## 1. Dataset Description:

The dataset comprises product reviews sourced from Amazon. It encompasses various features such as reviewer information, product ratings, and the textual content of the reviews.

## 2. Preprocessing Steps:

We preprocessed the textual data by conducting operations like stopword removal and basic text cleaning using spaCy. Additionally, we employed lemmatization techniques to retain meaningful word forms.

## 3. Evaluation of Results:

Our sentiment analysis model yielded satisfactory results in predicting the sentiment of the reviews. It accurately identified positive, negative, and neutral sentiments.

## 4. Model's Strengths and Limitations:

Strengths:
- Utilizes spaCy for robust natural language processing capabilities.
- Handles large volumes of text data efficiently.
- Predicts sentiment based on polarity scores, providing a quantitative measure of sentiment intensity.

### Limitations:
- Relies solely on textual information, which may not effectively capture context or sarcasm.
- Performance may vary depending on the quality and diversity of the dataset.
- Limited to English language reviews and may not generalize well to other languages.
- ‘en_core_web_sm’ is small which don't ship with word vectors and only use context-sensitive tensors.