

**BestBET**

***Make the right choice!***

Saptarshi Bhattacharya

Neha Gaur

Yamir Godil

Isamu Mar

Abdul Salama

# GOAL

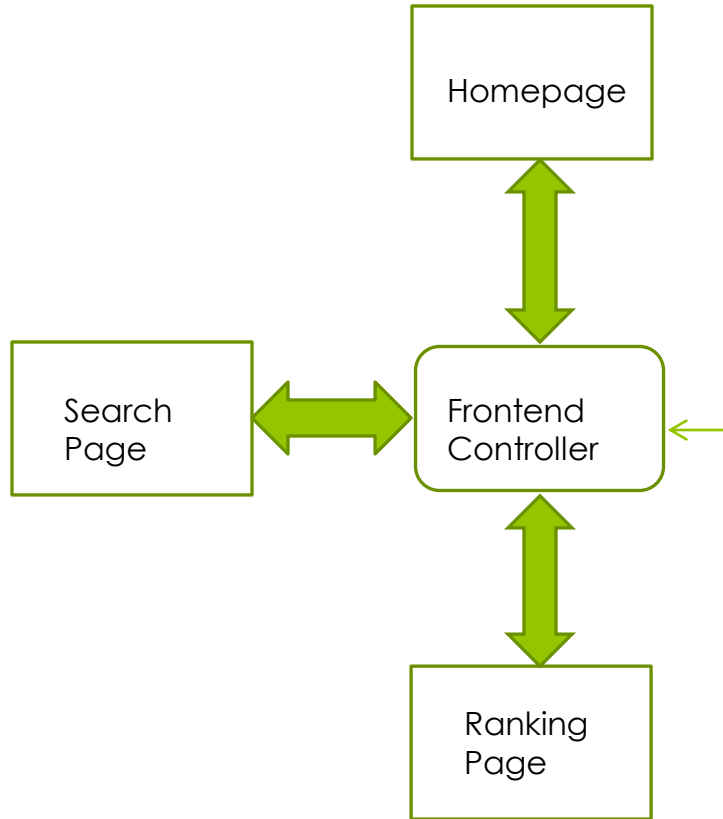
- Many factors driving stock market
- Difficult for investors to analyze the immense amount of data online and make decisions
- Build a system making it easier for investors to interpret the data

# Aspirations

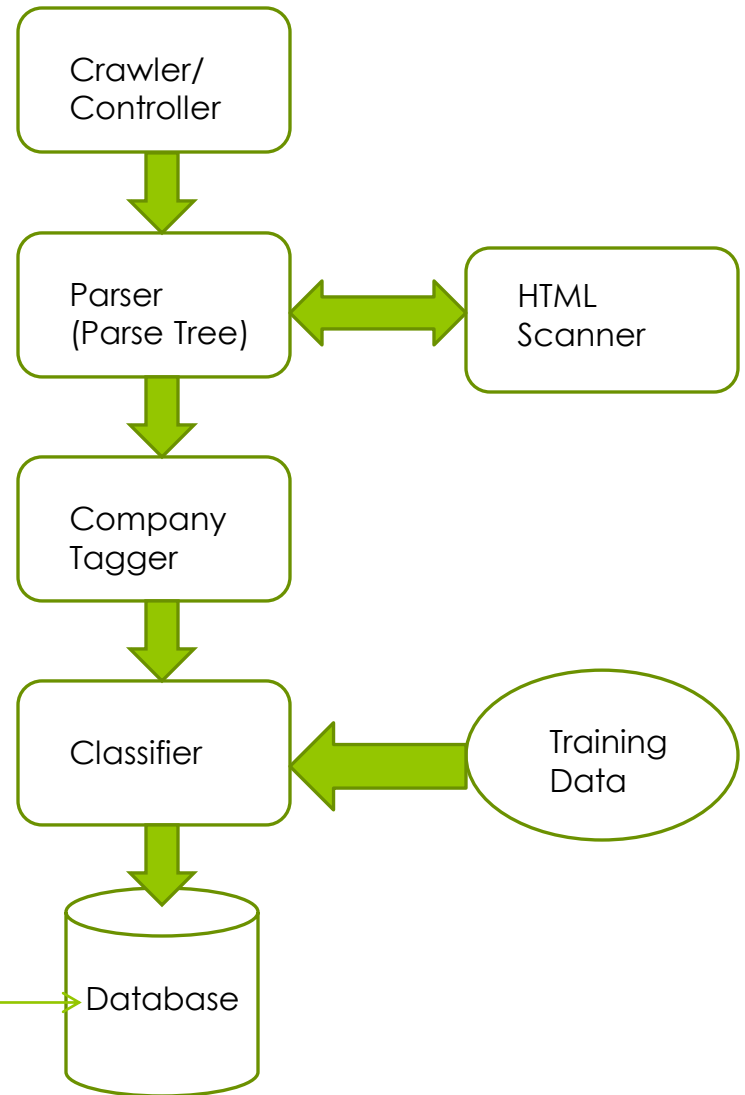
- One of the driving factors: **NEWS**
- Build a tool to classify news articles well.
- Begin with the Naïve Bayes Classifier and modify the algorithm to improve results.

# Architecture

## Front End



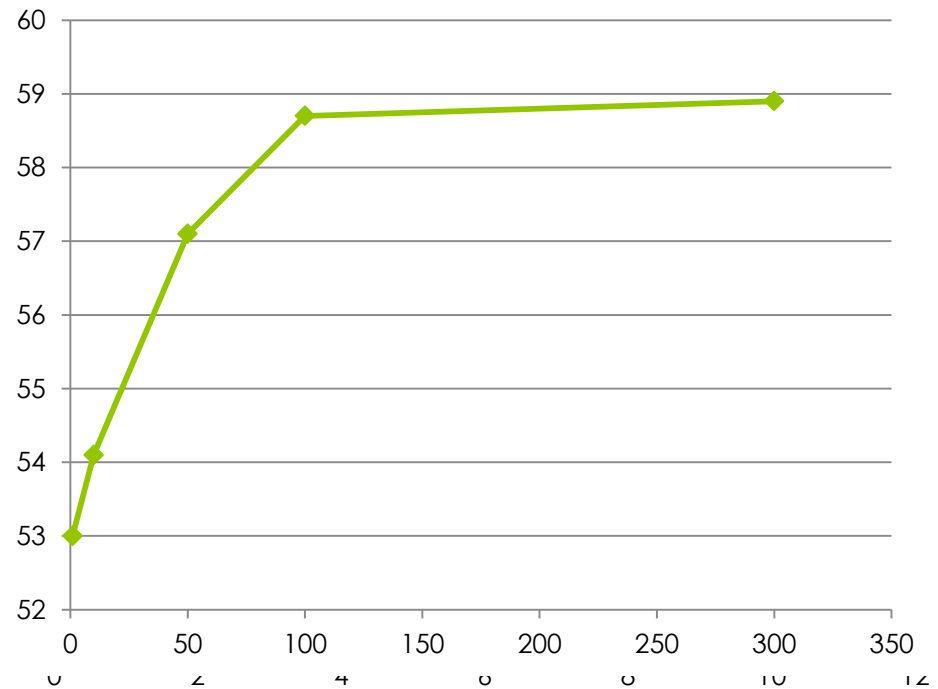
## Back End



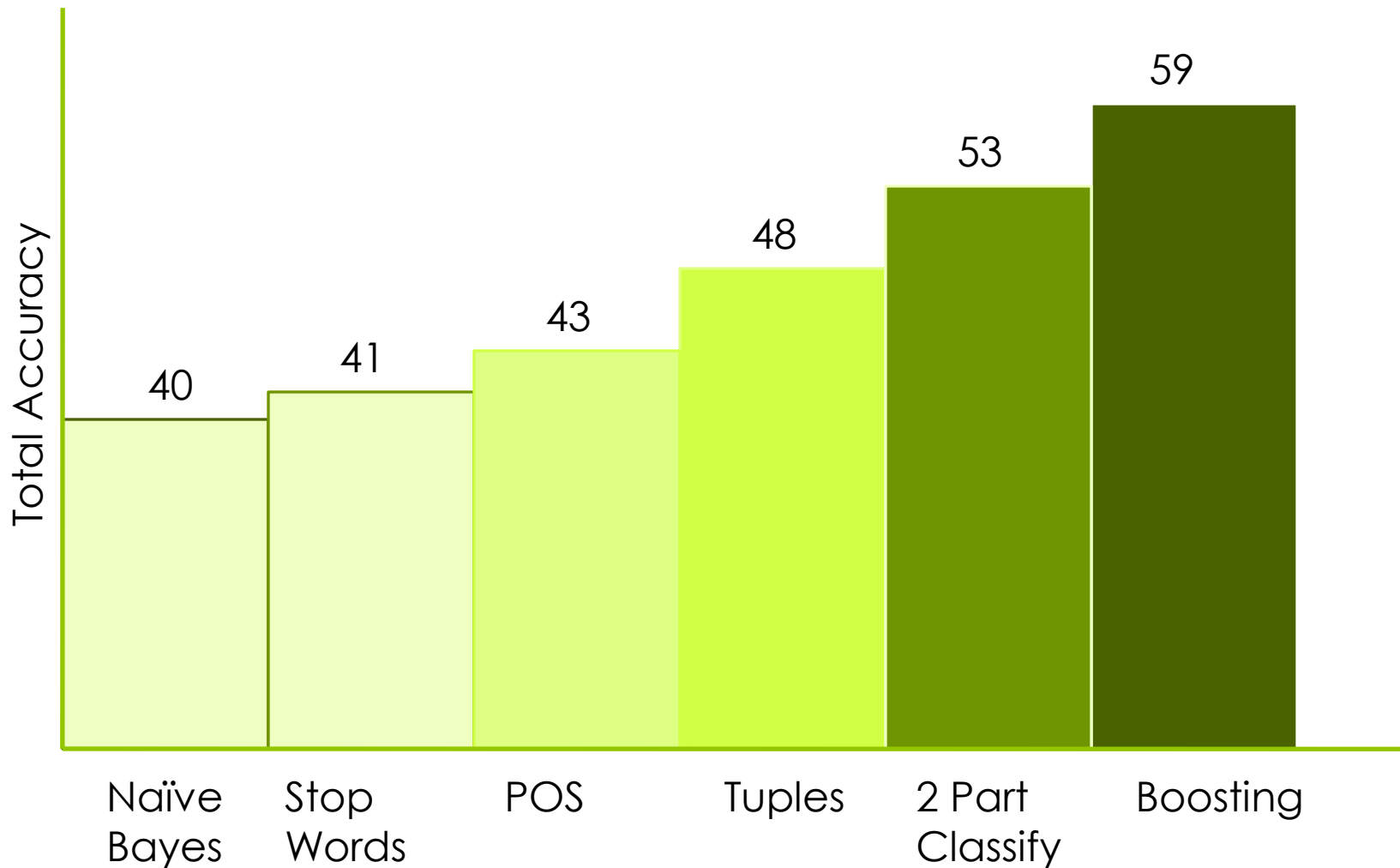
# Experimentation

- Naïve Bayes
- Omitting Stopwords
- Part of Speech Removal
- Tuples
- 2 Part Classification
- Boosting

**Boosting - Accuracy**



# Sentiment Analysis Results



# Challenges

- Web pages have ads, comments,..., etc., which make the classification of articles difficult.
- We could not allocate enough of our resources to label vast amount of training data
- Google API failed us, Bing saved us

## What did we learn?

- New technology: building a web app (C#, ASP.NET MVC Framework)
- Building a crawler
- Resolving conflicts between differing ideas/opinions
- Dividing the project into well-defined parts that could be integrated later on
- Team meetings/communication = essential to a successful project



**DEMO**