

Amazon Reviews For Sentiment Analysis

ML Project

System Vampires
Batch No : 2

April 20,2022

Outline of the project

PROJECT

Problem Description

Input

Output

Problem Statement

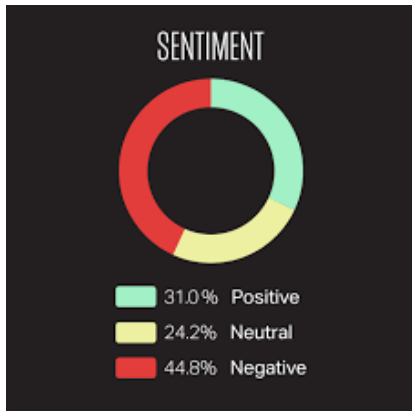
Work Schedule

Tech Stack and Learnings

Challenges

Problem Description

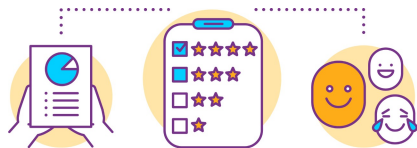
The aim of this project is to build a sentiment analysis model on Amazon reviews which will allow us to categorize words based on their sentiments, that is whether they are positive, neutral or negative.



Input

The input dataset consists of a few million Amazon customer reviews (input text) and star ratings (output labels) for learning how to train fastText for sentiment analysis.

The idea here is a dataset is more than a toy - real business data on a reasonable scale - but can be trained in minutes on a modest laptop.



Sentiment analysis

Output

For each amazon customer review the output should be whether the review is positive, neutral or negative.



Problem Statement

From the description of the Amazon Reviews using Sentiment Analysis we understood that it's a model where the amazon review is given as input and this model should predict whether the review is positive, neutral or negative based on their words.

Supervised Learning: Supervised learning is the types of machine learning in which machines are trained using well "labelled" training data, and on basis of that data, machines predict the output. The labelled data means some input data is already tagged with the correct output. In supervised learning, the training data provided to the machines work as the supervisor that teaches the machines to predict the output correctly

Work Schedule

- First Week and Second week - Problem Solution Identifying

(sentiment analysis, dataset ,supervised learning and its techniques like knn , decision trees, random forest, svm)

And Developed Logistic Regression Model.

- Third week - Researched about the remaining three models - SVM, Random Forest, Decision Tree.

Tech Stack and Learnings

- MikTex and TexMaker are used to make this presentation

Learnings:

- We learnt how to use latex from the scratch and make presentation out of it.

Challenges we have faced

- Developing all the four models - Overcame by researching about those models.
- Accuracy of the models - Still trying to overcome.

Team Members

19B01A0583 - K.Lovely Srenika - CSE

19B01A0594 - M.Alekhyas - CSE

19B01A05A2 - V.Harshita Sai - CSE

19B01A0478 - K.S.L.Katyayini - ECE

19B01A0573 - K.Devi Meghana - CSE