BRAINSTATION: DATA SCIENCE COHORT

CAPSTONE PROJECT FINAL PRESENTATION

Uldis Knox
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Collaborative Filtering, Content Based Recommender System

Problem Statement

How can we use data science to recommend new beers to someone based on their historical review data?

Context

There are a lot of beer review websites and apps, but none recommend new beers to users based on their ratings/reviews.

Intent

To create a recommendation system that will recommend beers to users they haven't tried based on beers they have tried and reviewed.

Project challenges

| Challenge 1 | Challenge 2 | Challenge 3 |

Exploratory Data Analysis

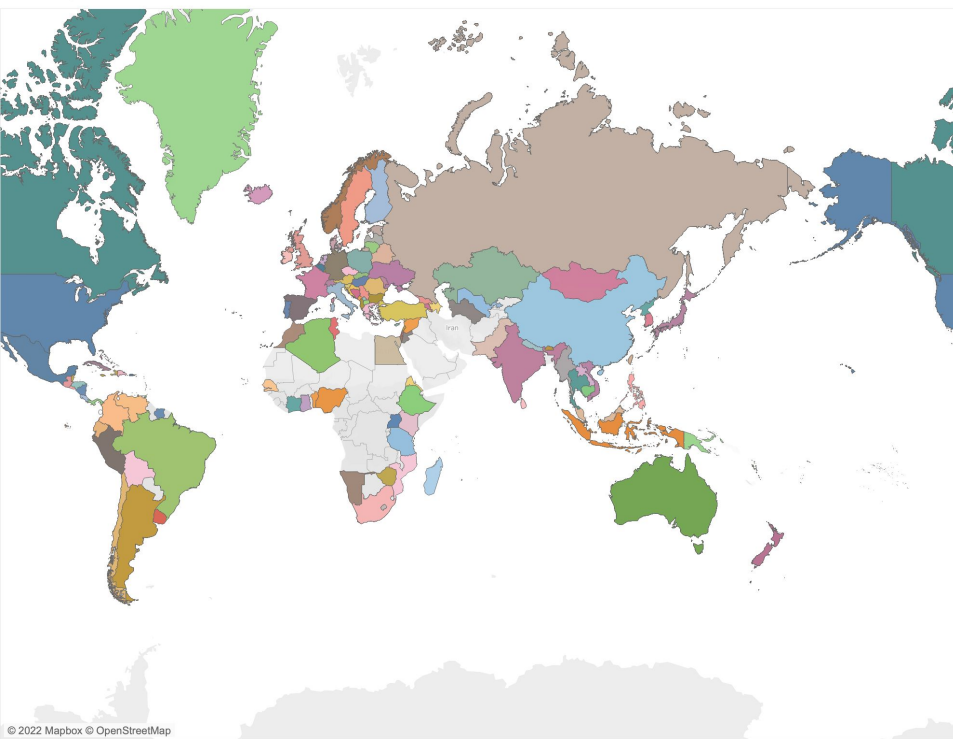During EDA it was obvious we would have only a few independent variables, with a lot of data points.

Data Modeling

Few features meant our models would not have much complexity or variance

Recommender System

Intended to be a content-content recommender; pivoted to a Collaborative Filtering, Content-Based Recommender

Brewery Map

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FINDINGS
- The data is heavily based in the USA
- The data fit the regression models well, even before scaling or hyperparameter tuning
- Recommender Systems are complex but rewarding to create

PRACTICAL APPLICATIONS

- No beer recommender website or app uses historical data to recommend new, similar beers
- Possibility to add feature to existing platform
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"Can you recommend a wine that tastes like a good beer?"

FUTURE PLANS/DIRECTION
- Improve model with newer, larger dataset that includes user reviews
- Develop model to MVP
- Expand outside of beer to cocktails, cannabis edibles, etc.

"With that craft beer, you're paying for the finest hops, choicest barleys and a lot more alcohol."

Questions?