# Sentiment Analysis Text Classification
### & model comparison
## with Mlpack C++

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## Project Description

An examination of sentiment in text derived from reviews and feedback using a web-hosted machine learning model.

## Goals

• Efficient and quick text analysization and classification.

• Reduced time and human resources spent to classifiy customers feedback.

## Features

• User-friendly web interface

• Dev-friendly api routes for easy intergration as a third party tool.

## Diagram-Workflow

- Data Preprocessing & Model Training
- Frontend
- Model Server
- Web Server
- Database Server

HTML5 CSS3

C++

docker

TS JS

mlpack

## Languages and Tools

• Git
• C++
• Mlpack C++ library
• Uwebsockets C++ library
• Docker
• Html, Css, Javascript and Typescript
• Visual studio code
• Bitbucket
• PostgreSQL
• Cmake

## Potential Enchancement

• Expanding its capability to include spam detection and other NLP tasks.

• Adding a voice to text system with it to further boosts its usage to also analysis the words from voices.

• Multilingual support

## Conclusion

With regard to memory management, handling large amounts of data, data preprocessing, natural language processing, dockerization, and web API development. With this initiative, developers and end users should be able to more effectively utilize text classification with ML