IBM Hack Challenge 2018: Team Persona

Problem Statement: Problem Statement 3: "*Help Me with My Mood*"

Team Size: 3 Members

Team Members:

- Sanskar Jain
- Bhanu Dutta Parashar
- Saransh Sharma

Problem statement defined in simple terms:

"*Help me with my Mood*" with "**Social-media Health Analysis and Display Engine (SHADE)**". 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 challenge 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.

Scope of Work:

- **Deliverables:** We provide a full stack web application that allows user to register/login to provide recommendations. Recommendations are in the form of videos, images, songs and articles that can be viewed on recommendation page as well as daily mails will be sent to users if their mood is critical.

- **Timeline:** Initially the project was a flowchart. The project started as a group of small scattered modules, including modules to scrap and/or extract data from social media sites, sentiment analysis using IBM Watson API, recommendation system using reinforced learning and UI and backend of Website which is holding everything together. Then modules were joined together, and additional functionalities like mailing system and a continuous 'watcher' system to send mails to users were finally created. Simultaneously dataset of images, videos, songs and articles was collected.

Technologies Used:

Python and its packages:	Web Technologies:
1. Flask 2. Keras 3. IBM-Tone-Analyzer 4. Bcrypt 5. json 6. SQLAlchemy 7. BeautifulSoup 8. Python twitter REST APIs 9. numpy 10. smtplib	1. HTML 2. CSS 3. Bootstrap 4. JavaScript

Role of Each Member:

- **Sanskar Jain:**
    o UI/UX Designer
    o Website Backend creator
    o Database manager
    o Login/Registration handler
    o Developed 'Watcher' functionality
    o One who joined all the pieces together
    o Documentation
- **Bhanu Parashar:**
    o Extracting tweets from Twitter
    o Scrapping Public Instagram posts
    o Creating and Training Neural Network for converting emotions to recommendation
    o Mailing System
- **Saransh Sharma:**
    o Database collection
    o Sentiment analysis

GitHub Link: https://github.com/sanskarjain1997/Persona

YouTube Link: **https://youtu.be/OxmJJuA8hIw**