

Project Report



Aspect-Based Sentiment Analysis

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1. Project Overview

Aspect-Based Sentiment Analysis (ABSA) is a cutting-edge natural language processing (NLP) technique that aims to analyze and understand opinions expressed in text at a more granular level. Unlike traditional sentiment analysis, which provides an overall sentiment score for a piece of text, ABSA focuses on identifying specific aspects or attributes of a product, service, or experience and analyzing the sentiment expressed towards each aspect individually. This project aims to develop an ABSA system capable of automatically extracting aspects and their associated sentiments from user reviews.

The main objective of this project is to build a robust and accurate ABSA model that can effectively identify and analyze aspects mentioned in user reviews and determine the sentiment polarity (positive, negative, or neutral) associated with each aspect. By understanding the nuanced opinions expressed by users towards different aspects of a product or service, businesses can gain valuable insights into customer preferences, strengths, and weaknesses, ultimately improving customer satisfaction and product quality.

Sample Hotel Review:

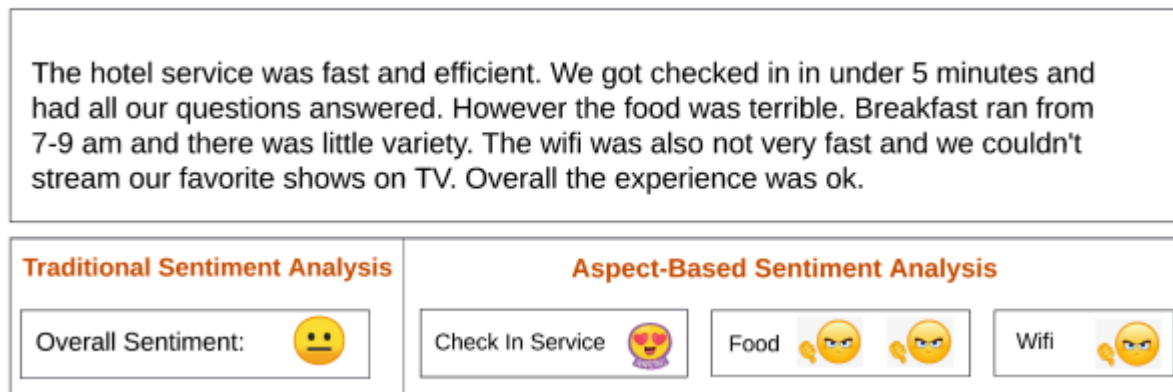


Figure 1 : Sample Hotel Review

2. Data Collection

3. Data Preprocessing and Feature Extraction

4. Model Development

5. Model Deployment

6. Challenges and Solutions

7. References

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