PROJECT PROPOSAL

L.H.T.K.Wishwajith
160719T

1. Title of the project : TWITTER OPINION Visualization

2. Overview of the Project

   The project is about visualize the emotions and other information taken from the tweets.The project is building a web application that visualize the emotions of the tweets.The input of the system is a keyword that user want to check.Then system provide output plots relevant to the keyword.
   Output:
   - A world map that present the intensity of the emotions.
   - A timeline that present the tweet count of emotions.The scale can be change(per minute,hour,day)
   - A table that visualize the intensity of emotions according to the user key word.
   - A wordcloud based on the content of the tweets
   - A tweet board that user can see the relative tweets for given keyword

3. Objectives of the Project.
   - Develop a web based system to sentiment analyze the tweets and visualize the emotions of the tweets.
   - Provide a user-friendly application for data visualization.
   - Automate the process of sentiment analysis and plot the relevant output.

4. The Need for the Project

   Opinion mining(sentiment analysis) is extremely useful in social media monitoring.It allows to gain overview of the wider public opinion behind the certain topics.In this way companies can

   - Determine the marketing strategy and improve campaign success.
   - Improve customer services.
   - Research about market trends and opponent products.

5. Scope of the Project
   User type a keyword, select date range and click search.System pulled recent tweets that contain the user's keyword and perform a sentiment analyse against the these tweets.Output plots are visualize in three different plots.

   Time line - A bar chart that contain number of tweets present at different time.
   Heat Map - Tweet emotion intensities are drawn on the world map.
   Intensity table - Intensity of emotions with respect to the user's keyword.

Wordcloud - Represent the frequency of the words in tweets

Tweet board - Shows the relevant tweets for given keyword

6. Deliverables .

   A web based software system.

7. Overview of Existing Systems and Technology

   "NCSUE tweet sentiment visualization app" is a similar exiting system which use machine learning algorithms, naive Bayesian network, support vector machines and maximum entropy approaches to estimate emotions in the natural language text[1].

   - Twitter API
   - "Tweepy" python library to stream tweets from twitter.
   - Emotion analysis algorithm.

8. References

[1] HTTPS://WWW.CSC2.NCSU.EDU/FACULTY/HEALEY/TWEET_VIZ/TWEET_APP/
[2] HTTP://WWW.TWEEPY.ORG
[3] HTTPS://WWW.CLARABRIDGE.COM/SENTIMENT-ANALYSIS/
[4] HTTPS://BLOG.INSIGHTSATLAS.COM/7-BENEFITS-OF-SENTIMENT-ANALYSIS YOU-CANT-OVERLOOK