

This java application allows you to read a user's tweet log (via a .txt file) and get the overall sentiment from the tweet log (via a lexicon file).

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*****
*   ATU - Dept. of Computer Science & Applied Physics   *
*                                                         *
*   Virtual Threaded Sentiment Analyser                 *
*                                                         *
*****
(1) Specify a Text File
(2) Specify a URL
(3) Configure Lexicons
(4) Execute, Analyse and Report
(-1) Quit
>

```

When the user runs the java program, they are greeted with the menu above.

- If the user enters 1 into the terminal, they will be prompted to paste into the terminal the text file pathway for the twitter/X user they will be analysing. An example input would be: "C:\Users\Owner\Desktop\tweets\gen22.txt". If the user enters 0 during this process, no value will be assigned (This is so you don't have to re-enter the file path again if you accidentally enter 1).
- If the user enters 2, nothing will happen except for a "Not implemented" message appearing in the terminal.
- If the user enters 3 into the terminal, they will be prompted to paste into terminal the text file pathway for the lexicon they will be using. An example input would be: "C:\Users\Owner\Desktop\lexicons\afinn.txt".

If 4 is entered into the console but no files were previously assigned, nothing will happen, and the menu will be brought up again. If files were assigned the sentiment will be calculated.

The program will go through all words in the twitter/X file and for each word in the text file, the program will go through the lexicon and see if that word exists in the twitter/X file. If the word exists, the corresponding value in the lexicon will be added to either a positive variable or negative variable.

Once the twitter/X file has been fully searched through, the Score and Sum(SaS) and Score from Total(StF) are calculated and then displayed along with if the overall sentiment is:

- Positive (Above 1)
- Negative (Below -1)
- Neutral (-0.1 to 0.1)

```

(-1) Quit
>4
Loading...
Score Sum: 96.0
Sentiment Score: 2.4025974025974026
Overall Sentiment is Positive

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$$sentiment = \sum_{i=1}^n polarity(w_i)$$

$$sentiment = \frac{w_{positive} - w_{negative}}{w_{total}}$$