Movie recommendation engine

Algorithm

I used the Naive Bayes algorithm in my work. When there is context, the algorithm is quite simple to implement with text. Regarding the homework assignment, we are aware that when the user provides input, it can be either positive or negative (I love, I detest...), which is also referred to as binary classification. My program also makes use of an API that calculates the gender of a given name or personal pronoun based on the probability of the supplied name or pronoun. As a result of this, I decided to utilize the Naive Bayes method because it seemed to me to be the most appropriate choice for this test.

Ethical issue

The application programming interface (API) may not always be accurate, which is the most significant ethical problem that can arise. For instance, Alex mentions both men and women, but the application programming interface (API) will only ever give the result for the female. Because of this, the suggested presents are not guaranteed to be suitable if the recipient is a man. In addition, the API does not take into account those who do not identify with a certain gender.

How the code works

To begin, you will be required to type in a phrase in order to search for a present (Konstantin likes adventures). The gender of the subject is determined by selecting the first word from the list containing this statement. After that, the verb is retrieved in order to determine if it is positive or negative. If the test is successful, the noun is given to the scraper, who looks for a present. If the answer is negative, the code checks to determine if the person is male or female, and if it is, the scraper looks for a male or female present.

Resources

Website for API: https://genderize.io/

Website Movie web scraping: https://www.whatismymovie.com/

Where to watch web scraping: https://www.metacritic.com/