**Sentiment Analysis of Product Reviews**

<https://www.kaggle.com/datasets/bittlingmayer/amazonreviews>

Datasets

Certainly! Here's a comprehensive real-world project on **Sentiment Analysis of Product Reviews**

## 🧠 Project Title: Sentiment Analysis of Product Reviews

### 📊 Dataset Options

**Amazon Product Reviews Dataset**

**Description**: Contains millions of Amazon customer reviews along with star ratings.

**Download**: [Kaggle - Amazon Reviews](https://www.kaggle.com/datasets/bittlingmayer/amazonreviews)([Kaggle](https://www.kaggle.com/datasets/bittlingmayer/amazonreviews?utm_source=chatgpt.com" \o "Amazon Reviews for Sentiment Analysis - Kaggle))

**Flipkart Product Customer Reviews Dataset**

**Description**: Includes product names, prices, ratings, reviews, summaries, and sentiments.

**Download**: [Kaggle - Flipkart Reviews](https://www.kaggle.com/datasets/niraliivaghani/flipkart-product-customer-reviews-dataset)([Kaggle](https://www.kaggle.com/datasets/niraliivaghani/flipkart-product-customer-reviews-dataset?utm_source=chatgpt.com" \o "Flipkart Product reviews with sentiment Dataset - Kaggle))

### 🛠️ Implementation Resources

**GitHub Project: Sentiment Analysis on Online Product Reviews**

**Description**: A project that classifies product reviews as positive or negative using machine learning models like SVM and SGDClassifier.

**Repository**: [GitHub - shreyaswankhede](https://github.com/shreyaswankhede/Sentiment-Analysis-on-Online-Product-Reviews)([GitHub](https://github.com/shreyaswankhede/Sentiment-Analysis-on-Online-Product-Reviews?utm_source=chatgpt.com" \o "shreyaswankhede/Sentiment-Analysis-on-Online-Product-Reviews))

**GitHub Project: Amazon Reviews Sentiment Analysis**

**Description**: Focuses on sentiment analysis of Amazon product reviews using machine learning and NLP techniques.

**Repository**: [GitHub - amri-tah](https://github.com/amri-tah/Amazon-Reviews-Sentiment-Analysis)([GitHub](https://github.com/amri-tah/Amazon-Reviews-Sentiment-Analysis?utm_source=chatgpt.com" \o "amri-tah/Amazon-Reviews-Sentiment-Analysis - GitHub))

**GitHub Project: Product Review Sentiment Analysis**

**Description**: Classifies customer reviews into positive, negative, or neutral sentiments using NLP and ML techniques.

**Repository**: [GitHub - nafisalawalidris](https://github.com/nafisalawalidris/Product-Review-Sentiment-Analysis)([GitHub](https://github.com/nafisalawalidris/Product-Review-Sentiment-Analysis?utm_source=chatgpt.com" \o "nafisalawalidris/Product-Review-Sentiment-Analysis - GitHub))

### 🧪 Project Workflow

**Data Preprocessing**

Clean the text data by removing punctuation, stopwords, and performing stemming or lemmatization.

**Text Vectorization**

Convert text data into numerical format using techniques like CountVectorizer or TF-IDF.

**Model Building**

Train machine learning models (e.g., Logistic Regression, SVM) or deep learning models (e.g., ANN) on the vectorized data.

**Evaluation**

Assess model performance using metrics like accuracy, precision, recall, and F1-score.

**Deployment (Optional)**

Develop a web application to input reviews and display sentiment predictions.

.