**TEAM NAME**: - BITGAMA

**TEAM MEMBERS and ROLES**: -

1. ABHIJEET PANDEY – Frontend and Backend
2. MAYANK MISHRA – Frontend and Backend
3. ATUL KUMAR – Database and Backend
4. GAURAV KUMAR – Android app

**PROBLEM STATEMENT**: -

“HELP ME WITH MY MOOD”. DESIGN A WEB/MOBILE APP TO PERFORM SENTIMENTAL ANALYSIS ON A PERSON BY MONITORING HIS SOCIAL MEDIA ACTIVITIES (such as TWEETS) AND SUGGEST HIM SONGS etc. TO HELP HIM WITH HIS MOOD.

**IDEA**: -

We propose to build an interactive Web and Android App that would monitor a person’s tweets and perform sentimental analysis to calculate the overall mood of the person thereby providing him with songs that soothe his mood.

For instance, if the mood of a person comes out to be “SAD” we plan to suggest him/her inspiring and motivating songs that would help cheer him up. Moreover, we plan to make use of the GEOLOCATION API to suggest him hospitals or doctors on the basis of his current location, if the person’s mood is found to be critical.

A person’s emotions and moods have direct bearings on his/her daily activities. It is necessary to eliminate negative emotions that our family or friends might be experiencing, to help them lead a better 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. 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 analyze the social-media health of our friends and family to take timely action.

**TECHNOLOGY STACK**: -

* To provide the user with an interactive UI, the front end has been designed with HTML5, CSS, JAVASCRIPT and the frameworks used are BOOTSTRAP and JQUERY.
* The back-end part has been coded in FLASK framework of PYTHON. FLASK is a light-weight WSGI web application microframework for PYTHON based on JINGA 2 templating engine with the ability to scale up complex applications. The database has been provided by using an ORM package in FLASK named SQLALCHEMY.
* For Android: Android app has been developed with Android Studio and Java is used for the coding part.
* API: -

1. TWITTER API (TWEEPY): - An easy-to-use Python library for accessing the Twitter API to fetch user’s tweets.
2. SPOTIFY API (SPOTIPY): - A light weight Python library for the Spotify Web API to fetch songs according to user’s moods.
3. GOOGLE GEOLOCATION and PLACES API: - The Places API is a service that returns information about places using HTTP requests. The Geolocation API gives information of the current location.
4. IBM WATSON TONE ANALYZER API:- The IBM Watson Tone Analyzer service uses linguistic analysis to detect emotional and language tones in written text.

**UNIQUE VALUE PROPOSITION**: -

1. IBM WATSON TONE ANALYZER: - It has been used to analyze emotions and tones. It helps in predicting whether person is happy, sad, confident and more.
2. SPOTIFY API: - Spotify has large music catalog. So it has been used to recommend music to a person from a wide range of collection.
3. GEOLOCATION AND PLACES API: - Offers an up-to-date information about the hospitals nearby. It is mandatory for people with critical mood issues.

**BUSINESS IMPACTS: -**

* Connecting with other company’s APIs allows the product to fast track adding features, functionality and tools that would otherwise take years to build.
* Using APIs of Spotify and Twitter helps new updated functionality become available over time as these companies mature and develop their API.
* Using ORM , one can have a rich , object oriented business model and still be able to store and write effective queries quickly against a relational database.

**DATA FLOW: -**

