**Formal Report**

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Abstract

1. **Introduction**

Price of a stock is closely related to the news about it. If some pieces of news regarding to the stock are positive, which means market is enthusiastic to the stock, the stock may go rise. Hence, We can use a classifier model for text to deal with the problem. Naïve Bayes model is adopted in this work. Other three models written by nltk including Naïve Bayes, Decision Tree and Max Entropy are adopted to make a comparison with my model.

1. **Model & Algorithm**
2. **Naïve Bayes Classification**

Generally, Bayes’ Rule is applied to Documents and Classes as following:

Here, is rather important, in which researchers devote many time to finding good features. In my model, I adopt three kind of simple features, which are bag of words, bag of bigram words and sentimental adjective features.

1. **1**
2. **2**
3. **Experiment**
4. **Discussion**