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CMP-262

Final project: Amazon Sentiment Analysis

The aim of this data science project was to conduct sentiment analysis on a specific Amazon product. Several tools were used for this project; namely: seaborn, pandas, and textblob. Seaborn was used for data visualization; pandas for data manipulation; and textblob for natural language processing.

Some questions I sought to answer with this particular dataset included:

What is the overall sentiment of Amazon product reviews?

Are there any trends in sentiment over time?

Do certain products have more positive or negative reviews?

Are there any correlations between the ratings and the sentiment of the reviews?

After analyzing the data, I discovered that the overall sentiment of this specific Amazon product was positive. Most of the reviews, when visualized using seaborn, tended to cluster in the positive direction of sentiment, suggesting that reviews had mostly positive things to say.

If I were presenting this information to a client, I would recommend that they focus on maintaining a high rating for their products in order to ensure positive sentiment. I would recommend regularly monitoring sentiment over time to identify any potential issues which could lead to changes in marketing or making direct changes to the product itself.

As for future work, I would like to continue to analyze the data to identify specific factors that influence sentiment, such as the length of the review or the presence of certain words over others. I would also like to apply more advanced natural language processing techniques to better understand the underlying sentiment of the reviews as the accuracy of textblob is somewhat limited in its ability to discern language used, for instance, sarcastically.