# Chapter 8

**Conclusion**

**8.1 Summary**

In this project we were able to successfully implement the sentiment analyzer tool for analyzing and classifying twitter data. The tool developed is capable of classifying the tweets as to belong to one of positive, negative or neutral sentiments.

Naïve Bayes algorithm has been used for the purpose of classifying the tweets, the training data was obtained from Stanford machine learning repository. The tweets to be analyzed are obtained real time based on the keyword (subject) entered by the user.

The training data consisted of pre classified tweets which in turn was used by Naïve Bayes algorithm for the purpose of classifying the retrieved tweets. The tweets classified are presented in the form of a pie chart which enables the user determine the overall sentiment of a subject.

The performance of Naïve Bayes algorithm implemented was satisfactory. The efficiency of the algorithm is mainly dependent upon the quality of the training data. By using the training data obtained from Stanford machine learning repository the algorithm implemented was able to reach an accuracy of close to 50%.

**8.2 Limitations**

Some of the shortcomings in our project are:

1. The application is not capable of analyzing very large number of tweets.

2. The application does not analyze tweets written in other languages accurately.

3. The accuracy of the algorithm implemented is highly dependent on the training data.

**8.3 Future enhancements**

Some of the future enhancements are :

* The number of tweets analyzed can be increased. For larger dataset(In terms of MBs GBs) or big data, distributed computing technologies like Hadoop can be used.
* The application can be made to analyze tweets other than the one written in English language
* The application could be made more responsive by using Threads and Parallel/Cloud Computing
* Efficient algorithms such as Support Vector Machines (SVMs) for analysis can be used.
* This application can be converted into a mobile application (android, iPhone, iPad) where the users can analyze the tweets on the go and share the results on facebook.