

1. INTRODUCTION

1.1 Overview

The web is home to massive amounts of data, with more being created every day. Organizations can harness this constant stream of information to gain understanding, plan strategies, and find opportunities. Enriched news data can help your application make dynamic connections across current events faster. In this project, we worked with the basics and build our own news mining web application using Node-RED / Python Web App and the IBM Watson Discovery Service. The user interacts with the created app UI to request relevant news content.

1.2 Purpose

The main purpose of the application is to provide a simple platform for the news readers to simply search the type for the news they want to read. There is a lot of content available on internet about any topic. A large amount of time is wasted in searching most of the relevant news in a large database. Using our news search application, it will check all the news in the database matching the news which the user has searched for. Our news search application will provide top relevant news along with their sentiment. Total sentiment count is also provided so that one can decide about the sentiment of the news.

2. LITERATURE SURVEY

2.1.1 Existing problem

The issue in today's time is that the internet is filled with all kinds of news, be it a genuine news, fake news or an irrelevant news related to user's search. The user has to search his/her specific type of news from different categories of news and then produce a search. This is a long and tiring process which involves a lot of user's time. In this long process the user has to make many clicks, follow many links and open many web pages, all at the same time.

2.1.2 Survey

1. **NOVA: A Knowledge Base for the Node-RED IoT Ecosystem**- Arne Bröring¹, Victor Charpenay², Darko Anicic¹, and Sebastien Püech¹

They presented the NOVA approach, and showcased e.g. the automated license clearing that can be extended similarly to [1], by checking composite license characteristics for compatibility with the planned usage of a node. Second, they addressed the issue of missing links from flows to contained nodes. In fact, the name of listed nodes can be ambiguous. Using SPARQL, they showed a two-fold querying process that addresses this issue and solves ambiguity for many nodes [2]. The possibilities for future use and research on the created knowledge base are broad. Automated quality checks or indexes can be developed based on different input parameters from the NOVA model [3]. This indicates to the users if a component

can be utilized or not. Discovery could be improved too. This can be achieved by semantically annotating nodes and flows with categories, or transforming their keywords into links to well-defined terms [4]. This way, links to a more general knowledge base, such as wikidata [5], could be built up.

2. IBM Watson: How Cognitive Computing Can Be Applied to Big Data Challenges in Life Sciences Research- YingChen, Elenee Argentinis and GriffWeber

Cognitive computing solutions patterned [6] after several key aspects of human thought are emerging in many industries[7]. Their ability to ingest varieties of data and to understand[8], evaluate, and learn from the data has the potential to unlock novel insights. These solutions may enhance areas such as Life Sciences [9], which are in dire need of accelerated innovation [10]. Early pilot projects suggest that cognitive computing infuses novelty and adds speed to the research process. Further study is needed to validate its utility in different therapeutic areas and research domains [11]. Cognitive computing may also add value in the identification and coding of adverse event reports from the text of case reports and published articles [12]. Current pilot projects are beginning to yield insight into whether Watson has the potential to improve both the accuracy and speed of adverse-event detection [13] and coding. As with discovery, multiple test cases across event types, drug types, and diseases will be needed to evaluate and improve Watson's abilities in drug safety [14]. In both cases, IBM will learn from each engagement and improve Watson's ability to both, extracting known relationships and hypothesizing novel relationships [15] through predictive text analytics.

3. Getting Users' Attention in Web Apps in Likable, Minimally Annoying Ways- Dan Tasse, AnupriyaAnkolekar, Joshua Hailpern

A series of recommendations for application designers, based on data from a 1505-person study where participants played a game while a user interface element tried to get their attention was presented [16]. Based on their survey answers, reaction times, and recall, UI elements were identified with glowing shadows [17] as the most likeable and effective way to get user attention. Icons with badges were shown as a good alternative for less-critical information. It was also found that users prefer dynamic visual elements [18] that blend in with the surrounding content instead of pop-ups. Using these recommendations, designers can create user interfaces that are likely to be more useful, usable and appealing [19] to users. Data-driven studies to improve user interfaces were considered as a promising avenue for research [20] and encourage future work in this area.

2.1.3 References

1. N. K. Giang, M. Blackstock, R. Lea, V. C. Leung, Developing iot applications in the fog: A distributed dataflow approach, in: 2015 5th International Conference on the Internet of Things (IOT), IEEE, 2015, pp. 155–162.
2. J. Lehmann, R. Isele, M. Jakob, A. Jentzsch, D. Kontokostas, P. N. Mendes, S. Hellmann, M. Morsey, P. Van Kleef, S. Auer, et al., Dbpedia—a large-scale, multilingual knowledge base extracted from wikipedia, *Semantic Web* 6 (2) (2015) 167–195.
3. R. V. Guha, D. Brickley, S. Macbeth, Schema.org: evolution of structured data on the web, *Communications of the ACM* 59 (2) (2016) 44–51.
4. A. Shemshadi, Q. Z. Sheng, Y. Qin, Thingseek: A crawler and search engine for the internet of things, in: Proceedings of the 39th International ACM SIGIR conference on Research and Development in Information Retrieval, ACM, 2016, pp. 1149–1152.
5. S. Villata, F. Gandon, Licenses compatibility and composition in the web of data, in: Third International Workshop on Consuming Linked Data (COLID2012), 2012.
6. WullianallurRaghupathi, RaghupathiVIJuBig Data Analytics in Healthcare: Promise and PotentialHealth Inf Sci Syst, 7 (2) (2014), p. 3
7. Andreas Holzinger, Matthias Dehmer, Igor. JurisicaKnowledge discovery and interactive data mining in bioinformatics—state-of-the-art, future challenges and research directionsBMC Bioinformatics, 15 (Suppl 6) (2014), p. I1
8. Jerry AvronThe 2.6 Billion Dollar Pill: Methodologic and Policy ConsiderationsN Engl JMed, 372 (2015), pp. 1877-1879
9. Ismail Kola, John LandisCan the Pharmaceutical Industry Reduce Attrition Rates?Nat Rev Drug Discov, 3 (2004), pp. 711-715
10. L.V. Sacks, et al.Scientific and Regulatory Reasons for Delay and Denial of FDA Approval of Initial Applications for new Drugs 2000-2012JAMA, 311 (2014), pp. 378-384
11. Michael Hay, Shamsuddin Hala H, I. Yasinskaya Yuliya, et al.Clinical Development Success Rates for Investigational DrugsNat Biotechnol, 32 (2014), pp. 40-51
12. Sean P. Keehan, Cuckler, A. Gigi, et al.National Health Expenditure Projections, 2014-24: Spending Growth Faster than Recent TrendsHealth Aff (Millwood), 34 (2015), pp. 1407-1417

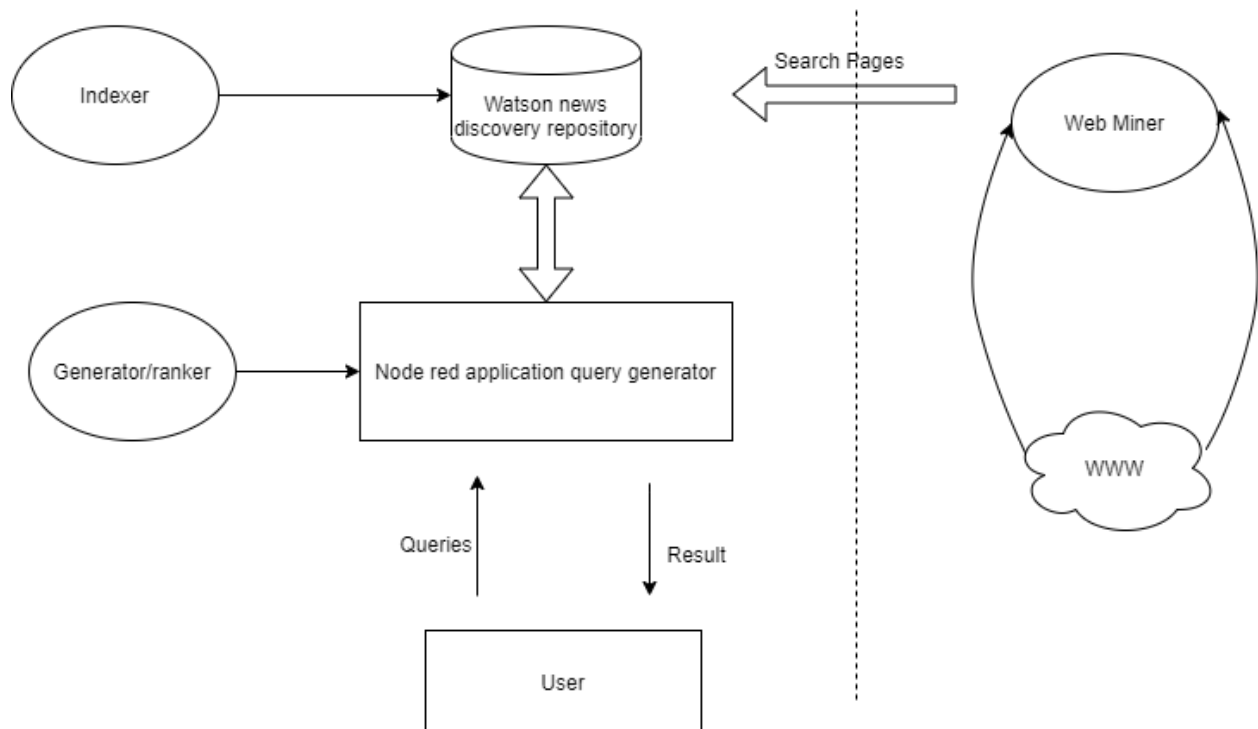
13. Joshua J. Gagne, Choudhary, K. Niteesh, et al. David. Comparative Effectiveness of Generic and Brand-Name Statins on Patient Outcomes *Ann Intern Med*, 161 (2014), pp. 400-408
14. H. Shrank William, K. Choudhry Niteesh, N. Liberman Joshua, A. Brennan Troyen The Use of Generic Drugs in Prevention of Chronic Disease is Far more Cost-Effective than Thought, And May Save Money *Health Aff (Millwood)*, 30 (2011), pp. 1351-1357
15. N. Meekings Kiran, S.M. Williams Cory, E. Arrowsmith John Orphan Drug Development: an Economically Viable Strategy for Biopharma R&D *Drug Discov Today*, 17 (2012), pp. 660-664.
16. Piotr D. Adamczyk and Brian P. Bailey. If Not Now, When: The Effects of Interruption at Different Moments Within Task Execution. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, (2004), 271–278.
17. G. Susanne Bahr and Richard A. Ford. How and why pop-ups don't work: Pop-up prompted eye movements, user affect and decision making. *Computers in Human Behavior* 27, 2 (2011), 776–783.
18. Brian P. Bailey and Joseph A. Konstan. On the need for attention-aware systems: Measuring effects of interruption on task performance, error rate, and affective state. *Computers in Human Behavior* 22, 4 (2006), 685–708.
19. Lyn Bartram, Colin Ware, and Tom Calvert. Moving Icons: Detection And Distraction. *IFIP TC.13 International Conference on Human-Computer Interaction (INTERACT)*, (2001), 157–166.
20. Jan Panero Benway and David M. Lane. Banner Blindness: Web Searches Often Miss “Obvious” Links. *Proceedings of the Human Factors and Ergonomics Society 42nd Annual Meeting*, (1998), 463–467.

2.2 Proposed Solution

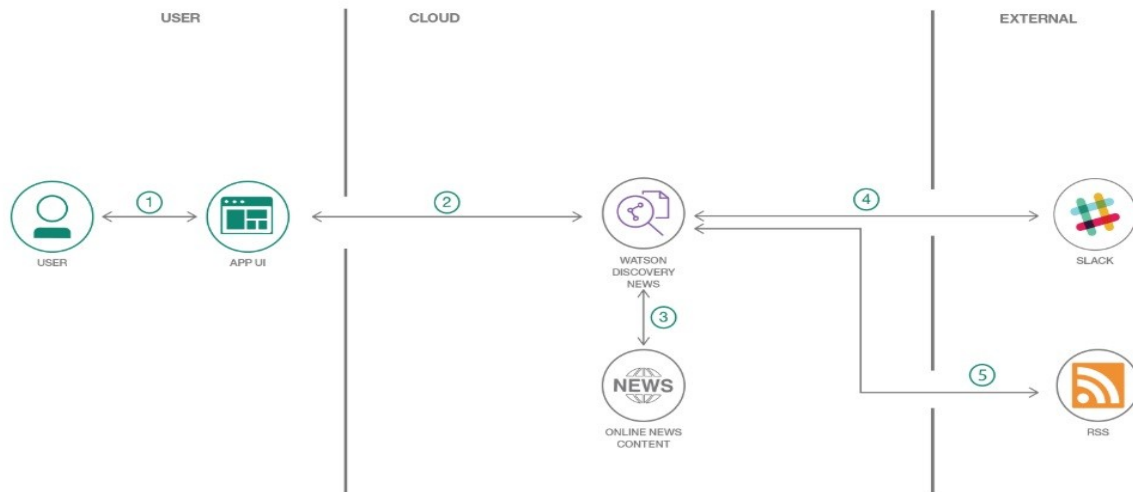
In this project to reduce this time-consuming process the user just has to type in his/her news which he wants to be fetched. Our application will analyze this search and return the latest relevant news. The application also categorizes the news based on the sentiment. All of this is done using artificial intelligence. The news is fetched from the pre-enriched documents in IBM Watson Services by using Discovery as an API. The sentiment analysis is also done on the whole news which gives the total count of positive, negative and neutral news.

3. THEORETICAL ANALYSIS

3.1 Block Diagram



Flow



- User interacts with user interface by giving news as a query. This interface is created using node red application.
- Appropriate query is generated and query is passed towards Watson news discovery repository.
- Watson news discovery repository has a pre-build news mining feature. It extracts the appropriate news based on the user query and JSON file is given as a response to the Node-RED application.
- Then the query is processed as per the requirements and the appropriate result is displayed on the User Interface.

3.2 Hardware/Software designing

Software used for creating AI powered news search application-

Watson Discovery: It is an award-winning enterprise and AI search cognitive technology that breaks open data silos and retrieves specific answers to your questions while analyzing trends and relationships buried in enterprise data. It may also be regarded as content analytics engine to identify patterns and actionable insights.

Node.js: Node.js is an open-source, cross-platform, JavaScript runtime environment that executes JavaScript code outside of a web browser. Can also be defined as an asynchronous even driven designed to build scalable applications.

React: React is a JavaScript library for building user interfaces. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single-page or mobile applications.

Slack: Slack is a proprietary business communication platform developed by Slack Technologies. It delivers services with chat bot integration too.

In order to develop an app UI for news mining there are certain requirements which need to be fulfilled-

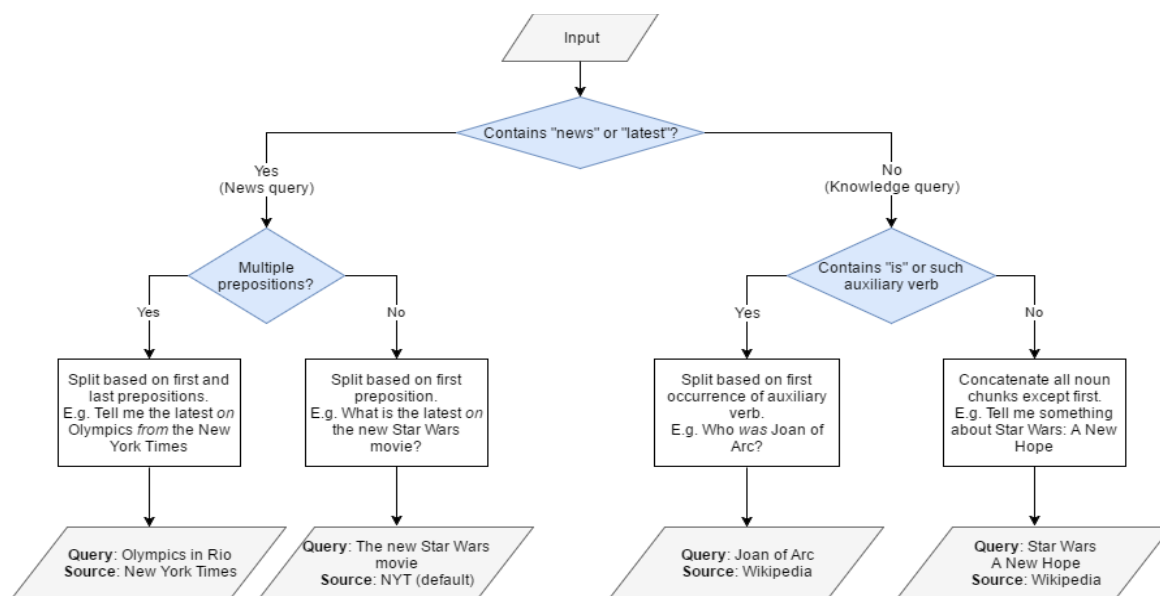
- 1) Knowledge regarding IBM Cloud and use of IBM Watson Discovery Service to collect the news article.
- 2) Development of Web application using Node-RED.
- 3) Processing user query and giving appropriate response.
- 4) Accessing the Watson Discovery Service through the Discovery API.
- 5) Using a Slack interface to query the data
- 6) Pushing news alerts out to web notification
- 7) Deploying the application on IBM Cloud

4. EXPERIMENTAL INVESTIGATIONS

I started this project to simply develop a web application for users to easily search their preferred news. I began by looking into numerous news pages and examined their user-interface deeply how they represented the news on the screen, the placement of all the important buttons and bars, the font-size of various headings and sub-headings. I tried looking for some open source codes for the news search pages for reference so as to know the work that is put in through the codes. In the end I was unable to find an accurate page which could be used as a reference to complete the project so I decided to work on it from scratch. I made use of a simple click and search UI. I kept the user-interface minimalistic yet attractive so that the user does not find it hard in getting the results, after all this was actually our proposed solution for existing problems of news search applications.

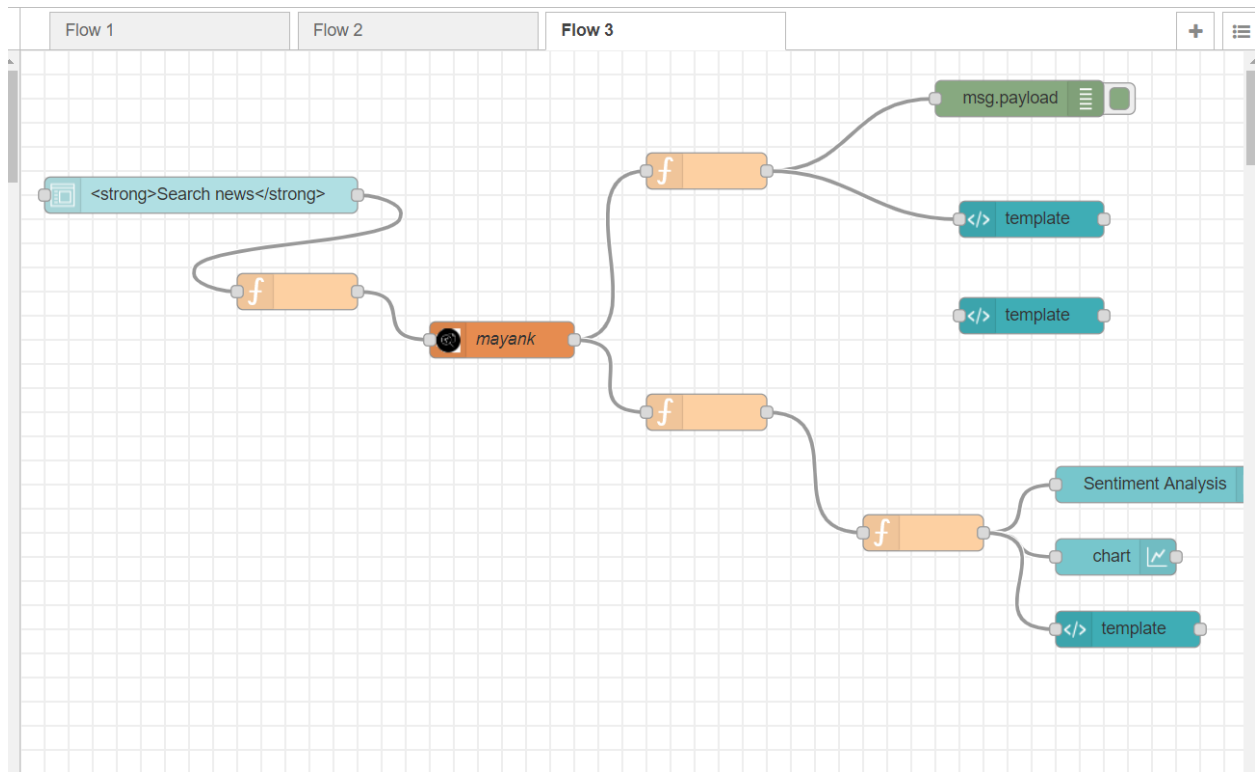
For the back-end development I referred to countless Machine Learning models. Again, it required a large amount of pre-stored data to train the algorithm which was a hassle since there were not many websites which would permit me to access their news search history. Henceforth, I went with IBM Watson Services using Discovery as an API. This not only had a bank of news search entities but was also capable of performing sentiment analysis (by writing appropriate J-Queries) on the searched text which enabled the user to get a deep insight of his/her search result.

5. FLOWCHART



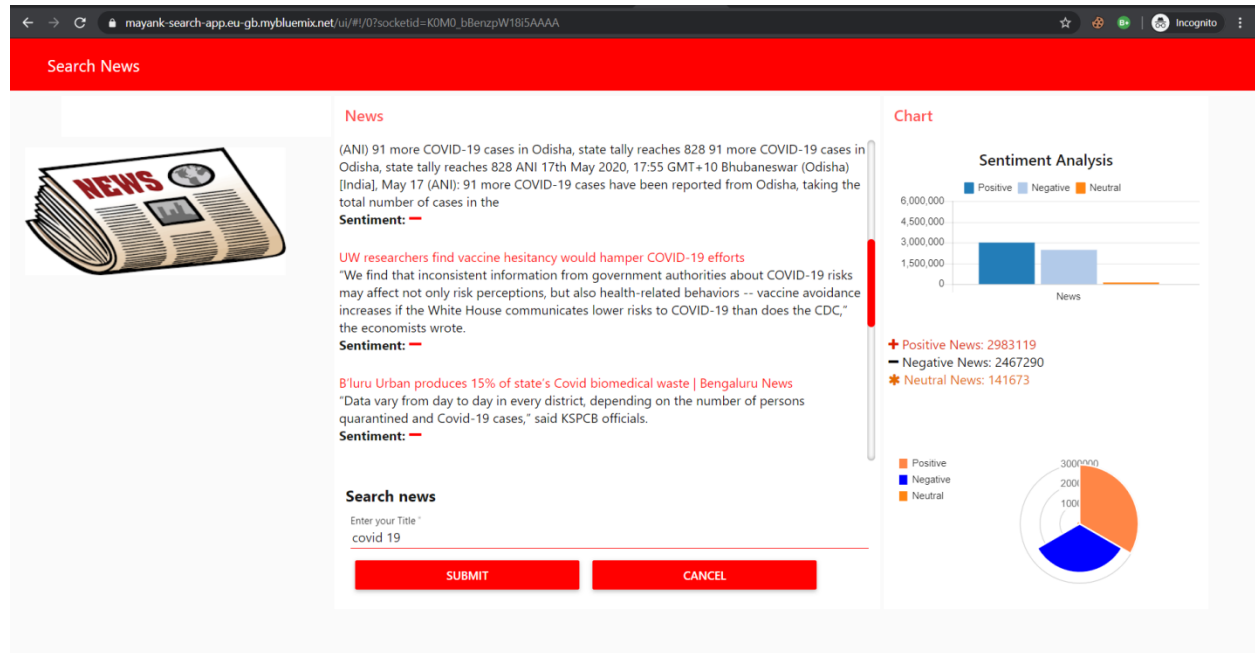
6. RESULT

1. Node-Red flow graph



2. User Interface of web application

URL https://mayank-search-app.eu-gb.mybluemix.net/ui/#!/0?socketid=K0M0_bBenzpW18i5AAAA



3. Slack-Bot integration with IBM Watson Discovery

The screenshot shows a Slack chat window with the bot 'mayanknewsbot'. The conversation includes:

- A message from the bot asking for a search topic, with 'sports' entered in the input field.
- A response from Mayank Yadav saying 'yes'.
- A message from the bot saying 'OK searching...'.
- Search results from JohnnyBet and Sport Event, including links to betting odds and news articles about Tottenham Hotspur hiring Steve Morrow.
- A message from Mayank Yadav saying 'Morrow could go to Spurs (Picture: Getty Images) Arsenal hero Steve Morrow is in the'.

The interface includes a search bar, a list of messages, and a message input area at the bottom.

7. ADVANTAGES & DISADVANTAGES

Advantages:

1. It has a simple yet attractive User interface which is very easy to understand.
2. Sentiment analysis of news is also done.
3. Unconventional simple click and search interface which makes it scalable as well.
4. Integration with slack bot makes it functional on a mobile phone as well.
5. Less response time is shown by the application.
6. Sentiment visualization using various charts and dashboard features.

Disadvantages:

1. Not programmable to show more than 10 news at once and only limited to 200 queries per month.
2. No area left for collaborating any advertisements which makes it non-commercial.
3. The interface can be more worked upon to enhance the user-friendly nature of the application.

8. APPLICATIONS

1. Best used for searching the most relevant and latest news.
2. Users who want sentiment analysis as well as visualization can make use of this application.
3. For users wanting to access the features via mobile phone can make use of the slack-bot integrated with IBM Watson Discovery Service.
4. During this Covid-19 outbreak, where news is mostly crowded with news and updates on Covid-19, users can make use of this application for updates on other topics.
5. Recommended for all the users wanting a search result of their searched query without much news of any other topic.

9. CONCLUSION

This was the first time when I was working with a cloud platform for deployment of an application. I have learned a lot in this past one month by making use of IBM Cloud Platform, using IBM Watson Services using Discovery API. The pre-enriched documents in the IBM Watson enabled me to make the

basis of my news application so that it could return the latest news and updates. Furthermore, my experience with node-red was amazing. It helped me to access the Watson Services by making use of Discovery node with API credentials of Discovery in it. Node-red enabled me to design an interactive user interface which help in getting queries and data from the user. Furthermore, various function nodes assisted me to access the data supplied by Watson Services. I made use of various Dashboard nodes and features to visualize the data output which made my interface even more attractive. Overall, this experience was unparallel and I wish to work on more such projects involving these emerging technologies and platforms.

10. FUTURE SCOPE

I intend to work more on the interface to make it more interactive. The application can be released to few of the users who can test this application and give constructive feedback as well as overall review of my work. The future prospects also include making this application a commercial one once it receives positive reviews from a majority of the users using it. Adding functionalities such as- web notifications and sharing of link of a particular news will prove to be a success for the overall efforts which I have put in the past one month. Dashboard allowing the changing of themes as per the user's convenience is an aim to be achieved. There are certainly many features which are unexplored in the Node-red environment which I want to use. These include, searching for news through user's speech which will certainly make it different from other news search applications and enhance our functionality.

11. BIBLIOGRAPHY

I took help from various sources-

- <https://nodered.org>
- <http://noderedguide.com>
- <https://opensource.com>
- <https://youtube.com>
- <https://cloud.ibm.com>
- <https://github.com>
- <https://developer.ibm.com>
- <https://api.slack.com/support>

APPENDIX

JSON Flow Code

```
[
  {
    "id": "11a915a4.97dc5a",
    "type": "tab",
    "label": "Flow 3",
    "disabled": false,
    "info": ""
  },
  {
    "id": "fe82d7dd.0aea68",
    "type": "ui_form",
    "z": "11a915a4.97dc5a",
    "name": "",
    "label": "<strong>Search news</strong>",
    "group": "5663dd4f.814bd4",
    "order": 2,
    "width": 0,
    "height": 0,
    "options": [
      {
```

```
      "label": "Enter your Title",
      "value": "input",
      "type": "text",
      "required": true,
      "rows": null
    }
  ],
  "formValue": {
    "input": ""
  },
  "payload": "",
  "submit": "submit",
  "cancel": "cancel",
  "topic": "",
  "x": 150,
  "y": 120,
  "wires": [
    [
      "a5f1caec.2e6ba8"
    ]
  ]
},
{
  "id": "a5f1caec.2e6ba8",
  "type": "function",
  "z": "11a915a4.97dc5a",
```

```
"name": "",

"func": "msg={\n  discoveryparams:\n{\n  \"environment_id\":\"system\", \n  \"query\":msg.payload.input\n }\n}\nreturn msg;",

"outputs": 1,

"noerr": 0,

"x": 230,

"y": 200,

"wires": [

  [

    "25f904a8.43755c"

  ]

]

},

{

  "id": "abf47eec.ec17f",

  "type": "function",

  "z": "11a915a4.97dc5a",

  "name": "",

  "func": "var i,key;\nvar arr=[]\nfor (i=0; i<10;i++){ \narr.push( {title:msg.search_results.results[i].title,\ncontent:msg.search_results.results[i].text,\nurl:msg.search_results.results[i].url,\nsentiment:msg.search_results.results[i].enriched_text.sentiment.document.label\n});\n}\nmsg.payload=arr;\nreturn msg;",

  "outputs": 1,

  "noerr": 0,

  "x": 570,

  "y": 100,
```

```
"wires": [  
  [  
    "4e771355.be2e2c",  
    "3cb69f69.10dd"  
  ]  
]  
,  
{  
  "id": "4e771355.be2e2c",  
  "type": "debug",  
  "z": "11a915a4.97dc5a",  
  "name": "",  
  "active": true,  
  "tosidebar": true,  
  "console": false,  
  "tostatus": false,  
  "complete": "payload",  
  "targetType": "msg",  
  "x": 830,  
  "y": 40,  
  "wires": []  
},  
{  
  "id": "25f904a8.43755c",  
  "type": "watson-discovery-v1",  
  "z": "11a915a4.97dc5a",
```



```
"name": "mayank",
"environmentname": "",
"environmentId": "system",
"collectionId": "news-en",
"configurationname": "",
"configurationId": "",
"language_code": "en",
"collection_name": "",
"count": "10",
"passages": true,
"nlp_query": true,
"query": "",
"filter": "",
"aggregation": "term(enriched_text.sentiment.document.label,count:10)",
"return": "",
"description": "",
"size": "LT",
"discovery-method": "query",
"service-endpoint": "https://api.eu-
gb.discovery.watson.cloud.ibm.com/instances/2d417b7a-e379-4f55-b26d-
d653940d3ec1",
"x": 400,
"y": 240,
"wires": [
  [
    "abf47eec.ec17f",
    "b6da2f2e.44c5b"
```

```
    ]
  ]
},
{
  "id": "3cb69f69.10dd",
  "type": "ui_template",
  "z": "11a915a4.97dc5a",
  "group": "5663dd4f.814bd4",
  "name": "",
  "order": 1,
  "width": 10,
  "height": 7,
  "format": "<head>\n<style>\n/* width */\n::-webkit-scrollbar {\n width: 10px;\n}\n\n::-webkit-scrollbar-track {\n box-shadow: inset 0 0 5px grey; \n border-radius: 10px;\n}\n\n/* Handle */\n::-webkit-scrollbar-thumb {\n background: red; \n border-radius: 5px;\n}\n\n/* Handle on hover */\n::-webkit-scrollbar-thumb:hover {\n background: #b30000; \n}\n\n/* unvisited link */\na:link {\n color: red;\n text-decoration: none;\n}\n\n/* visited link */\na:visited {\n color: green;\n text-decoration: none;\n}\n\n/* mouse over link */\na:hover {\n color: purple;\n font-size:100%;\n font-family:verdana;\n text-decoration: none;\n}\n\n/* selected link */\na:active {\n color: blue;\n}\n\n\n\n</style>\n</head>\n<body>\n<div>\n  <p ng-repeat='x in msg.payload'>\n    <a href='{x['url']}' target='_blank'>\n      {{x['title']}}\n    </a>\n    <br>\n    <span style='color:black'>\n      {{x['content']}}\n    </span>\n    <br>\n    <span style='font-weight:bold;font-size:16px'>\n      Sentiment:\n    </span>\n    <span ng-if='x.sentiment=='positive'>\n      <img alt='{{x['sentiment']}}'\n      src='https://cdn.pixabay.com/photo/2012/04/13/00/21/plus-31216_960_720.png'\n      width='15' height='15'>\n    </span>\n    <span ng-if='x.sentiment=='negative'>\n      <img width='15' height='15'\n      src='data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAOEAAADhCAMAAAAJbSJIAAAAbFBMVEX/////AAD/KSn/uLj/wcH/MTH/ODj/fX3/y8v/QED/1NT/Rkb/jlz/3d3/TU3/6Oj/9f/XFz/VFT/rq7/vb3/8vL/2tr/ycn/nZ3/amr/ZWX/kJD/DQ3/Gxv/7e3/b2//dXX/goL/qKj/lpYrq+qLAAAB1UIEQVR4nO3b246CMBSF4SogqMCAimfB0fd/xyniaSbGiRc729b/ewBYK0jayK4xAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEIRVdWXI3MRzfjA4vwX7PgBU+uc3/bLIAXsQ1bFc8qVcEyjffNam2VZTmxcmt8MrwzeCT6V/8VT65zf9cuUBe
```

xDTuZ2OTr9aqJN9Pqb8FNf7fteWTb//7VL9lpJxKwS24Fpz4WtM/xcCkYDrSzCImCrmCWa
ycRk2endWGjnUNQ2q4fmZ8v4dncNky1Q4iK7Y/U60fY6xWm0o4grDZz7QjCEhNqRxA
WmKI2BGFLc9COIOxoltoRhG2MzzuaVuz5gk9DH9DQfbGJtSMlo6H7aOg+GrqPhu6jofs
+YV9KQ9fR0H2f0PCoHUFY+gH/CPv/3SLQjiDsYBLtCMJCU2tHEJaZQjuCsMIUpXYGUXlh
PP/M3c591WvtFILKuh37WvS1c4jZhd3As78bt/Q8FI3ttZMlaa6j0IWfFZv7We9Z5NWUt7
W9jM9eHVZlPh4OXhyqfz9RNBiO83K1fHQgoc5GyWvnlt7QLFyMsvrJsQsAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAC8hx89ukbRSJQNSgAAAABJRU5ErkJggg==\">\n
\n \n <img
src=\"https://cdn.imgbin.com/13/17/9/imgbin-blue-circle-watercolor-brush-
7Hh4HcUPTCYGEBjriew8GuLHx.jpg\" width=\"15\" height=\"15\">\n \n
\n \n

\n </p>\n</div>\n</body>\",

"storeOutMessages": true,

"fwdInMessages": true,

"resendOnRefresh": true,

"templateScope": "local",

"x": 840,

"y": 140,

"wires": [

[

]

},

{

"id": "22e399fb.d54fe6",

"type": "ui_chart",

"z": "11a915a4.97dc5a",

"name": "",

"group": "c6bb7405.2b6258",

"order": 1,

"width": 0,

"height": 0,

```
"label": "Sentiment Analysis",  
"chartType": "bar",  
"legend": "true",  
"xformat": "positive",  
"interpolate": "linear",  
"nodata": "",  
"dot": true,  
"ymin": "0",  
"ymax": "6000000",  
"removeOlder": 1,  
"removeOlderPoints": "",  
"removeOlderUnit": "3600",  
"cutout": 0,  
"useOneColor": false,  
"useUTC": false,  
"colors": [  
    "#1f77b4",  
    "#aec7e8",  
    "#ff7f0e",  
    "#2ca02c",  
    "#98df8a",  
    "#ff0000",  
    "#ff9896",  
    "#9467bd",  
    "#c5b0d5"  
],
```

```
"useOldStyle": false,
"outputs": 1,
"x": 950,
"y": 360,
"wires": [
  []
],
{
  "id": "ca2ba617.e5e0f8",
  "type": "function",
  "z": "11a915a4.97dc5a",
  "name": "",
  "func": "msg.payload=[{\n  \"series\": [ \"News\" ],\n  \"data\":\n [ msg.payload[0], msg.payload[1], msg.payload[2] ],\n  \"labels\":\n [ \"Positive\", \"Negative\", \"Neutral\" ]\n}]\nreturn msg;",
  "outputs": 1,
  "noerr": 0,
  "x": 750,
  "y": 400,
  "wires": [
    [
      "22e399fb.d54fe6",
      "bab0c848.6e41c8",
      "96a15219.e271c"
    ]
  ]
}
```

```
  },  
  {  
    "id": "b6da2f2e.44c5b",  
    "type": "function",  
    "z": "11a915a4.97dc5a",  
    "name": "",  
    "func": "var  
val=msg.search_results.aggregations[0].results[0].matching_results;\nval.push(ms  
g.search_results.aggregations[0].results[1].matching_results);\nval.push(msg.search  
_results.aggregations[0].results[2].matching_results);\nmsg.payload=val;\nreturn  
msg;",  
    "outputs": 1,  
    "noerr": 0,  
    "x": 570,  
    "y": 300,  
    "wires": [  
      [  
        "ca2ba617.e5e0f8"  
      ]  
    ]  
  },  
  {  
    "id": "bab0c848.6e41c8",  
    "type": "ui_chart",  
    "z": "11a915a4.97dc5a",  
    "name": "",  
    "group": "c6bb7405.2b6258",  
    "order": 3,
```

```
"width": 0,  
"height": 0,  
"label": "",  
"chartType": "polar-area",  
"legend": "true",  
"xformat": "positive",  
"interpolate": "linear",  
"nodata": "",  
"dot": true,  
"ymin": "0",  
"ymax": "600000",  
"removeOlder": 1,  
"removeOlderPoints": "",  
"removeOlderUnit": "3600",  
"cutout": 0,  
"useOneColor": false,  
"useUTC": false,  
"colors": [  
    "#ff8040",  
    "#0000ff",  
    "#ff7f0e",  
    "#2ca02c",  
    "#98df8a",  
    "#ff0000",  
    "#ff9896",  
    "#9467bd",
```

```
"#c5b0d5"

],

"useOldStyle": false,

"outputs": 1,

"x": 910,

"y": 420,

"wires": [

  []

]

},

{

  "id": "4eedb328.14a89c",

  "type": "ui_template",

  "z": "11a915a4.97dc5a",

  "group": "e25a9d9.27c126",

  "name": "",

  "order": 1,

  "width": 0,

  "height": 0,

  "format": "<head>\n<style>\nbody {\n  background-image:
url(\"data:image/png;base64,iVBORw0KGgoAAAANSUUEUgAAAUUEAAACdCAMAAAAAd
WzrjAAABVIBMVEX///8AAACOGBtNZ2ezs7PcvpnKycz+/fv8+vbjyqzs28X79vHq2MD69
vDq1bz48urv4M3iyaqEAADmz7Lx5dWJAACvkXjy6Nnt3cngxaP17ODs1Lb///rv2b5hYW
GDAAcwsLC9vb2lpaXj4+Pu7u5sbGz+9ed2dnZGRkbQz9KLCA2piGyuj3b569jr0a9WVI
aRkZGBgYEzMzNRUVHry6Q4ODiUIJSfn58XFxeGdF3Gq4omJiba2to7NS57a1fVujS4n4C
ahWscHBzt4ODHtj0nlx6mknIYTD1nWUHLQTSgS03l09PTy8Cml4XYx7G2pl07Mym9i4u
nXV61envYvL2XNDaWMTPhnZ6ZkYd+d266sqfj2Mnlva+Rh3lxZlmle2zbwck6hIWjVFX
AsqDZy7p1YVGSliWua2xTPy3GmpuloJajjXyLg3oiGBCwo5NeVkxiTj42KRfEpLgXAAAgA
EIEQVR4nO2951+a2fb/DcEIVrCNhRJbqhEpNixYQSVRSDKmKlqZ0UxO1JFz//9P7IV2uw
BrzCTzPb99XiejgAhvVv3stS9ttv+pNZFom4/NLP/sl/EvXBpt4+II3C5X5Ge/nn/NcgK5eY
OcWsGf/cp+9eVssLnmFf7ZL/EXXeGVYCgdmbsZXDyWTvEXP/ul/mlLyC1kAtkbwc05Mq
```


HgirC7drpp4ee+4l9kgbNias3dBC6byiy0JSYafyxldzbd/L+00FkzgRudNTcTmx9vn3Dd+
PMxfNTmP/iCf5UVxvwQuzk/xCPpceWrtY56eOyHv+BfZTmhDF7lpG6McnOOdOh+4NTi
UNj+o17xL7Kc4QT66o3gsoHMQRa5yN1vkR/bnU/7in+VRUHOcaOv3pAdHroo+wSe4v
X+MovA3VwEL6di823tE09mNRP0rG1P9XQ/cd1hcZspTKsPC3L3WYf6/n9ta4lxbiHjuLE
e2Zz5UeD0ot7kX9eahDGr3lzl2eciD06rj15O+o2hf+R3ffe6l8bJ7PAPp8bgL+/HUMfd6q
qcHf5xcHpRSTP3s377zSu8As3qbW3+Mjddv0AxRiXN/M9+FXIBOGi5bu7yRbf6A4Ock
wzrQZ/LCr2wnywxUONwq5Z5/271sS+hPWTP+Tbjsfngyr1+dj584se9tjsXykq3JIUA9/B
u9RFRjRS46QXMpe/R99I7+AcIbVtU+Vhq+RZwcw7oVv+heiSRMWLEcnYmk8nEsnNm
AHbcBTfMD/vhEgMUI+PpyC0h7sm61Ye8qAX5u1OZUDDhiDjmE4n0eKwtFnGk4krpz4
3f/jTj9Kg9RoTtzZc9Pru0jj/1AoL85vLjLcncM0HHLFEe1swkQ4EAulMZKE9LSHevi83Q7b
6lK+Nq7hbQ9w/kB3uWNzU2mPBIUQoE1xILKSRHBhhe3sC4kwiERxvC0Tkpz9z2wt13Y
Pyw5bjNI8N/HNB7pblZDKx9kRbJBPMpGPtoRCYYToTDLUDwmAA/gGiDodDFgm3BbogP
elp3ag5T2AJ/JTK0ncujv7xIBhce7At4Ai0p1ML+A2vYCCw0B6ad4jFieU2GYtsjvWEL9CpE
Mb/wT7//osVAQd4bDAIrguQgFmwXROMOBYCdDstYYa3uSk9YPwpX2PqyUPD/dbB2z8/
DA0NTb5/9/bg5s+NiARWIHcITLGMw6FNkNxy4gtEYgGB8JY6gVuTJ7WU+af/VO5eb/sB
3jNak0ND/V+7Wj+Mwxbe45RDgXIE2gyC7W3yDswtkFHIqW5TAjN3PeDhK0Ev8x/oubc
O3r778yN+9bX/mWUNDbU2CioS4unxUCozrxFGTCNUNoi3JklBblsSt7wMYvy0UmF4kz
7pJ31OvbZeU1b6/dUQ2t1k/zf4hS+eNazjyVb5UTQRCCyRiCiCjpgRCRMxRhgl0cPaM7lb
34zT+UMkBif91ietNOHtb5Fdfejv73+L304Kr33x2eZUJjjU3z/ECF+1eAra6c2yxYF5KtCO
plCopJgYziwsBaGmSAjzLZ8m7xs6Rsf8ejlbKOPZeaJnm5r6/XB78/6+1+8B4afgdbQKz
DDrSFjzWn7KmgOfXOG3zLOobfNT0RhMC7RSCOE+r69PTOv7TCRCKVD0rNF/9z0Fo1ly
z5l2HK1p3Ur950Sbvjlwduvf722fXzRz2li8hnc+moSnXQLETK3oa+2sDDCyD9tyBiSyV
D/i9dNT0gE5ySblGeTQDqlBtjWzh2eYGH4Nf6QZU7GpOeC5eTdz/tpYneslcZy+IHVuhN
s7tvXV+iRAAm89EDGOYBI26Jv+g+0l/e/th0lhP2YWLbevf34+XWLXMLvVNPJBDJQ1AQ
CUloiu4VMLBJpb1gljy5qe72RHi3bQhPIRy9yk0Bs/PLlb1P/fUShtPXuz/dEbkIGOQL0ul9/
bftG7tv/ByD8ix/0AW4Ujxh6/7EVO+Pl2XULkmiLtS/EArgywXkyyUAmYSXIAISbUt6jDD
+ZLkT9Z5NfAeVqd9+27hvjgq/vjH11ev0H4+NqVVgLWIPBZh2d7T1xgMnR/4y28aIZa
D/ZPvv7asqxeMVCiAscPGVCMSaDBBjkmum+nB6nKF76x57r1iMilgwqnbw0P488EBxD
Pb5xdkc5P9f8l3fww1l4TqTprbEEQ6EfUwGAqE/UDr4MWk8SMI8q+3W42/kkuTBjMz0w
okFkuLEhPF7c30aPmeUCrMSGpnLwEhvuKWHd7nj18n0VlFYpVwUbkg3PNOIQSsojR5B
g/6c0hFOhX1DmxOfsA7+MGt9/0mQ3yC/vcH1l/LkXC+CWEi3bjFEYk4bruNHIOkbvZpD
koEjcljI8IKx1s86uCFADWJOUFFMazi3sv2DCLd62ciCYOR/d6vEP4ufrij/d9sW3dr/mT6WV
7q5kxHgldUOuWGKJRyYJhZ0i+JQN7Zzk59tptdlrh5cbnro0+gB4blGhK0Gt1VyQAzKqtB
JXZLBELx55/shKk0QrYiRmEM+yALwle2AaA6xfBY+
+OOVyETSnRmuWlwuLI83MAwafXlmwV0Ld/j2VAO/Jni8ghwwnwQhBUNEuPdSpjNWW
UolB8DQZdt6Nikd0xZWfozj4O3Hg8+v+YW95h8Z+IMVgOjgWCASerm6tj5DNfRB+vQ
Lqyc7udOdsTJMZAwdMB9iQWx6xSy3U3P3eN2+yL0tE9D0BYRCKsSYas9QZkcMOx/1n
EurO1zcmir5Y9ADmHLo+L6LSeTpgl6/FV8Eo21dZC3vZYzwYRBMRQxzHBe7uQ5ws5W
+Bro8dj1zxMsmdu3Xk5xOmnVJLs+qlj14g8Z56ihIU79bOjj7+/fvzOM6JXMJ6/g37+lulH
nELit15Cm3pP5ynDZWNiMCyF4OTlftKjVlo45lpFIYGZO7iw6Vmx32p5ee/ZHVMDNK7z
Slp7h348bDBMYC/
+2t1bCnRohejIXMkMfjff+DCvryf73Orwlv+KHbr3Vshb9HKx+amUmn+GPvOLnn3zf9
Kvb9Wb7XCCWng+FxsdDC/OxOWOfih223ZserugV5Z3v5Gc3F2amsETyKkj0PVMlJydf
2/5kf0TX/dNSFg4ZSsvvGhrY64GuYISliRZw8j3kls/iWYYOmn93ODRjv2XFgpxA7kmPEW

7elDcfsPhTnU//jyeDQtdvUFsX7a113LBu3sCTwxzlyB//MqqSyaEX3/TPGHYHeWfrL8mai
kj9/+Szj68/yvv+avline3zqRbwsrHQis3puyHw3UDP7R4bE378fVjhUISCvZeLSA2TsBMR
vrnBvsOGrQ09e8//fWu948Pv3w5Ml/polAwbjXj/gRUx1DTqcU3dCbW59ArwQGImgm1d
LMMjAl+hRyv6Cd/
+90gM4QXqgtDaIA1/sQtRAzu8EgbuFnueWy26OMqrqmCUYqnz9dtXrwiS0mo4wv2h8
o6rCbG07waCTsvSN/t8vgd6rqLHCEnj+Q6JlSFjMKJ5SYVM3ESYa5GotpreLjXCBgeq9b4
NUfPcT3XfZ4WQ75PVj/BjuMHamZhX1ErvI7jNnrRKNw4tne8Z+EHq6py6CMX2jCqGbhJ
DTkECxmSarBjvknates04PmifE6Hwq8U9RXrm0tnoaA4MhP0iH9s+fv2LOhMULKCIUeX2
99AT327tHV1cReKUNK7GGIf0ghA+esBgBZ04FBRpuAuyMAZD2eF9uSHMiuov/E33tEN
kTR8sbv3eQGZ2NFT59RsPFLC2Pn98+8fXrxBEu76HHn3h63HvBS+u5Fz3nOPq4nhvO
BptljgWpTLpsa1JWhYxWZYTXXBDigLn3i0lyV8h3Lne6S0jzCZbyln7v21tvZjfU0wLf5DSB
MH+htrWJLTEzdr+I+kZ5DKBZU1urzoW1WtvrxHhsF1WIY9Y4L85rGISOLmAsRADYFE8
HyJctNtbCoZUS6PdHVi9UxXWuAmnfFuYJrJk5CzxGr79+rFFyr2VXuuU64KE4p7YC12Jw
Rm2OSDXo9EN7x19wrs3hw14uMaOv6OkwXaYiuoV/NiHlEL4RqaV6C0lKeRjvt56p4Eee
26D4GS4OfF9glOuXzUir9TDbQ3Kuib22eXkOOR75BDbn7oli7uAF6ePiidx44HDT8dRkx
6t6Che+bgBawyAKVlxJ9CjaasOcghmYdQet6TO0EINp/5r8q8to7xDWaGrRa3zbPKF2MI
8/e7V14NWZncnvZa2507H2VuzqczF0d4YhkBAR/TcYHMXh0xuM8UWYUQt9Ggl6VGPG
7BOUVMzQTK3JloXgRBja1gibJHtqUUmMe+b2pkLW2sd2sTsH/rw7vc/bst2WHqYNdKON
ICbcPvoW6xZenrGquCtcpJw5vDTEeYP5cnVveOji08XDQSHzx9V0oTxUiPLbGERhDAoog
EEwB38YCHDh6eEVNP87NzRPXsBLikbNd4VnhyaZHQf3v3x8fPW3dLHQ+i5wHFVxaJZ
AjmsWcTJoE0iZySQseqxutNuPwx06Q3CSn56TEkzblcrLBAmNMJdUU5jdiadoVkoF9ZGI
x0fWWOe5GLvTyhlbntCfAw9JofwrRN7MxCXdb3cM3Z0lcMc5Q+LzRG6wxkVI4+Oq4P
D0TELPVpJnrj7GEHSFJYzC1Ax5bg5YZBCaFWFTExoDM0IRWXN9d7Bu8n+/sk/Pz5Abbu
bHn4B5LooWRjHCyYUwQBAXITauQ1yUYqCjG45gFFwWIRAMMzk4N7RYMPy0EMfelY7K
BhlqZNRj5ubEA4LOWRVppCK0BmaER68oM3eF2FJ5InoMTe0OTp7tmlvXDnV4IYt3KIUB
Q9T9BM58uXBMyluGO+tUZfdbSCYPBLE+KCF29lgfjHPI2KELIs4x7U1IKRCBrFhh/em5
Sf07d3H11sP3qu5jR5wc/rct19hBv3V0AmIkBEFI1MqCo7hXZRBIA7WRZWdrx9eNjogIK
zhfQ9tTfCYQYpnrqR1kk2CF+A1KjmGBEGtr7PBK9ifZUrijHpJzulZuu95HdsaRSYdC8+Sb
qagWqNhGI8HkhLdG2eRgGYl5uX6lcXA4qZZ2YVyDjxrMREfOMMKYRliNctbTXaKQwa+
xPdn5boSt6SE6nxvPGzZ7q0FuPAirDVeQ9tgORWUcPcYgqlo9trmxQXRmCpwC3GBUgz
uHguawVjs8V/RonT/GjwkhWJxzUyLEZ0hJoVXvfO4JqebRCG9yXLC7tkxL9T6XnYIYyKkVJ
KO6kM2FIAtUAqnTRzFzCGQHo1HD5ozEnKtdVA16uLikefCANWoL41C05AhhGyMMiHGI
ypTatsMOB/eRCG8Le81HgnJzqUhmPtRmkguOhxZCBkN64JESWqJRLJSIEDMnyugkNBvs
s9VjsEj25SyY5PXx+SAC9TSs5MyD/Tgc5OnLNkYY4SIRENZEbXT2Um3bbQmp5oElb3B
cn6hYXHqnazkeiDWSEwtPjARixq2sKSmVhevhuQDIXgqDSU10FEH5GpCrGgZ5fn58fm
7wGxnxdZqj+f1597Gm3YORggVzqFIS5BD5J7TxMspQjj+HfQg5sHNUBgnZLXs4otizb
dwVmPFaNLc8GPe+pQqC6oDZi0l3gr5g8ltYhwkmxPLcw4VTZ7fd03Ro+U5o0/iYQRTX
7680QgDnJ8ZIT0TBEDac3Jyk7x6X4QWewSvzeYLR0gVJSQJ9vjInuZupoeLhtBjweC4QkgJ
O2uKBNT0giuLlrgoMogZBa9PanFhkFfXZ8fnnqSmRyt5+CA/RmQxzBelJAW/n1EIT8U+
U5V1BpT+w1OM8K7K3Zjz8QbXRPu4Fj0DmdCET6sEPj6xeivCIBhJqLtkHvSQFQBrKZU
nLs4Nm0Oyckoal+jQY4oc/QkR6oaYWdnp6f4ID8eJ4S23yhfCCuMmwhJqtlinQGftmtqih
DePDJmAcfX+xTSHZ4UbUtMuHx4LzUcSheg+9N3GyHaobqFj2xfKYRHFoNrsDkAC50d
2Jxel+dnnw6hyK57JD1a5Yf5cRs7LqfccUY4xwihOz4RnwZ4L+05TdyB0CAHRhdio1tO0
VXvumhfkIbXBJbNm/YJKbH08HybMK9QJoPn1hcaEGbEhJEywiBnkyOL1ifJXclAR758biQ

QD1lknUwtH68fnnk0PVr7D/JjOvESJ4Q6FmqEl4wNa2upM6BUgwhvkNKc4UTbPJ/Zj8cW
gitdTk2OIZWUkAfmGj1KYOmhnRZ+LE44tVAcFwYYUZ7NhXW9j1DYofqj8nl4jWos7W7
Yv4Aizys02/P1yEKwp0yC1sleuIP8eN2qsYgxJ293NAIs9wxC4Qo1TgFwoRGaKjWYHcr7
UGltC875oMrLptC5/QhVinD87W2Jnp8ShVFhLTtn2KEC+LQSAPCtDj7Na4R8IMOKoD1e
u0KsofFWYmc9OU4VDTnIx6FDI15/7Derfl1w7Lb71lXB3X/OQFVy6JGuMx5WiAkc6tMkV
QDX7umuKjhvRNY3CCzUUfiKdDBP11kdFK6Q3I90h7de+PzsVgkKBHy4YSgyhoK1fg8D
nhgLehoNMK2NnrqOdXfji3kzi6UL2Nfc4ZgVfHXWb7+JLnWu7sVPVidZ/f14za7Xu2AUM
Q3YYVpjZCC3tmUlGo0QmdD3pD6FqbetNg1yx15t3Jln3vISF5mO3axpwQWumXBdFiuo
PmbwHwrlxQJ+VBLBIPU9F7VBTnUt6CM1uiESdLdpdrJ9Vm5XO426DHC2n39GD/1slgm
41D4/ZcjTbARZjw/WYXBaBA2I7phBu8sEbo8uFDoN4LiihoXw5kxttXunwmuuBFJLvS+
OHF3pjyYayJeYgqZzpsYMFMeMtjZAT8rVE6KnWOQpC5j07R3ICHdnktQiDpdr+WblThj/
MI90Wgt1+7KvvcyEBRIWqAiW1NCDcYUIT/PMxjZBMmh0dGbunWKKj605tlrYsPvUYtBf
aW5mckqzAlo+QXY+YZYmODbvN4Ys4h0JxVqTBluebjTDIs7/nUmM5PmZu2uiSuhqkM
vq8UyUPT3f57Hr/BBNzSSLsxdVdsNvvN+UfXmbhhWb5HVA7GwgDGuHfYjN+j9INIYQG
r4SCrE92uhEo9tonupxOK7m0nLqlx+YZXY+YAhoTwt2yUlJIGSLBpmTCRhhYCAFY2IxRf
AcplGxaRAKz3iuyyUMUHDfiYAHTsvB0ey5fu9b0aPmxkLvfvTocsFb8KOegdkECUbosC
Ck8bCqROh0s2q93KAVcL1H11oVaQovf7G34vapPTV3de/iSrQn2fjMIR4g4Dm0dJBM7
A2WcfE1NR5um08tJBOU2nl+bCuc4Tn+uqwJuToPIS6slG1IFUpiOTqhyfXhV4VBXuN5S/
Z73fcegXJZVGID+JTht1TJY0wJhE6UVyIYJYe/ISIBx7SdtPc1JjweVLpAMzlvMGMryRa3Qe
JM5RIMoG9Ab42JjSqMT8SIMyyTgaFx1NdAQc6TRgpZ/6pDDV4IDUABuz4OtW6YPj4Ake
Qkog/k5/d6ff7+8tF8omwd6Be/nxvjzhxqqZTI+tdFEP3N6lcp0N2iogdFPpLRECjhmf2pj0
zeN1zNog8fYYPZvPN6aEdpNcVEqIR5+USGVKE455AehPHIEmgNbFif1YSiwewxyTnSa6
vCaH6PydvRAHwZ1L+LHWLQB7/RX8ibslchk7J2Hjm2x3/mZYYUYhrADCOlos7ilx8s5Xf
UnHnwJOvRmOrmyMFEDuZX/IMSDeVFPzLLSTi78zd6QUqiOdTSJ3cNNLJP8RrRB4POfIR
qDb5LLFaDvoTuHNxTrcWyn0+nsbEGJjc+epO/zVuQnsSiToEuP29YFwhVGmBEI4dblLp/
L5xaHF33OKo+8xpzmJIYPipOVvXHOIMs8rtLTE8VZFk6+UWMqg7eGolqh4tMJJNOE7ji9
A2GOQ6EiSPXcZrx2qkyOK2Yiv+K2MrcD5Aplv7kMjx4Y8Lae1GhYEXbjrMgnWGMv2BA
WftOCrESISWYCwp60Qp9rj3fz0ipNuHukaDtzhXNAUVW0gO3RCBwn5qzD8GbWRCVC
qucwmmwTTd6OTi+XWE4/QWI6vj6lmUfVed0GToyhYKHdrbuXC/mmtXsrna4oeLm/hHn7
scoqT3im0RREM07bKfzTCeUa44nQWsOBe8XW5xl7yIl3Pdc6TDSGfHLwdGw9dHAWrm
HKJUYHYHjnfXSYwbLKdw88cgV8Vd3sPlor5kSVJqfYD9RSKOgGgcj60iC7nr/qnMvXk2ScPi
jHvz9fppRdOjRSXNDfNczsS4ZVd2hsQYDIaINGMrGAgXhBX6fIVd4tblGmaEey7XMaUV
QWOMRYwDucf07JkgZwrxVTENSRY5c1VVYyzDPH1xH3IRR2omnjWvvGZqVPV8Xsc5C
zl/mUxS+vllBkG5vBaElp41rJVQpMXVLcMTm4gOsm0GuZf/w3YnEFKP7Hmw0ODaAGG
VEa64fGc88bqnEUarnw4dYud35hChly3eanCdkftCtKkmG7NhSsjLNyUSIheYic9IW2wu
15VOdVgCiyNwlHc7sWLPdhvOnK+f7lui4EChAndeWqyww84zHZYID6dl38hfy5YQxJgY
d9llaInYzv9DdkclQ0KpcbkKGPYwfD0KYU9Xgcubqij4YY8HrqyJZ4KcnLrgzlxD4SyJRPOY
IT9JjYoHWOYaEbK7tiaHplY7kemWxAG1GsgV66cWo8NKEHxZFDw7HSbAAS+WNI1HTX
hzEfoV8kkyBe7O04gO9RbbRA6sUCD04UhXyOnEx0y4fIQwAwjPXxK4iZ6eCs+GjEmRw
DoINKjngOybypfJlq85zaKHqZKUKOMRza7JXc1FfUenR9OT8kAvNL2nwlVj5izkAF3IsiYVV
7yzUB4AJ7b4sbdbmbx6BnmDC0KthZliGuJeaoAQ5Ywtn0Weh13XAA6r/YWilcNznpL2TLId
hA/4b8bm7BEIAx+Jr1jgphCZHqxfCPHgcUtbRcg6l1bliHbAeHVCNgWowWWeETr4Gr8
B3SY2ZcfdWmLuti58kil5c2PNQv5Kv5yi4ADGP7nKFe3DsAY2WxwZl4MArmMv0QrTGZ
SyCCtkY/gmAAQhsYQUQtWlaPP5CGEP5A5sRCD3nIOPvAngeCgppQcl+IhLNOxVnnUccl

CVgjyZZuxfjAfP1RRQkpxqM9vSY4t1btmwBbFly9ZVtlQsqmyps2lww9BBqaOXyUEYvFz
dwZhelvSIYEHYmyWV0KsDbz2mK/QExxHhBH3QQZqAm/B1+VbsQeewQlihPeijq4us9
PQcvyzS7Bl8gQjhqzHOJlcK4cXe3rA1Cg7qMBgnrcrQIJHaGUH4igzxXCstIK2+tUzXCzZtZ
sjTB032FmSRydpk/6PZeLz9gQFkkqjT1S02Plve0hR9TMwd511YhkW+iHQUCvmZKxtY
Fb2Xc2eXqSq24xhAhNLmE0OXDCF9FhJCENSfcpYUUpRDgTdQ+
+RPVGTwKpMaBBYwece2lml5R7anqzmz56/qjaNUQlyV/tnYnNjpLHiu5ke9baH9TrZIX3n
UOYPsDn670C5oqrBYn0V7u5gY2xEmG/hx/RT7Tani0Q+O242zrn4jGK8Cz3a4erq8rVB
UVcihK4gluRrY0C1XJ5C8NWou0CqtQOqOw6Kexrh8MWhUGIU0ZLU25FGkMzzZiHeAhe
SwBkGuqtrY6ygsVq+nR4C3M/nS1ANVoTRCZukFqSkzBrioAqC3o5CoVIBluZq5cd8njPs
RH2FdFJoRbJdvi7SiVZsYHLL6wQIMlceCyy2+vp2SOE7uOpL8QLEK6S+0ZFXIFaHx4S2
ozrESphdbSRy31d40gG3VevqzEWj9CmRlrcu5Oe6cT+Xu3LO5scBtGZvV4T3f7prihp8h
VFrw/WNPpx43kncSFSI/OchmLm8Gjyy24XX4QwZOsjYOCjvXD3joGQR+wACM/J+l6j0Q
LI4Qv4gjx6TokEHP+SYvgMd394qC9bu7KOZNCemhj4s9vPmj45yjfJleopiGcxKJBAUE9B
ZdebFBKLQcakl9yt4vKbftDiqvsxBz+Xjl2AzNncOQHx5qK5xdGHtkvFxfVfnoHekEQ4jQ
gR2FI1yKD2SCA/1GMtwdLBKk0Cc/TZx6oL190Fldj/UHBDUJedsdU9ID1ZBmFxtEmyuk
ZwUDskk+wa8XIXG9FIWwd68+Sn+fjvPjc5yOhAh1HtdNEi1vOjbydlnxKEXQLgMdTIhJE
YJlbtjjoyvQpNde2NjFZK6LiRCccQFXjxIEEvVcqSmLmjrR+
+o4Q6458noAQtoOGAZBZ9pcxgGt0UYnIZFzlypXJ7Wtg18o6Oj0+hxjZsmvFcMjZqb1f
qY072M37sp8Ulj7XZg4iWEDgvCKsW7KPs/VDAVKmWqY8M8ArYnTfD4eO/cMglkjLPkaT
PSY9ISA28+qRXtxaY5lsfQM9sKLwkGypWZnEq9SA/BbUN2ESJO8dSgxyvX4joCvEvsRp
XgN9pj8rmzpBD0uDFLxnp8F+idpBVEcFDPRIjnS88pCx1Gx9YxieSGhz1Tulmck0eFZOL
liUexQZKKnqQtNTu2pxenO/eMRz8Nzro55Qia1KCzegkSDKg0kkA7DI/sK28qX8/VFsEgle9
PTFnq41lSkEw6Fcy7sMkh1BoTwNo4g+vmwQ8mO+aqbYGNusQ+Zh9ohMuM8L8U+
dYpiYwNs1kGoqo7O7+q1WfkptkVj+AOMuT2RZCM13Amw9Jk3EDvFnIDhX0ojTEI7RS
0EXorGOUqFOa8ltKZHQi2dlgMIji5RgvbqxULweiSi507lhgCvh5XYYo2PDK+nhQEMkAY3
UODOfZFHfYUtbt4/nZOIKyOEclxQgiZOAllsaapRYfhiTAUyhb3vF47PDxpnARKnhvTZ1Qs
m1u9ns7zs+vu+9lZNGY5ILNzuj/gtwosEh1XLZVLKdMA2m0Lub61yvbiLoIW+TULwdGl
VkbIVSGYXk9FIYR25apHnFbDOn+fuoAAABM0SURBVO/CvImNNiHEy2Pkh4cR4SJW1M
Pr2B5+Sg5XqMpR561MbmhyahIILBLbDF1AjzDWPL21/TvpSaNTolWe7Kw8wCqp16Kvl
Lq+AkY6zia5JldhcHpgukMY3ZK80/5md3Fju7I2bQU4OrvTavuY/24KGt1vfNXBWE/PJyTi
hqCH6kAczC3HZw4kQry5OjwMCOMKYS06iLuh9uPkIA2DZJXO4hmEmuVYpV4ahyRyS
W1x+ye6qDi5PjsuN+FrAMeIMVeQ3OcOWIXSy9NSwULwkh66Q+D6IOVOU+OGRleob
EhnLtU2tpdGiSdTvYcRcmFtP+pxj02xFUKDdoTgwHPZk6FPC7BkgAjjY8MGwhnoNcq0X
QclcesYjA+yCXxxlRRjLIPXzCaHc3uQJURmIYPUY6YsGbQOf0Su2xDnuakoYjsmmjV/sy/
XIFDKfVlfh4qBcA/k3tGKNjpMIGujRhRcW99efGNfajbC1SaC4g/kQKFcfde+TFHBx547hj
vZn9CTZ8akFQ6bCOvJQYHwMDmIP12E2Ed+rESWc1wjsuXIIKjGldEir1FsiWiYRMqkiUJ2
2Tdsz9+LxS97K3jgCQt6fmmUXq0Q8L2FPglLL3ZmNLpt+VSQQDYqBZPc0rqMgpCMtg
16z3GhEY40l+T3Ah2uRBjngo+u5kCXpJoZBqZztB2uEeYGCWEAEEL2IIQeJAdMC+jHR
WNswCN7N4svszTKhfMIb6mJEfmHmqNs7Nz690XoPKmUZbnSaxVKKQwWjCoFAI+fBe
D26empcNeScGadP5bWN1YludLqxvrS2uislR6uWXjERjNB/oMG1OqKCyRMjUWHs0Kpiq
JAKnuLDmbjUYEQoh+CzUK9d062B9kDf+4q6SIRNhmKD+LEHASq5TcFHDqPNSI6Nw9
Nn+2LmT6KgoVyN24LAR4jdZRFV8GlnkXRK1pLY6rwhEXmDYIDu/ZSncCNmuQo88rtk
x1ENzot0M3OWvHh2obXONiMUJzjqkdxwJhcRhjnzg5OYh9MvRuh4cKYZIGC/KM8AQiH
iBcxBqGVNHj5AgjN+dCYhnXJOkXJZjQDSTwZNA0n54mAVngGTAq5xem5IXlsrKX7mp

GPBBG91LfsZcvlSqn1gEqg6jZJnugyC4qDTV0u7iNhgd05uF/y1tL37hEnzVSvA53FRoJm
ggLMjrAFejaGbxYem69gC47rEcyogP01ZQPDmYPCEjG+TR9KMkqajVTxmvO5VPqoNW
Sq+yDIEJyZkzh78bLa9MNTGlgjNL9VIAMyZb2ZEjPjUuld+Fe/sEUItARY0G1SyS3Gaptri9
zglkFm1udm1pe+NLSRjkl9XF7bUGgLPQcS22iChEBsRWmBIX9D6OivZDDgNBahlUI8R
AdnjqDv5zjAO4Hg8g/C+aHyaZfDJG3rXhsgCCaVM/oofba5+iORU94EjVA37uGW/dQxo
oA7BESLdAEvMyujED3FTMSCybQemW6hYLA7V6O6mMjnyVp0/RjEMiooGikHAOjtLTME
erQihftv/3K0QrjQjvGAN5ggRjqtZukUUyRphHcqSY7Q9z8hvNI5ZpT22WtjDs0tKYhnhaz
JBFEF0nUbj1q2w8mSB2MFQ+ULwG5BeTCKBoc6XWO7TzRpY5CjWg7V6yX5qSlSrxxv
WkgXJbStyf3MUIPljdvY5VjS7i1aC6MbVVGQlQqj9ECFJLRAFB+OYKYaHB4fpAgRyXt5ACK
xQjD9OejqpnCzyBtF1svslkZSsjq+vzwoWdFTZ5e1i380CTieKcq/WWBCcqc7XTqU4z+Q
6+qDAkzxykDY2CtOmQkX/V/2HlmcvkdHjxIHoyJfZHd6sN7jxzo1nJlQjo+b8ks0JiphhHjSl
fVxyz6zY0sVv4sCuRjUml0s0UnZpj6kkxjnHhpSstbIVLd0F+SxliyJ5f63WROrYwylilR1e
wiQCmrM4VSIrUw3wpDw9hnUaimlzYW1eCCIKfr5dm19Q1ZDGj76+9Hy2wQSfL958
QRqBEPo3QkiXD60OE7gjQniOYeSYEHqS1woh1DD4HSAst2EdeEXmWvR4UA0qGYety
of1UI52TydnXNjj7Vw9PGAuzJYhoA4oaMqWeq9DRUG7KPFGB4DbgJZXwCiXDIIqbRO5g
TMjmlINDjoQaZjC0cC9cjUSxHd1A0GJ8FMUmwxx7cu9ZHJPuy+GODGrTAjhP3W6Bdw6
N0llc7jPgT956OnGiuZMt2i1Wu2Qhgcw58L3RK9XN2JFNQdkVC7NAous9/IGOTJJWagUy
JnFtseGveObnp41vsOyReTeXOkLtMRrBrk1Kmnsbxolrtlv+csjYf44oew7fzkIDtGh+cURI
ox/GPnkVmSeEe4nR6C2KUK+5Y0SPiF15in8DW9hRB+0ks2ubnBLamKloHoNS9GXsxA
s7F9Kdy0qcUWKzNCsgSG9kb6MPICYFaBhdLJ5eyOjINkb/mPkZSidlholztpvOywm/nxnP
TlcxXRC00RQ7NEU0DGCw7yL3AyEnjpVLeC6eQ8i3MViBvcGc52diPPaUFmwYMY+TLZ
2pr9aEginilKtYkpUBQFOdiDorQDQ1FagHESJQErMJBfy4K2v7u7ulizuKqDKBCJ+OcVbt
MIGL55tjfyBs2ybDQ6P/Cb/3lCNaz5232QVxmquSuWxB27Ng+
+W0N5GwBgh6l0UMAed0szLaWcvDjZoguW6zgXWuT0zgQgdnsBqSRIWX5/x7TSi0+p
8TkkEsnbGSoXMzNRXtu25YgnRrRiV6w2SAC3qp35OcoMGy0l3npNJHHdkvPkIP29IRz
kmAMPHonjaCMtxMCbaRjhHo8hdl6U7DX4t4ltzTEdLi134uidOirUfUpRsGXVgsJyTcP8Ro
+2Ws+VvIbGQtGQMogZBo3UC25LIQrrX292Fq02OGsmEO2vaJASHHH7l036y1oLL779
2t/isrYQ/1RVAzw9yRP4PedkhuTTjLAMCKFGgXdThniXh/TR2bm+iB6MomC9E0do86ou
NshxpjMjVKYre/3Uoylf3jUFFjS7HY6du43qilHj5UoIZHR2enbWwu/5c2ZIRke/AMrobZF58
UbRDMu88nx2qaEc5JL6jtF0cUXCq2SyjMGQZjTPsPXIUfs2MoJpGP0WqjscDipCmZylyq8
bxfnubpT7D6mkOevE2FVQGguKUXqTG7UqMQjUS4NAXqho5BxQjveGOszutqNjOw+B
EBOIVV2Rcp9MC3QHyrIV3spvf0NO7Slj6t1mOefmVPhDW0TrBMb4UhptEKuZpqHghiW
ukJ4fSVIwXGSeYH01ujQLey8gpNx6nrNvdnd2F+25brrAAyYO7GgK6McIPxphTRkh18T5
ekMC6e1QFY0Gp4s+cwZo2qviFVCXyss3vmp0urPTRoFnXzcEqvXfXQ1RDc7OmjlX5JX
nRq/yZmd1dbHJBFFauPvs+4T4QCD9FmQwrlvsWzyniaBNhRDhnXd2Q63KB8MLEPOg
oSv60VILfjRCs7ttjILC6JpFPq23nBoaS8c0gFNxP2elK2a7JsTGL8Br3SrwUcmYJH2Ym2F0
V4NmjmAKlWa7kSCWg/e5gL+Q4D+hj8tr8wM6TydWf7ShW8lahhFiFOzszdnzUK7sw9f
d3QNNQSu7782h+
+O+JqTb7ITDARrfTqCxrKhV11crXkOhKrDBALjKkqmUsriiGjjZ4UFsW7WY0a14y8TFyn
Mqm6U0TT+3ZN5SbEzEJFLf72K34u8d1Uc8lxVxhR4snCkGlkiVAo88HemkQpkQltFpe/2
n9hXk3Q74Rb1YV5M+r3Njr3dfRhZrVduYnUV2xikWaNMhUpuavS1ICck5tI2Zab9Tteb
gQyKE4D7XKZhfoCd0sYS3iLDKT1Ti6b4OV1z535/TkdefwFyCjohXai/TvsZZladnZ59ZM
mnDuCmsr9MEc9fR2DovCf+Ilpir50VFh4CKpycXO5XKlGMWoxulTsQjVWpLbXpDhzCsC
5Jri59mTlvpY5Rw0Pt2AKvmxQwbRg7SSQtLnFHUNOWFJu3hgEZ5fyz+95ERUZDA89n

s6KuKZC7hjRnYHDIjv5ahjXCmEBEZ6CtRXtdT+a3gkeqKr7/UhcSSy9prvqMjovR8+8sg
PGTHHJ924rjWp0tG90e3HVDtlnGSLhqi3BhJlHY0gaWSuJsDnXJXyMv0RLOGwFAslhp
ceHadDNC+fP+rwolzO1klgGiGG2jzpxT6oGk7BfPrzeOJXGjUuvEU6RkiBjtkP56jbOI/xJt
U/dmkD4KSshnNUEZnW5vRTqsQ8AbNQWqDY1uVKUO2YopN36uY9mOYUjbhEk3b1xH
PxeP171eYwED9NbWV4XLP+jPOS0Ib/gEuUOaYRGsr7sT+7N9fzeitF/TziN8VUGEFb//jE
AO2MmBCzj/WNQEC6J1K+m9SRZdkBzPDLEwIMpIIFRpUAempdFpjRRtCFtcnVKx3FuiiG
fmEVEwv/nCLFzHfuKaLfrVGmLx2yz3xNdqTMsP/TSIfivQ4PTdpahNtzAZzolzv0r2ovXfjK
zEu7sYsbYx28LfvRe+Pey4M+hAyNHbYLIcrnDujNjk81KGFA9mtYlTg2C02vbG4uLDW5
sklO7HCSXrlosaWN39wuamEV+Ke5QMNxeFHKfgyfwpXJR/SJaqdAj/nCEU/5NrhPw3YJU
vK5pSxKQFQt+qpKxXMH67wQRljGb2Mve3gGqZLyYUMwRFkMeXVWHVmu5yBMFsIA
Goqvbo6YJLipyJA4YNqflmeWeJZSBORoaAj/JurqBdjyf83YdRfrrwc1Uuu3Rf0kspM2wuxf
nu3bY6IAF3c9hGCxs4r2cf0/9FXtuwDuQsxch9yK7U68X3o2hUnkhfajPX8ujNEJqtAMk7
5GT2S0uvETDBPgu5RbdomxsdfTDWxd3d0omP5EHxGDW9rbcaOcNpiWWE97YrSs3g
1dee/TfHul1IQ9lofeSK+OvqReYldzM12XBLEz1TAWqGTWZXvIO+O1EEF66PqdWoUNDq
wqcl0Uql7KDE49WtKknzOGV7dUvuzLOKXI6hWJSBSeXP2vx4e0N6OfwH2mguZ3dVejx
FlebuOHCi9Z93x+wM1ZMfiBn4L0FyTC/3yvssFboPcUU4/d2YCWzjyXMJfoxXgdxn21QC
VR9qobu0L0HJg6SRdcqifjSbQlyxAfTu082bUYHWSCaFewJEf4IDasKXVtW4/F4EOk0ol
e8u1GUiPJ777j3g2rHb57HXMgQWobOjPatpr6Lv+wmmpdFk+QTP0DuShMbmEryAUIj
Ec2oEYxUE1vtIHfa0x6nhaKbBMoMRSDnKUhrd3SBgw1T1IG8+XVP8PaYAMi6uTEkc2k
QCKWp+fnV1tjctcWccPQCeXU/290dNeyZA+UHBm3tjw+v2Ver7s9UJL4j0Byxuwn2KO
2fHSGfE+BZAGldGPuVyhWVG2DRbouYAR9QMYnAXg0qKuXzCWbfD33EoAui9KL1hcf0
6bRevAGsLb37eQm3NkQnSpxB+79EX29v2C4Qa93Py+16/KYXBWqK1rUBxW+CIzml
RRp/bqESo6skGbG0LUw2xC5TGS44DIVcra9qKeQHv+fHStZM9hjsFFrHlITgK6t0CNns2
wOSs0rOVUbL6tfel7s8QDVjguf3Ue7a4X4yEdrAVnLpj7ut5TuxcwnhCdS28HnhDfKQQH
CqewdIXlhrUfD6CpAWYqzoQ1vTHV0dF1SgNSIF9fW901Ljrz+roxh3AbuPT4PwnOWCH
1Kigc9hbWUX7IT7q2r1WWjp3dS5EMTpEcgpRhEH04h+5aGLVMXnA808IfloI8MjtqqHv
4yL+p1bBsR+KDZR9x48oGgFtwJfxTwOkV1n96oDaADDvIEL8ombde21VXo401icreNE
ZDJe9RO7ZkasuL2xTPtFxJLEMHpY4aMk8tzUve6xNuN0Nb+VH5UdHrOC+uWd0tUc
vB1LBLHF26pvowFSFDwdkOLKEj1wE5NmhfSBMwEbRri5i7nA2FK7N7nlmVg6FExM/PD
U8MgV0y/1hAUvQOuWcHf+i/ak4u4JODV5Lu2SK3VqGpXI0VFjg4PIIPV1owz8QI2p2FFrX
e42r03i9tPd9D5rxbjoxqU+Stq3VsDOCNYSjdGLuDeKD5MK6XRIsSbl5UpCUV/fkDKX3L
EdbdmY3sAt7qArhf8LujkrZLyFE/RI46yBubWLyPAxS0Lf61vliQAcoNOObEXIEDbkt7t6ZSu
14bRdHBq/y+m/jZixnxng/p31e60UdjKxxKi2QhSma796Rzl7CrhStyJ2VG9psHlqQ0C+
WFb5nTQSMd7dTGFa20kN+FUS1I7Spvuklax96DyfnAjXKpf9eY7tlraTM91qr8HUJ9FZQ
3zZd02BbTctDL3w3MYUNU+n/FWO7ZU1ELO+8vIFR27dr23w5r+LG4p21Li9sscaD/2d
89L4rnG4EUdrZ3b1n+UGLLuL/r0ulT7qCgbsxNa84XaX/f83gblrOtua/INZ6UU///8C1Xlm
F1M3cZiLp/3VPvd8KJ8bTsVR8GaqU3PJMIAN+
+n+nemta/z/ZI4XSALwktgAAAABJRu5ErkJggg==");\n\nbackground-repeat: no-
repeat, repeat;\n background-position: 1.5%
22%;\n}\n</style>\n</head>\n<body>\n</body>",

"storeOutMessages": true,

"fwdInMessages": true,

```
"resendOnRefresh": true,

"templateScope": "local",

"x": 840,

"y": 220,

"wires": [

  []

]

},

{

  "id": "96a15219.e271c",

  "type": "ui_template",

  "z": "11a915a4.97dc5a",

  "group": "c6bb7405.2b6258",

  "name": "",

  "order": 2,

  "width": "4",

  "height": "2",

  "format": "<body>\n<div>\n  <p ng-repeat='x in msg.payload'>\n\n    <span style= \"color: rgb(220,25,0)\">\n      <i class='fa fa-plus'></i>\n      {{x['labels'][0]}} News: {{x['data'][0]}}\n    </span>\n    <br>\n    <span style= \"color: black\">\n      <i class='fa fa-minus'></i>\n      {{x['labels'][1]}}\n    </span>\n    News:\n      {{x['data'][1]}}\n    </span>\n    <br>\n    <span style= \"color: rgb(226,100,0)\">\n      <i class='fa fa-asterisk'></i>\n      {{x['labels'][2]}}\n    </span>\n    News:\n      {{x['data']\n[2]}}\n    </span>\n  </p>\n</div>\n</body>",

  "storeOutMessages": true,

  "fwdInMessages": true,

  "resendOnRefresh": true,

  "templateScope": "local",
```

```
"x": 920,  
"y": 480,  
"wires": [  
  [  
  ]  
],  
{  
  "id": "5663dd4f.814bd4",  
  "type": "ui_group",  
  "z": "",  
  "name": "News",  
  "tab": "99d8ed11.b17c3",  
  "order": 2,  
  "disp": true,  
  "width": "10",  
  "collapse": false  
},  
{  
  "id": "c6bb7405.2b6258",  
  "type": "ui_group",  
  "z": "",  
  "name": "Chart",  
  "tab": "99d8ed11.b17c3",  
  "order": 3,  
  "disp": true,  
  "width": 6,
```



```
    "collapse": false
  },
  {
    "id": "e25a9d9.27c126",
    "type": "ui_group",
    "z": "",
    "name": "",
    "tab": "99d8ed11.b17c3",
    "order": 1,
    "disp": true,
    "width": 5,
    "collapse": false
  },
  {
    "id": "99d8ed11.b17c3",
    "type": "ui_tab",
    "z": "",
    "name": "Search News",
    "icon": "dashboard",
    "order": 1,
    "disabled": false,
    "hidden": false
  }
]
```

