Proposal: Project-3

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Following research paper fueled us to start this amazing project:

LINK BEER DATASET ANALYSIS by Fintan Ward

Abstract

Business owners require numerous data to design their product and many small businesses do not have access to the necessary data expertise.
The aim of this project is to produce a beer recommendation website. The website will allow a user to select a specific beer from a list of beers and breweries and predict several beer recommendations which will be displayed to the user.

For this project purposes:

1. Dataset chosen to be used in this project reflects real world point of views users.
2. The finished application can be run from any personal computer for demonstration & presentation purposes.

Background

Beer is one of the oldest drinks humans have produced. The first chemically confirmed barley beer dates back to the 5th millennium BC in Iran, and was recorded in the written history of ancient Egypt and Mesopotamia and spread throughout the world. The word beer comes from old Germanic languages, and is with variations used in continental Germanic languages, bier in German and Dutch, but not in Nordic

languages. The word was imported into the British Isles by tribes such as the Saxons. It is disputed where the word originally comes from.

Beer is an incredibly complex beverage containing more than 3000 different compounds, including carbohydrates, proteins, ions, microbes, organic acids, and polyphenols, among others. Beer becomes even more complex during storage, for over time it may undergo chemical changes that negatively affect the flavor, aroma, and appearance. Thus, it can be expected that maintaining the quality of beer throughout its lifetime is a difficult task. Since it is such a popular drink throughout the world, and based on the fact that consumers everyday require beers as a common beverage with specific enhanced flavor, aroma, appearance or even ABV% profiles, we got motivated to make ourselves familiar with proper data science analytic techniques for beer evaluation using the existence dataset of 1,048,575 that has discussed in O'reilly conference in 2017 and the BeerAdvocate dataset which was obtained from data world to understand what are the factors that make a brand one of the top five highest-ranking beer styles in beer industry based on existed reviews.

Beer performance by Zip Code app

1. Features:
   a. Users will be able to search for a beer, brewery, zip code, and rating and we will generate information.
      i. If searched through beer names.
         1. We will give an average rating.
         2. We will give the location of the brewery.
      ii. If searched through a brewery.
         1. We will give an average rating for the beers provided by the brewery.
         2. We will give top performing beer to the brewery.
         3. We will give the location of the brewery.
      iii. If you search for ratings.
         1. We can give a list of beers of that certain rating.
         2. Give brewery locations where the beers are located.
         3. The average rating for the beers.
      iv. If searched by zip code.
         1. We can give the breweries that are nearby.
         2. The average rating of beers of the nearby brewery.
         3. Top performing beers of the brewery.

Look and Feel