Brogrammerss

Help me with my mood

3) Role of Team Members :

	Name	Role
1	Amitabh Tiwari	i) Development of ibm-aggregator and ibm-recommender modules ii) Deployment of Node.js and python servers
2	Akash Shendge	i) Development of ibm-analyser ii) Dashboard

4) Scope of work :

Scope of work consists of development of following modules :

a) Data Aggregator :

It will be a REST Server to aggregate data from different social media websites and put it in a NoSQL DB.

b) Data Analyser :

It uses the data aggregated previously and use IBM Watson components like Language Translator, NLP and Analytics, Tone Analyser, Personality Insights, Custom Models to understand user's state of mind.

c) Recommender Engine :

Once the user's state of mind has been understood, recommender engine gives tips to the user. It uses LDA and TF-IDF NLP models to suggest recommendations.

d) Dashboard :

Dashboard presents the details aggregated from social media platforms in visual format such as entities user is tweeting about, keywords used in the tweets etc.

5) Technology Stack :

a) Programming Languages : NodeJS with Express Framework, Python
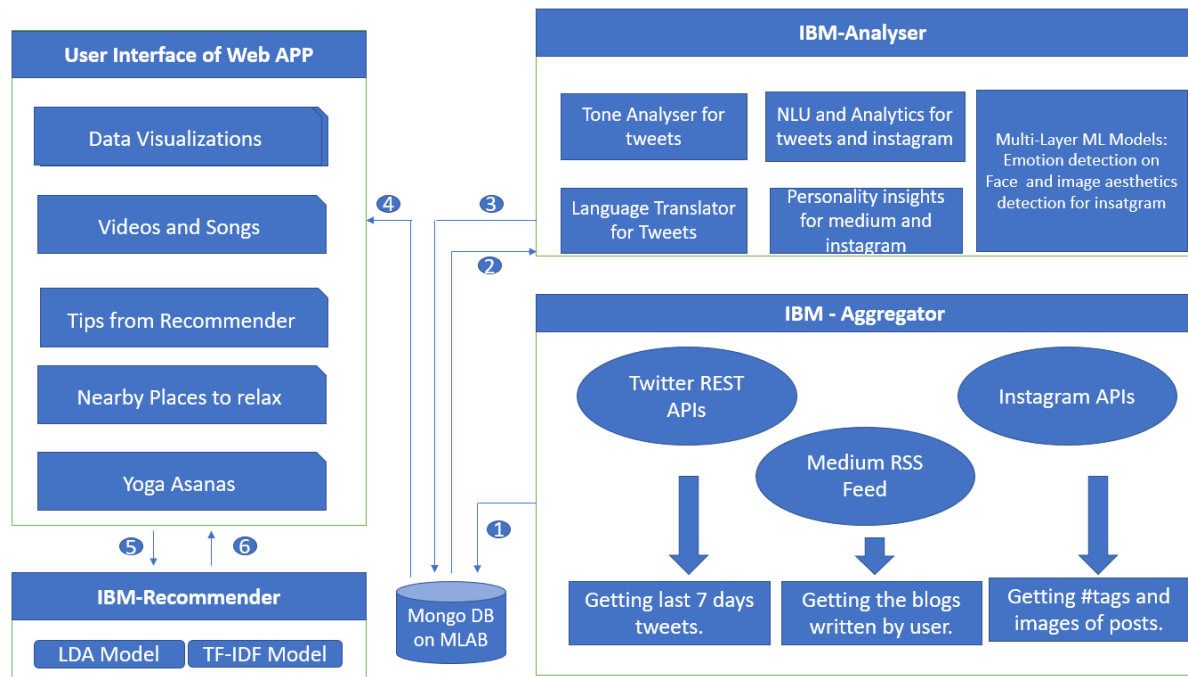
b) Database : MongoDB hosted on MLAB

c) Hosting Servers : IBM Cloud, Heroku

d) Server Type : REST

e) Machine Learning Models Used : LDA and TF-IDF

f) Third Party APIs : Twitter REST API, Medium RSS Feed, Instagram APIs, YouTube APIs, Nearby Places APIs, Google Chart APIs, Algorithmia Models, IBM Custom Model APIs, IBM Watson Language Translator, NLP and Analytics, Tone Analyser, Personality insights etc

6) Architecture of Solution Implemented :

User Interface of Web APP

- Data Visualizations
- Videos and Songs
- Tips from Recommender
- Nearby Places to relax
- Yoga Asanas

IBM-Recommender
LDA Model | TF-IDF Model

Mongo DB on MLAB

IBM-Analyser

- Tone Analyser for tweets
- NLU and Analytics for tweets and instagram
- Multi-Layer ML Models: Emotion detection on Face and image aesthetics detection for insatgram
- Language Translator for Tweets
- Personality insights for medium and instagram

IBM - Aggregator

- Twitter REST APIs
- Medium RSS Feed
- Instagram APIs

- Getting last 7 days tweets.
- Getting the blogs written by user.
- Getting #tags and images of posts.

7) Architecture of Recommendation System :

Emotion Parameter

FLASK REST SERVER HOSTED ON CLOUD

- Articles
- Pickled Models

Data to ML Models

- LDA Model
- TF-IDF with NER Model

ML Models in work

JSON Response