

Twitter Producer:

The Twitter Producer gets data from Twitter based on some keywords and put them in a Kafka topic.

Twitter Java Client: <https://github.com/twitter/hbc>

Twitter API Credentials: <https://developer.twitter.com/>

ElasticSearch Consumer or MongoDB:

Your Consumer component should get data from your twitter Kafka topic and insert it into Mongo/ElasticSearch(as per your choice) after doing some basic transformations . You can use either elastic search consumer or spark stream or kafka stream (whichever ever suits you)

ElasticSearch Java Client:

<https://www.elastic.co/guide/en/elasticsearch/client/java-rest/6.4/java-rest-high.html>

Write an API service(Java,Scala,Python, your choice) which can be queried using any tool like Postman etc to give the following answers.

Need to implement following functionalities

1. Need to find overall number of tweets on coronavirus (keywords can be virus/covid-19/corona etc) per country in the last 3 months.
2. Next, need to find overall number of tweets per country on a daily basis.
3. Also need to find the top 100 words occurring on tweets involving coronavirus. (words should be nouns/verbs and not involving common ones like the, is, are, etc etc).
4. Find the top 100 words occurring on tweets involving coronavirus on a per country basis.
5. Top 10 preventive / precautionary measures suggested by WHO worldwide /country wise.
6. Total no. of donations received towards COVID 19 country wise, in all the affected countries.
7. Ranking of impacted countries over the last 2 month on a week basis, to see who was standing where at any given week.
8. impact on economy, country wise analysis, global analysis, trend analysis etc.
9. Using this post one can get the required data. I have not tested it though but I will check and confirm.
<https://www.quora.com/Where-can-I-get-stock-market-data-set-for-data-analysis/answer/Namita-Patel-13?ch=8&share=fc4bfc7a&srid=T9Iz>
10. Age categorization of affected ones per country per geography along with the temperature in that region. But getting this data is tricky, and I'm looking into it.
11. Workflow orchestration using Airflow - scheduling and monitoring
12. Security / Data Encryption
13. Include a CI pipeline component in the project - Build, Integrate & testing
14. Task buildup in jira and update in tasks at end of the day
15. Scrum minutes updated in excel
16. 1 week review, 1 fortnight review, 1 month review and 1 final review by a panel