**Literature Review**

In last few decades , a number of research have been performed on Sentiment analysis. Recently sentiment analysis on social media data has become very popular. Generally sentiment analysis is done with the help of machine learning algorithms thus to find out whether a given text is positive or negative or neutral.

The first work on sentiment analysis aimed at classifying text by overall sentiment, not just focused on any one topic. They used various machine learning algorithms such as Naive Bayes, maximum entropy , and support vector machines (SVM). They found out that classification of sentiment is very tedious .They concluded that supervised machine learning algorithms are the foundation for sentiment analysis[13].

Collection of large amount of data has been helpful to find out what people are thinking or presuming. Recently with the boom in social media sites , data available for opinion mining is very large. There are other recourses such as blogs, public comments on different sites etc. which are helpful to decide people's opinion about the topic. Various new systems are built depend on different coding languages as the work in the field of data mining is booming. Nowadays there are libraries and commands available which can perform live research [14].

Natural Language Toolkit (NLTK) is a library. This library is a combination of many script modules, a big set of structured files, different tutorials, numerous statistical functions, machine learning classifiers, etc. Natural Language Processing is the primary purpose of NLTK. Developers develop various new components and substitute them with existing component, more structured scripts are written and better results are given by dataset[15].

Researchers performed a real time analysis of public responses for 2012 presidential election in U.S. to predict election result. Their sentiment analysis was very fast compared to traditional content analysis. The system they explained is very effective for media and researchers [16].

French Polynesia went through the biggest Zika virus outbreak between 2013 and 2014. Increase in Guillain-Barre syndrome was identified during the period of the Zika virus outbreak. There was an expected relation between Zika virus and Guillain-Barre syndrome [17].

In traditional survey based methods , there is a big time gap but in new techniques of big social data mining help us getting rid of that time gap and also take care of privacy concerns in order to study public behaviour on specific issues. In the past sentiment analysis has been performed for getting public views on many social issues such as gender based violence [18] and to find out health related opinions [19,20].