

Sentiment Analysis Report

1. Description of the Dataset Used

The dataset used is a collection of Amazon product reviews. It includes various reviews written by customers about different products.

2. Details of the Preprocessing Steps

The preprocessing steps involved converting text to lowercase, stripping whitespace, tokenizing using SpaCy, lemmatizing, and removing stopwords.

3. Evaluation of Results

The sentiment analysis was performed using TextBlob. Sample results include:

1. "This product is amazing! I'm very happy with my purchase." -> Positive sentiment
2. "I hated this product. It broke after one use." -> Negative sentiment
3. "The quality is decent for the price, but I've seen better." -> Neutral sentiment
4. "Absolutely fantastic! Exceeded my expectations." -> Positive sentiment
5. "Not worth the money. Very disappointed." -> Negative sentiment

4. Insights into the Model's Strengths and Limitations

Strengths: Simple and quick to implement, effective for basic sentiment analysis.

Limitations: May not handle complex sentences well, limited by the capabilities of the TextBlob library.

Similarity comparison: Two reviews were compared using SpaCy's similarity function, yielding a

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similarity score of: 0.70