Rating from Reviews AI generator.

The main purpose of the project is to create a sentiment analysis model that is built using classification algorithms. The model will be used to generate ratings scaled 1- 5 of reviews of products. These reviews are collected on a user-friendly web application.

Positive ratings and reviews help build trust in a business, but online shoppers often find inconsistencies between the ratings and the written reviews. Users may give high ratings but mention flaws, or low ratings with mostly positive comments, causing confusion. Reading through numerous reviews is also time-consuming, and some reviews can be biased or misleading. To address this, we aim to create a web app that uses machine learning to predict accurate product ratings based on the review text, ensuring consistency, saving time, and providing reliable ratings that match the review content.

Yelp Review Sentiment Analysis

This project is a Streamlit web application that uses a pre-trained BERT model to predict the sentiment of Yelp reviews. The application allows users to input a review and get a predicted star rating based on the review's content. The project demonstrates the power of natural language processing (NLP) and machine learning in understanding and predicting user sentiments from textual data. The project utilizes a pre-trained BERT (Bidirectional Encoder Representations from Transformers) model for sequence classification.

Dataset

The dataset used in this project is a collection of Yelp reviews, which can be found at the following URL:

<https://raw.githubusercontent.com/cynthialmy/DataVizLab/main/yelp_dataset/yelp.csv>

Application

The application is built using Streamlit, a popular open-source app framework for Machine Learning and Data Science projects. The app allows users to input a review and receive a predicted star rating. Additionally, users can view sample products, read reviews, and submit their reviews to see the predicted rating.