Moody - An App to Help With Your Mood

Problem Statement -3

Help me with my Mood- Social-media Health Analysis and DisplayEngine (SHADE).

Close to 800 000 people die due to suicide every year, which is one person every 40 seconds. Nowadays more and more people are becoming prone to mental health issues than before. Analysing a person's mood is the first step towards predicting and preventing extreme situations such as suicide.

Scope of Work

- Our solution proposes a simple web app as a solution to the problem.
- Data from user's social media is collected and stored in a database.
- Sentiment analysis is performed on this data to gauge a person's mood.
- If he is sad, uplifting music is suggested based on his tastes in music. Comic/ funny videos are also suggested.
- A chatbot is provided for the user to talk to in cases where they are lonely.

Technology Stack

The technology stack comprises a Web App using the Flask microframework. The webapp will have a sign-up page where users can create an account. Their preferences for music artists and language is asked which will be used to suggest music and funny videos to uplift their mood.

4 worker processes are running on the backend on a Heroku server.

- 1. Twitter worker Constantly gets new tweets of the user and uploads it on the database, using the Tweepy API.
- 2. NLU worker Using IBM Watson Tone Analyser to analyse the tweets and get the user's mood. Keywords are also obtained and this is stored in the database.
- 3. Spotify Worker Using the emotion values in the DB, a call is made to the Spotify API. The preferences of artists given by the users are used along with the mood. Depending the mood the values of energy, valence (how happy the song is), instrumentality are varied to play an appropriate song.
- 4. Youtube worker The Youtube Data API is used to search for funny videos in the user's preferred language. If the user is joyful, videos related to the tweets are displayed. The keywords from the Watson NLU API are used to search for appropriate videos.

Watson Assistant

Studies have shown that the main cause of depression is due to loneliness. Often if people have someone to share their sorrow with it lightens their mind. To solve this issue, a chatbot has been integrated in the application.

This bot runs using the Watson Assistant in the back-end. It will be integrated into the web application using Chatlio.

The Team (2 members)

- 1. Aravind B S
- Roles:
 - o Building the Web App.
 - Complete UI/UX design.
 - DevOps deployment and testing

2. Ashmita Raju

- Roles:
 - o Back end processing using the Watson, Twitter, Spotify APIs
 - Watson Assistant set up and integration