IBMHACKCHALLENGE

1. NAME OF THE PROBLEM STATEMENT

Problem Statement 3:

Help me with my mood – with Social-media Health Analysis and Display Engine (SHADE)

2. TEAM DETAILS

Team Name: SENSEMUSERS

Team Size: 4 members

Team Members: Arnab Das

Naina Roy

Ameeta Som

Sudhanya Gandhi

3. PROBLEM STATEMENT DESCRIPTION

With the advances in technology about sentiment analysis and predictive analytics, it has opened many avenues for researchers and enterprises to understand human mental state better. The proposed problem is to know the emotion/mood of a person, to help in eliminating any negative state of mind that might have adverse effect on his/her daily life. Research has shown that social networking activity is a good source to gauge a person's state of mind. Mood of a user is often reflected in his/her social content, like tweets, blogs, article, status updates, etc. Timely analysis of a user's social media can be used to improve the feelings, and even save a person's life in an extreme case! Hence it becomes important to regularly analyse the social-media health of our friends and family to take timely action.

4. SCOPE OF WORK

Mental health is important at every stage of life, from childhood and adolescence through adulthood. With the growing competition in today's life, it has become common to develop stress, anxiety and other mental issues. The world right now is in the middle of a mental health crisis. It's estimated almost half the population suffers from depression at some stage throughout their life, even without realising it. In this situation, this app will come to great help in analysing the mental health through a user's social media activities as well as help him/ her get better with the help of social media analysis.

FOR BUSINESS USE:

Sentiment Analytics is basically the process of determining whether a piece of writing is positive, negative or neutral. It is a way of gauging the speaker's opinion or attitude. Businesses are using it increasingly to unlock the hidden value of the text(primarily tweets, reviews, comments on social media) in order to understand the customer's opinions about the company. This helps the company take better and informed decisions to improve customer experience and satisfaction.

Sentiment Analytics for the Telecom Company

Negative review Mixed review Positive review Great work done #XYZ Problem Although the value added Dear #XYZ there is no network in services being provided are resolved by customer care in just my area and internet service is great but the prices are high pathetic from the past one #VAS #XYZ #ThanksXYZ week. Kindly help me out -Dated: 10/09/17 -Dated: 5/06/17 -Dated: 10/09/17 Sentiment Analytics Model Analyze output to implement Actionables like:

- Improve service quality and increase quality checks for locations with max negative reviews.
- · Train employees and improve infrastructure of areas with poor service.
- Ensure dedicated customer complaint teams for some areas.
- Tweak the marketing strategy to convey the right message to the customers

* XYZ depicts name of the telecom company

This image shows how a telecom company gets three different kinds of reviews on its twitter handle. The company uses machine learning algorithms to build a sentiment analytics model which helps it to gauge the nature of the reviews i.e negative/positive/mixed. This helps the company to implement actionables like improving quality of services and quality checks in areas with maximum negative reviews etc which eventually helps in improving customer experience in future.

5. TECHNOLOGIES / PLATFORMS / APIs USED

- IBM Cloud
- IBM Watson(Visual Recognition, Natural understanding, Tone Analyzer)
- Python Programming Language and its Packages(Facebook, tkinter, json)
- Pycharm(IDE for PYTHON)

6. ROLE OF TEAM MEMBERS

- Arnab Das (Planning and execution and working on Visual Recognition)
- Naina Roy (Creating GUI interface using tkinter)
- Ameeta Som (working on tone analyser module)
- Sudhanya Gandhi (working on natural language understanding)