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1. Introduction:

1.1 Overview:

This project is based on IBM Watson Discovery service to make it online for continuous delivery and this will be used to deploy it using Node-RED and Integrating it with Slack.

1.2 Purpose:

Being aware of daily news is crucial thing for everyone. For that we can get this app to be used for daily purpose like getting RSS feed online without any interaction, getting top news and many more.

Here in this project we have deployed this news search app that searches news based on the keywords we give, and retrieve that news with most popularity filter.

Moreover, for integration part, we integrated whole service with Slack. Where we can chat with that bot to get desired news.

2. Literature Survey:

2.1 Existing Problem:

As mentioned in previous section that everyone needs news to get informed as well as aware. People use Google Search to search news with keywords and get the desired output.

But every time doing the same task has been boring for them as it will be time consuming, too.

2.2 Proposed Solution:

For this problem, we proposed solution using IBM watson cloud that provides access to clusters to computing large amount of data.

But for our desired solution, there is prebuilt service which we can use just by creating it and integrating it with our APIs.

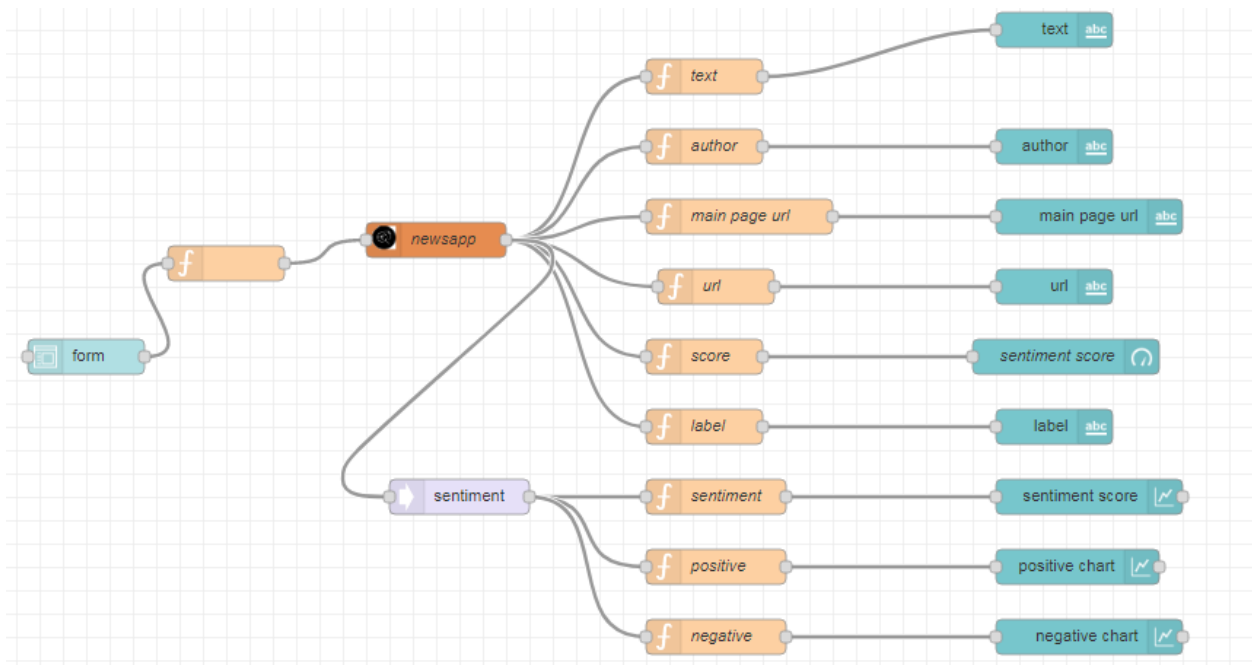
This app can be deployed locally or on server or can be pulled with API so there is not any harm regarding coding complexity and other parameters.

3. Theoretical Analysis:

3.1 Block Diagram of Software Designing (Watson Discovery):



3.2 Node RED Flow design:



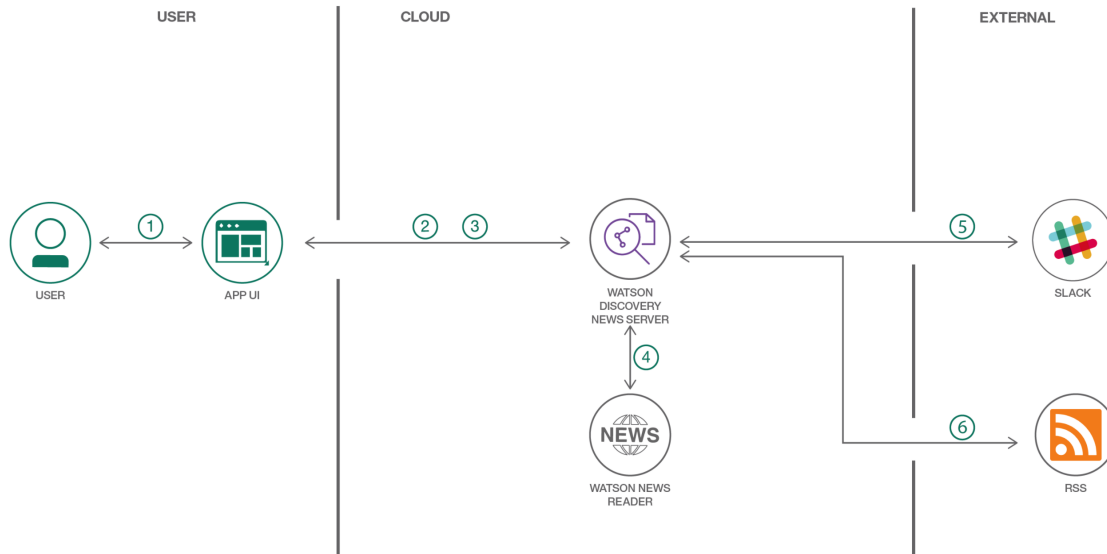
4. Experimental Investigations:

As in dashboard, all steps are given to follow the process of watson discovery and given things can be done to get desired outcome there are some experiments that have been done to understand the watson dashboard clearly.

For more understanding, I have accessed many other services of IBM Watson. But for our desired solution I chose Watson Discovery app for getting done with data of our project.

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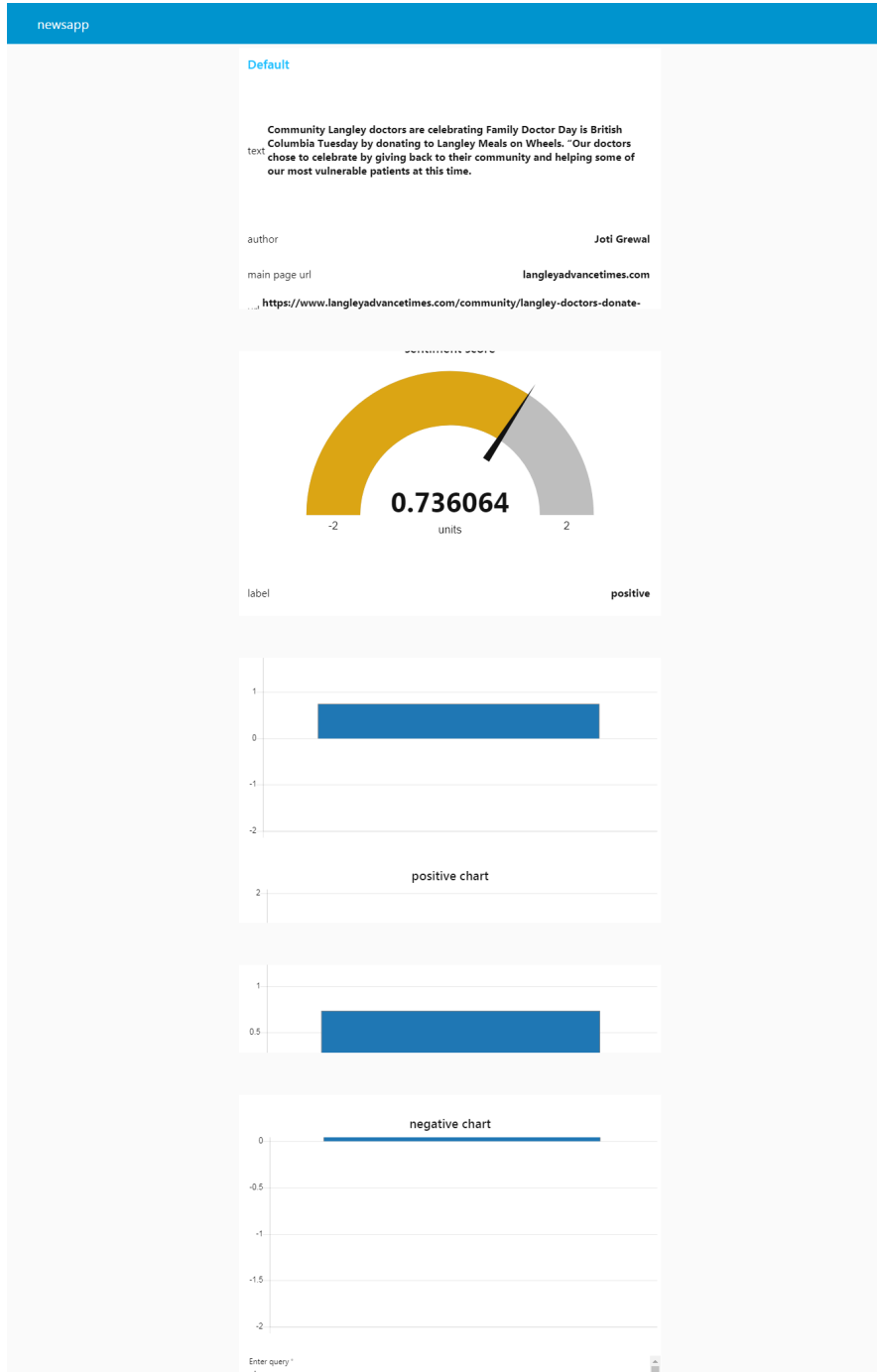
5. Flowchart:



With the extension of Node-RED app, that dashboard will be illustrated in upcoming sections.

6. Results

Here is screenshot of Node-Red Dashboard and Slack bot chat conversation.



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Slack Chatbot conversation:



Prashant jadiya 1:33 AM

@newsbot-pj Hi



newsbot-pj APP 1:33 AM

Hello.



Prashant jadiya 1:34 AM

@newsbot-pj News please



newsbot-pj APP 1:34 AM

Hi there!

What news are you interested in?



Prashant jadiya 1:34 AM

Covid19



newsbot-pj APP 1:34 AM

You want me to search for news articles about
Covid19?



Prashant jadiya 1:34 AM

Yes



newsbot-pj APP 1:34 AM

OK searching...

Here are some news articles...

<https://www.independent.ng/breaking-3-dubai-returnees-test-positive-for-covid-19-in-lagos/>

<https://oraclenews.ng/pregnant-covid-19-patient-gives-birth-inside-lagos-isolation-centre-as-another-67-discharged/> (edited)

 www.oraclenews.ng



Pregnant Covid-19 patient gives birth inside Lagos isolation centre, as another 67 discharged - www.oraclenews.ng

By VICTOR NZE- A total of 67 fully recovered Coronavirus disease (Covid-19) patients were, Saturday, discharged from the various isolation and treatment centres in Lagos. This is also as a pregnant patient at one of the treatment centres in the ...

Sun, May 17th at 1:12 AM

[View Full Message](#)

<https://leaders.ng/three-dubai-returnees-test-positive-for-covid-19-in-lagos/> (edited)

Leaders NG

Three Dubai returnees test positive for COVID-19 in Lagos - Leaders NG

Three Dubai returnees test positive for

7. Advantages & Disadvantages:

Advantages:

- Easy, reliable and fast access to latest news.
- Service without interrupt or intersection.
- Modifiable app and APIs.

Disadvantages:

There are not major disadvantage I found, but there is related to IBM Watson.

- Service will be paid after some definite number of requests.

8. Application:

Applications are listed below:

- Web-app integrations
- API integrations i.e. Slack
- Instant news search application
- Deployed on server or localhost with sentiment analysis

9. Conclusion:

So for in this project, I got insights about IBM Watson services and used Node-RED service of it to deploy Discovery app to that dashboard.

Then with using flow of Node red, we integrated it to sentiment analysis method from IBM watson and directed output to Dashboard app.

At the end, we deployed service to API that is of Slack is shown in results.

10. Future Scope:

- This project can be extended with more functionalities similar to clustering and sentiment analysis that is used currently.
- Document classification or scraping can be done from similar entities.
- Many more things can be done with IBM watson services.

11. Bibilography:

- 1) <https://github.com/IBM/watson-discovery-news>
- 2) <https://nodered.org/docs/tutorials/first-flow>

Appendix A

i) URL of Node-RED UI: <https://node-red-nrybn.eu-gb.mybluemix.net/ui>

ii) Flow code:

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AI Powered News Search App

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AI Powered News Search App

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AI Powered News Search App

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AI Powered News Search App

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AI Powered News Search App

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AI Powered News Search App

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AI Powered News Search App

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AI Powered News Search App

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AI Powered News Search App

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