DATA ENGINEERING

A sentiment Analysis Project

Hanaa Louatib, Leana Neuber & Lilia Cherif

Master-II Big Data & Machine Learning

efrei PARIS
Ecole d'ingénieurs du numérique

Summary

Demo

Project Management

Presentation of our project: A sentiment analyser

Our Machine Learning Model

Our User Interface

Docker and its aim

Demo

Let's run our app

Get your test sentence ready!

Project Management

CODE MANAGEMENT

- New branch for each feature
- Using pull requests to assure better code quality

TASK MANAGEMENT

- Ensures tasks divison and project advancement
- Four columns: To do, Doing, To be reviewed, Done

A sentiment analyser

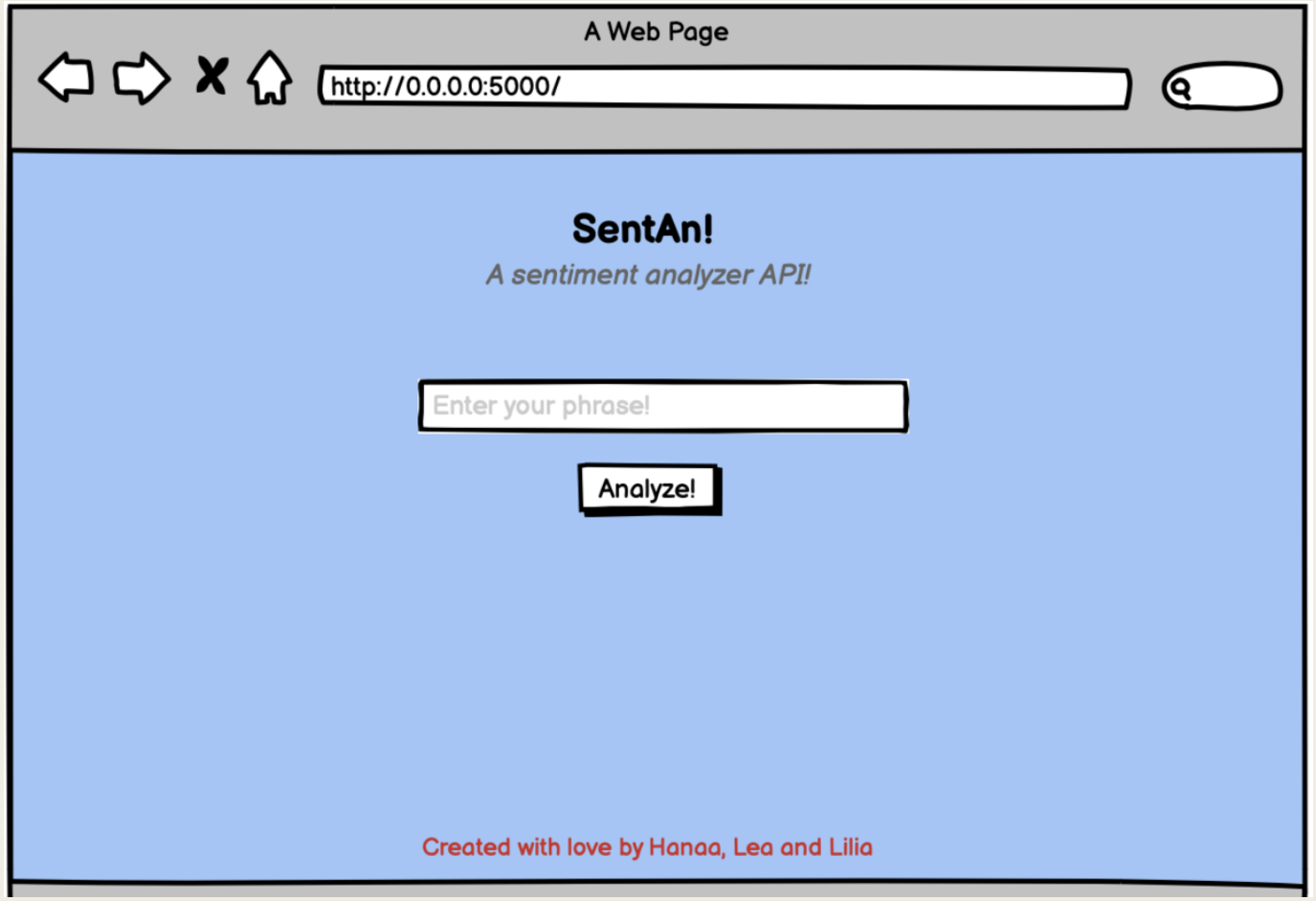
- In the form of an app
- Running through a web interface
- Returning sentiment: positive, neutral, negative
- Text ⟶ Sentiment : Machine Learning Model
- App format for distribution: Docker Image

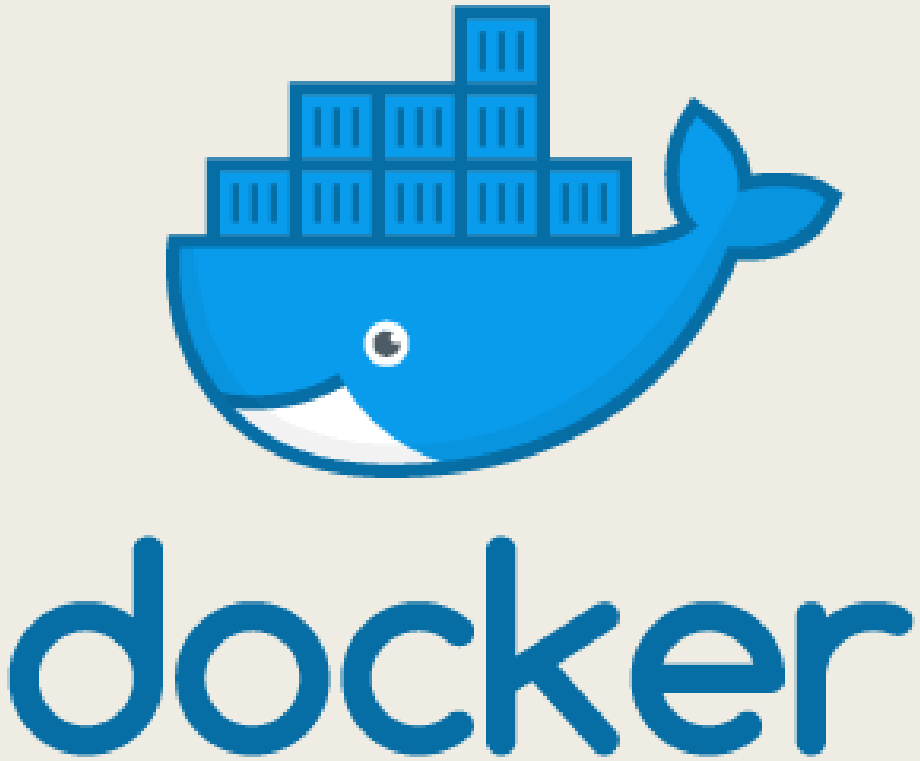
Machine Learning Model

- Dataset : Amazon Reviews
- Cleaning :
  - *VADER sentiment analysis : mapping lexical features*
- Using SVM for prediction
- Reached accuracy : 85%

Frontend and user views

- App available through a web interface
- After running the Docker : https://localhost:5000/
- Using HTML and CSS
- Four different views





Docker and its aim

- Sentiment Analysis App running through a Docker Image
- Working on a DevOps environment
- Two containers : App & Redis
- Redis : fast and persistant