistics that greet our users when they open our application

In this dashboard we are representing **541909** transactions

This seller has sold **5176450** total units

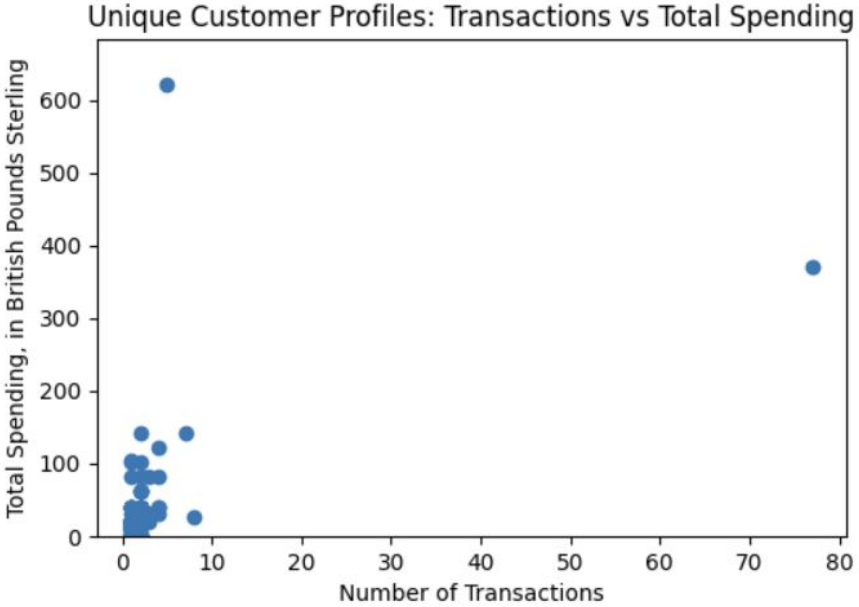
This seller has sold **$9747747.934** in total goods

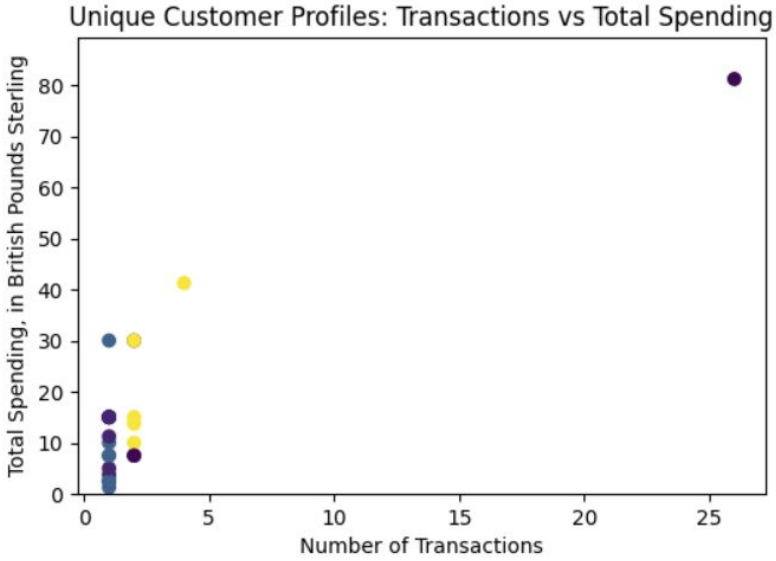
This seller's top item by revenue is **"Dotcom Postage"**

This seller is operating across **38** countries

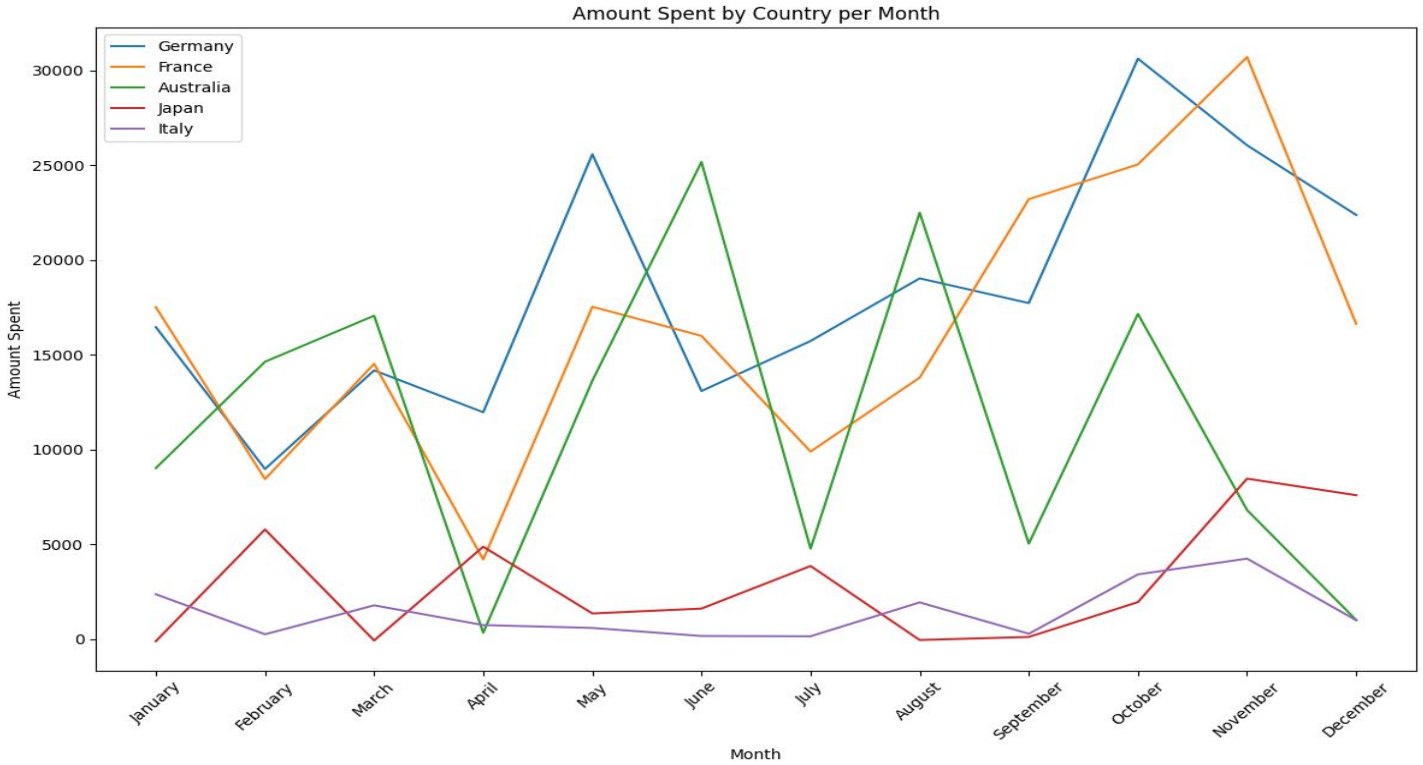
This seller's top category in units sold is **"World War 2 Gliders Asstd Designs"**

Understanding Buying Trends in Collections of Products

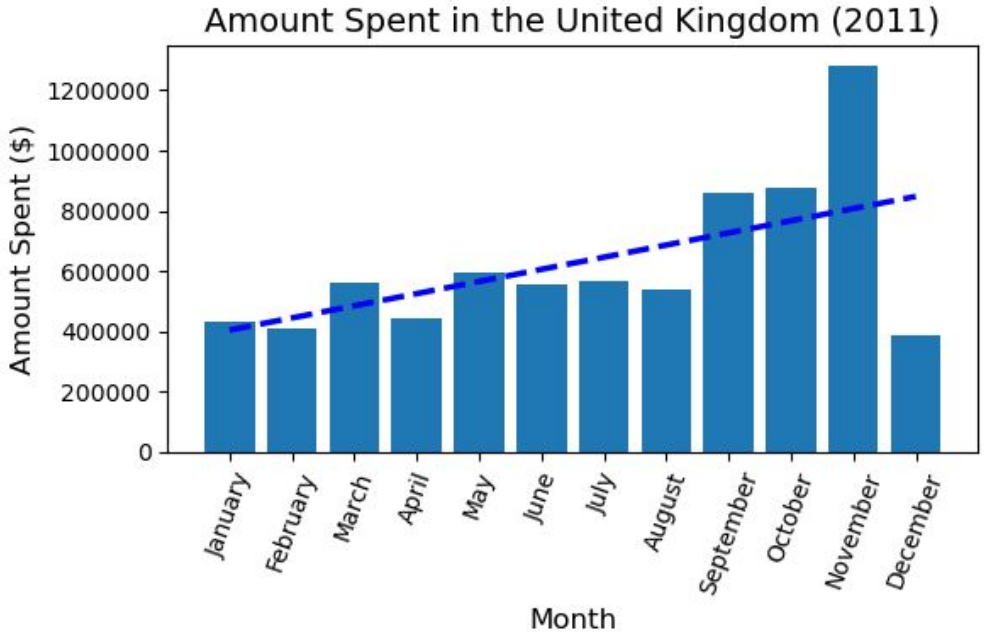




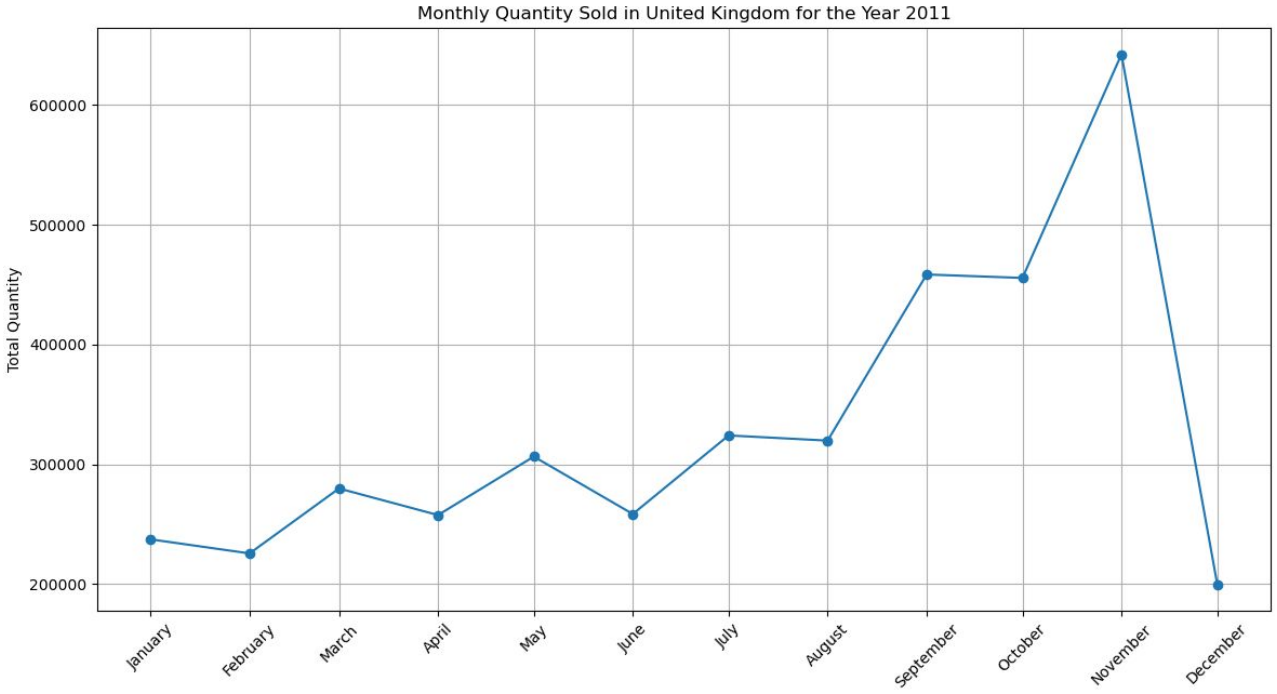
Amount Spent by Country



Spending Trends by Country



Quantity Sold by Year by Country



Best Selling Products by Year

Database: MongoDB

Design Considerations

- This app should integrate with several different retail streams
- Database actions need to be fast enough with potentially large datasets to facilitate user interaction
- This app should be able to scale as sellers and their number of transactions grow

How MongoDB Helps

- Flexible Schema: Many different platforms can be integrated and features can be added later without the need for large migrations
- Aggregation features allow low latency queries for the analytics we made
- MongoDB has excellent scalability features that allow growing businesses to handle growing data pipelines

Potential Downsides

- Lack of Joins: Analytics across document types can be complex and slow, limiting the integration we can create with other types of data
- No Transactions: Query pipelines are not necessarily consistent in real time
- Accessibility: Everyone knows SQL, but people without data engineering skills may struggle to understand and extend our platform

App Demo!!