BestBET

Make the right choice!

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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
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.
- Naïve Bayes
- Omitting Stopwords
- Part of Speech Removal
- Tuples
- 2 Part Classification
- Boosting
Sentiment Analysis Results

<table>
<thead>
<tr>
<th>Method</th>
<th>Total Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naïve Bayes</td>
<td>40</td>
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<tr>
<td>Stop Words</td>
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<tr>
<td>POS</td>
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<td>2 Part Classify</td>
<td>53</td>
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<tr>
<td>Boosting</td>
<td>59</td>
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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