IDEA:

Our application works on the idea of analysing the sentiments of the user based on his posts and comments and at the end of the period decided by the user, a report is sent which is the analysis of a person's sentiments, negative or positive.

The basic idea behind this application is to translate social data into tangible insights and make use of it in a purposeful way.

SOLUTION:

The solution of this problem can be divided into two flows:

FLOW-1:

Flow-1 mainly contains the following activities:

- User login
- Adding social media account
- Tracing social media posts
- Calling the API of the social media application
- Sentimental analysis is performed
- Report is generated
- User sets time period after which the report of the sentimental analysis is sent to him
- This report is sent to the user in a way he/she demands.

FLOW-2:

Flow-2 mainly contains how sentimental analysis is done. The main steps in flow-2 are as follows:

- The entire post is broken into words.
- Then, unnecessary words are flushed.
- Frequency of a given word is found.
- Then, sentiment of each word is found, whether it is positive or negative.
- With the help of random forest classifier train, finally the sentiment analysis is done.

TECHNOLOGY STACK:

WEB APPLICATION:

- Python
- Django
- Celery Beat
- HTML, CSS, JavaScript, Bootstrap
- D3 (For Graph Data Visualisation)
- Nginx Server
- Postgre Database
- Social Media API

SENTIMENTAL ANALYSIS:

- Python
- PensorFlow(machine learning library)
- NITK-library python
- Random forest classifier

OBSTACLES:

The main obstacles of this application are as follows:

- In order to use the comments or posts on social media, their APIs should be callable by us. But the APIs of all applications can be called by us limited number of times. This limit turns to become a major obstacle of the application.
- Moreover, the personal websites (e.g. Blogs, etc.) do not have their APIs, which becomes a concern because the posts and comments cannot be accessed by the machine.
- Another matter that acts as a stopper is that if the comments or posts include sarcasm, then the software might not give the result up to required accuracy.

Thus, these become the subjects of major concern of this application.