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# NEWS TRACKER APPLICATION

IBM-DOCUMENTATION

UNDERTHEGUIDANCEOF

IndustryMentor(s)Name : Sai, Priya

FacultyMentor(s)Name : R Sivaranjini

**TEAM ID : PNT2022TMID38914**

**SUBMITTED BY:**

Sathish K	421319104023
Shanthini A	421319104025
Narmatha S	421319104020
Vignesh M	421319104042



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

KRISHNASAMYCOLLEGE OF ENGINEERING AND TECHNOLOGY 2019-2023

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<b>S.No</b>	<b>Table of Content</b>	<b>Pg.no</b>
1	<b>Introduction</b>	
1.1	Project Overview	
1.2	Purpose	
2	<b>Literature Survey</b>	
2.1	Existing Problem	
2.2	References	
2.3	Problem Statement Definition	
3	<b>Ideation &amp; Proposed Solution</b>	
3.1	Empathy Map Canvas	
3.2	Ideation & Brainstorming	
3.3	Proposed Solution	
3.4	Problem Solution Fit	
4	<b>Requirement Analysis</b>	
4.1	Functional Requirement	
4.2	Non-Functional Requirement	
5	<b>Project Design</b>	
5.1	Data Flow Diagram	
5.2	Solution & Technical Architecture	
5.3	User Stories	
6	<b>Project Planning &amp; Scheduling</b>	
6.1	Sprint Planning & Estimation	
6.2	Sprint Delivery Schedule	
7	<b>Testing</b>	
7.1	Test Cases	
7.2	User Acceptance Testing	
8	<b>Results</b>	
8.1	Performance Metrics	
9	<b>Advantages &amp; Disadvantages</b>	
10	<b>Conclusion</b>	
11	<b>Future Scope</b>	
12	<b>Appendix</b>	
12.1	Source code	
12.2	GitHub & Project Demo Link	

# **1. INTRODUCTION**

## **1.1 Project Overview**

The main objective of the project is to provide people a handy a web application through which people can access all types of news and information. Through this application, any user can gain technical knowledge of the world and its surrounding with just one click ahead. User does not have to visit multiple sites for different related information. All information is going to be in one place. Many people generally get the redundancy in the information .Sometimes, people even spread fake news, which circulates and spread more like a disease of false information in Whatsapp and other social media. Various myths are also likely to spread as soon as possible which gives more harm than good to the people. This app while cross- checks the redundancy in the information along with the false and misleading information, which later results in panic in the people.

## **1.2 Purpose**

The purpose is to develop a web application, which will eliminate the problems faced in the current scenario. This application will provide all the information and news related to cyber security, E-sport, Science, and Technology or that are in trend at one place. So, it will save time and efforts of the users by making it more efficient. Using, this application will terminate the possibility of information redundancy.

# **2. LITERATURE SURVEY**

## **1. AnImprovedMethodforMulti-LingualNewsFeedApplication**

**Authors:** Regonda Nagaraju, Mohammed Farhanpasha, Mohammed AbdulMajeed, AdapaSujith

Inthepresentera,theinternetandnewtechnologiesarechangingtheinformatio behaviour of news reader. Instead of reading a copy of the localnewspaper or watching the scheduled evening news ,people incresingly turn totheinternetfordailynewsupdate.Thisuserswillfindtheapplicationinteresting and reading the news articles.Multi-lingual news provide from 50+countriesandtranslatemore90+languages.ByadvancedCSSstylesanddifferentf rontend technologies.

## **2. Challenges and issues on online news management**

**Authors:**

Wael M.S. Yafooz, SitiZ.Z.Abidin, Nasiroh Omar

Recently, the Internet usage spread in all areas of life. Online news is among the popular articles on the Internet, which occupies a large portion of online information. The online news will be viewed almost every second in order to follow the evolution of any desired global events. There are many organizations or political parties employ agents for tracking news by grouping the event. Therefore, news clustering is helpful and worthy for many researchers and online news readers in order to view events from multiple perspectives. Additionally, it can be used in online news summarization, topic detection and tracking for extracting and detecting new events or topics in the news articles.

## **3. Android News Application**

**Authors:** Brijesh Joshi , Nehal Patel Department of Information Technology, CSPIT, Changa, Gujarat, India(2018)

The world fast technology. Then connect to the people and used mobile day today. Where user have access to latest news from 120+ news paper from 50+ countries. We need to stay updated with every incidents and news too. Then fast and best visualize way.

## **4. An Approach to News Event Detection and Tracking Based on Stream of Online News**

**Authors:** Yajie Qi, Li Zhou, Huayou Si, Jian Wan, Ting Jin

Once an event occurs, usually there are a large number of online news to be released. How to quickly and accurately detect the hot events from the huge amount of online news is the focus and hotspot. Event detection and tracking technology is as a key technology to solve this problem. In this paper, we propose an approach to detect hot events from the online news stream in a timely manner and track the hot events. Based on the idea of single-pass clustering algorithm, this approach addresses the weight of keywords and proposes a new method to calculate similarity among news to track event. Through the analysis of the experimental results, we can find that this algorithm has a good effect on hot event detection.

## **5. Breaking News Detection and Tracking in Twitter**

**Authors:** Swit Phuvipadawat, Tsuyoshi Murata

Twitter has been used as one of the communication channels for spreading breaking news. We propose a method to collect, group, rank and track breaking news in Twitter. Since short length messages make similarity comparison difficult, we boost scores on proper nouns to improve the grouping results. Each

group is ranked based on popularity and reliability factors. Current detection method is limited to facts part of messages. We developed an application called “Hot stream” based on the proposed method. Users can discover breaking news from Twitter timeline.

## **6. Newshotspots detection and tracking based on LDA topic model**

**Author:** Xiao Hu

With the rapid spread of Internet and the mobile web, the number of news pages is increasing quickly as well as the content of news becomes highly dynamic. It's difficult for normal users to obtain specific information contained in a mass of news streams. So it's of great research significance to study how to analyze mass news, detect and track newshotspots automatically. This research proposes to apply LDA (Latent Dirichlet Allocation) model to the application of topic detection and tracking. The news articles collected by crawlers are modeled by the LDA model in a form of document-topic-word distribution. We propose a method to compute the heat of topics based on the distribution and to detect the newshotspots.

## **7. Tracking terrorism news threads by**

**extracting event signatures**

**Authors:** Syed Toufeeque Ahmed,  
Ruchi Bhindwale, Hasan Davulcu

With the humongous amount of news stories published daily and the range of ways (RSS feeds, blogs etc) to disseminate them, even an expert at tracking new developing stories can feel the information overload. At most times, when a user is reading a news story, she would like to know “what happened before this?” or “how things progressed after this incident?”. In this paper, we present a novel real-time yet simple method to detect and track new events related to violence and terrorism in news streams through their life over a timeline.

## **8. News Keyword Extraction for Topic Tracking**

**Authors:** Sungjick Lee, Han-Joon Kim

This paper presents a keyword extraction technique that can be used for tracking topics over time. In our work, keywords are a set of significant words in an article that gives high-level description of its contents to readers. Identifying keywords from a large amount of on-line news data is very useful in that it can produce a short summary of news articles. As on-line text documents rapidly increase in size with the growth of WWW, keyword extraction has become

a basis of several text mining applications such as search engine, text categorization, summarization, and topic detection. Manual keyword extraction is an extremely difficult and time-consuming task; in fact, it is almost impossible to extract keywords manually in case of news articles published in a single day due to their volume. For a rapid use of

keywords, we need to establish an automated process from news articles.

that extracts keywords

## 2.1 Existing problem

- There are multiple news-sharing apps used by a single user and are often spammed with notifications. There is also a lot of fake news which gets shared.
- A news-sharing app wants to help users find relevant and important news easily every day and also understand explicitly that the news is not fake but from proper sources.

## 2.2 References

Tracking terrorism news threads by extracting event signatures <https://ieeexplore.ieee.org/document/5137296/authors#authors>

New hotspots detection and tracking based on LDA topic model <https://ieeexplore.ieee.org/document/7949504>

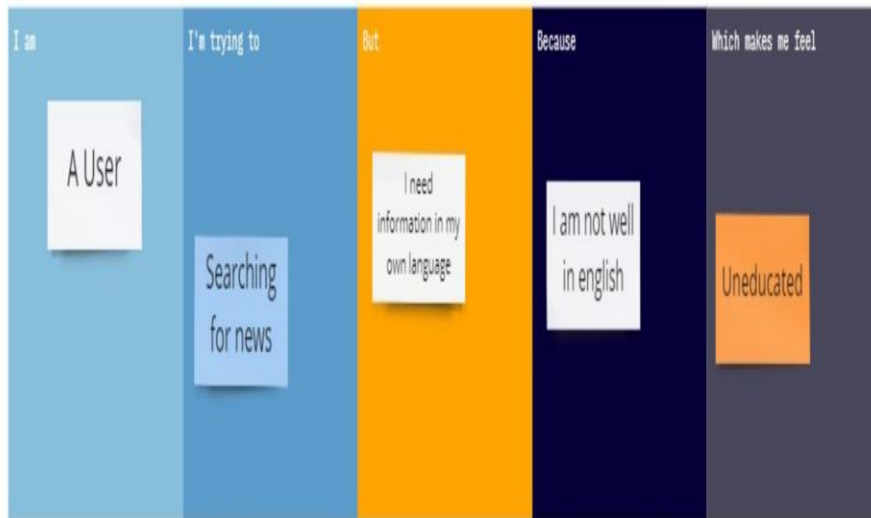
Breaking News Detection and Tracking in Twitter <https://ieeexplore.ieee.org/document/5616930>

An approach to new event detection and tracking based on stream of online news <https://ieeexplore.ieee.org/document/8048142>

Challenges and issues on online news management <https://ieeexplore.ieee.org/document/6190574>

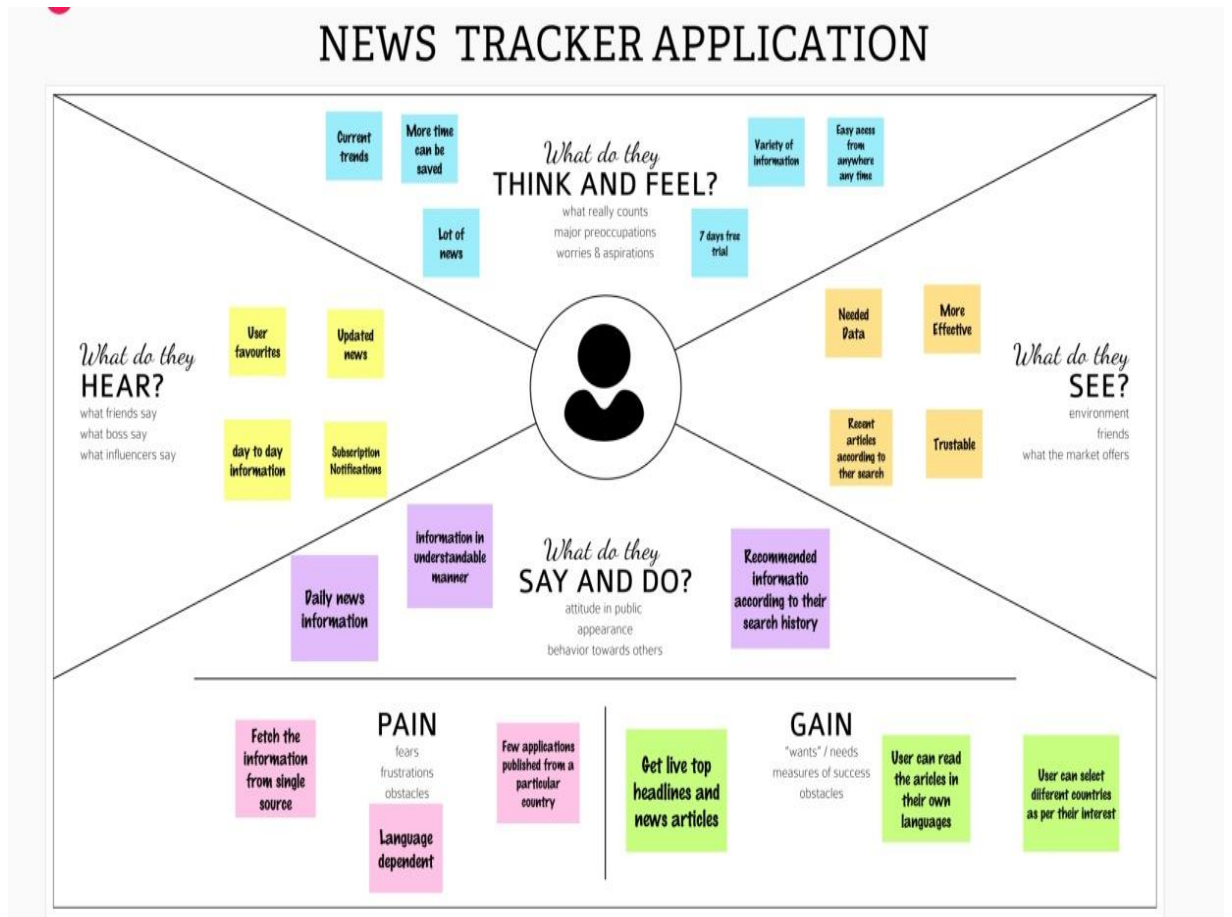
News keyword extraction for topic tracking <https://ieeexplore.ieee.org/document/4624203>

## 2.3 Problem Statement Definition

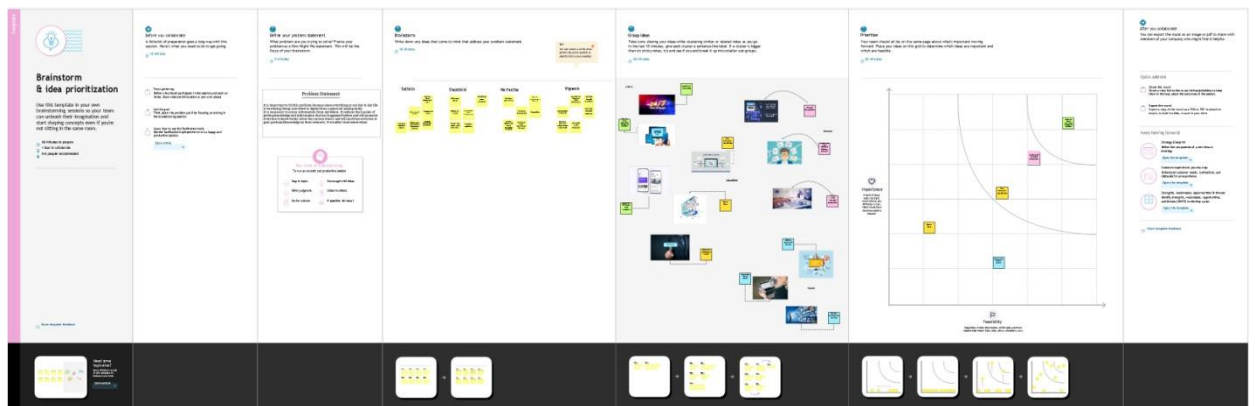


### 3. IDEATION & PROPOSED SOLUTION

#### 3.1 Empathy Map Canvas



## 3.2 Ideation & Brainstorming



## 3.3 Proposed Solution

S.No.	Parameter	Description
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1.	Problem Statement (Problem to be solved)	Many people generally get the redundancy in the information. Sometimes, people even spread fake news, which circulates and spread more like a disease of false information in WhatsApp and other social media. Various myths are also likely to spread as soon as possible which gives more harm than good to the people.
2.	Idea/Solution description	This app while cross-checking the redundancy in the information along with the false and misleading information, which later results in panic in the people.
3.	Novelty/Uniqueness	<p>A news app allows users to read location-based news. For instance, a user from the USA would get news updates related to the people living there. Additionally, people who don't have time to read detailed articles can browse over the headlines to stay abreast of the happenings around the world.</p> <p>If they find a headline matching their interest, they can read the whole article in depth. You can also add images, GIFs, or videos to make articles more interesting and appealing.</p>

		<p>Plenty of historical and political events take place across the globe daily. It is a known fact that some news is more vital than others. Users should be able to distinguish such essential information.</p> <p>This is why a news app pins breaking news at the top of other news. You can also send push notifications to inform them about the breaking and latest news using your app. Besides, you can display these notifications on the lock screen of their mobile devices to improve their experience.</p>
4.	Social Impact / Customer Satisfaction	<p>The consequences of disinformation overload are the spread of uncertainty, fear, anxiety and racism on a scale not seen in previous epidemics, such as SARS, MERS and Zika. Therefore, the WHO is dedicating tremendous efforts aimed at providing evidence-based information and advice to the population through its social media channels, such as Weibo, Twitter, Facebook, Instagram, LinkedIn and Pinterest, as well as through its website.</p> <p>The MIT Technology Review highlights that social media are not only being used to spread false news and hate messages but are also being used to share important truthful data and solidarity with all those affected by the virus and hate messages.</p>
5.	Business Model (Revenue Model)	<p>The fact that we now see that more and more newspapers are choosing to merge both apps is mainly due to a changed connection between the two sources of</p>

		<p>revenue of publishers: that of the reader and advertiser market.</p> <p>Roughly ten years ago, the prevailing idea was that consumers would not pay for online news and that publishers' internet revenues should therefore come purely from advertising income.</p> <p>As a result it was quite simple to define the commercial goals for apps: reach as many users as possible, to maximize advertising revenues. Alongside, e-paper apps were mainly an extra service for the existing print subscribers and some lost buyers of single digital copies.</p>
6.	Scalability of the Solution	<p>The goal is to show how a developer can build their own news feed as a feature in the developer's app. Cloud services such as Amazon Web Services will provide infrastructure easily but the management overhead of using a database cluster is still there.</p> <p>Even using a traditional content management system (CMS) approach, the developer must create multiple virtual machines or a cluster of databases.</p> <p>The approach detailed in this article will reduce the infrastructure required to build such a service. What we describe can be deployed on any cloud-based infrastructure provider. In short, this article should be taken as a blueprint to make a service similar to what Twitter or Facebook offers.</p>

### 3.4 Problem Solution fit

De fin e CS fit int o C C	<b>1. CUSTOMER SEGMENT(S)</b> <b>CS</b> <p>Our customers are the people who are aged above 10yrs old.</p>	<b>6. CUSTOMER</b> <b>C</b> <p>Customer can access our application through web browser using devices like mobile,PC.</p>	<b>5. AVAILABLE SOLUTIONS</b> <b>AS</b> <p>Digitally customer can view their information, instead of seeing on paper.</p>	Ex plo re AS dif ere nti ate
Fe cu s on JS P cap int to BE un der sta nd RC	<b>2. JOBS-TO-BE-DONE / PROBLEMS</b> <b>J&amp;P</b> <p>They have to sign in first to access our application environment.</p>	<b>7. BEHAVIOUR</b> <b>B</b> <p>Our application behaves like a information provider to the customer.</p>	<b>9. PROBLEM ROOT CAUSE</b> <b>RC</b> <p>Information plays important role in people's life. So,they will get it easily through internet.</p>	Fe cu s on JS P cap int o BE un der sta nd RC

<b>3. TRIGGERS</b> <b>TR</b> <p>Their daily needs of information can be fulfilled by searching it in our application based on their categories.</p> <p>Categories like(sports,politics,culture,food etc...)</p>	<b>8.CHANNELS OF BEHAVIOUR</b> <b>SL</b> <p>ONLINE In online,customer can access the various information according to their needs by globally.</p> <p>OFFLINE In offline,customer can view their downloaded information,saved news.But can't access the live information.</p>	<b>10.YOUR SOLUTION</b> <b>CH</b> <p>Our application provides customer needs information according to their interest.They can access it globally and regionally with their flexible languages.Just need an web browser &amp; internet to access it on devices.</p>
<b>4. EMOTIONS: BEFORE / AFTER</b> <b>EM</b> <p>In weather reports our application helps to provide the updated information.</p> <p>For example: Due to heavy rain,the power cut will occur.In that time, people can't afford the information through television or news paper.In instead of, our application will provide news information through their mobile phone.</p>		

## 4. REQUIREMENT ANALYSIS

### 4.1 Functional requirement

#### *Functional Requirements:*

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	SubRequirement (Story/Sub-Task)
FR-1	User Registration	Registration through online application Registration through Gmail Registration through website
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User login	Login through browser directly by entering username and password Login through Login through email
FR-4	User interaction	Done through user interface between client and server View the related news by subscribed or requested page

### 4.2 Non-Functional requirements

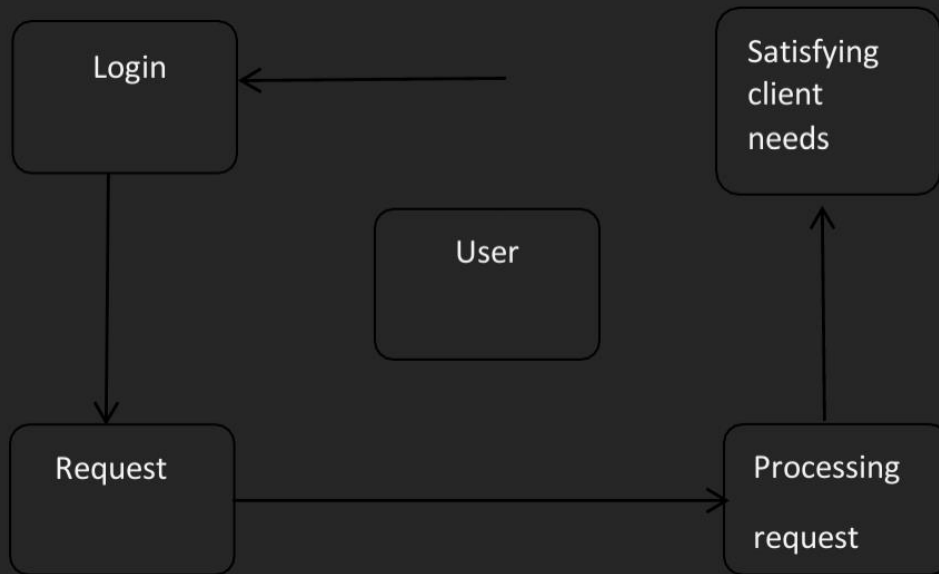
## 5. PROJECT DESIGN

### 5.1 Data Flow Diagrams

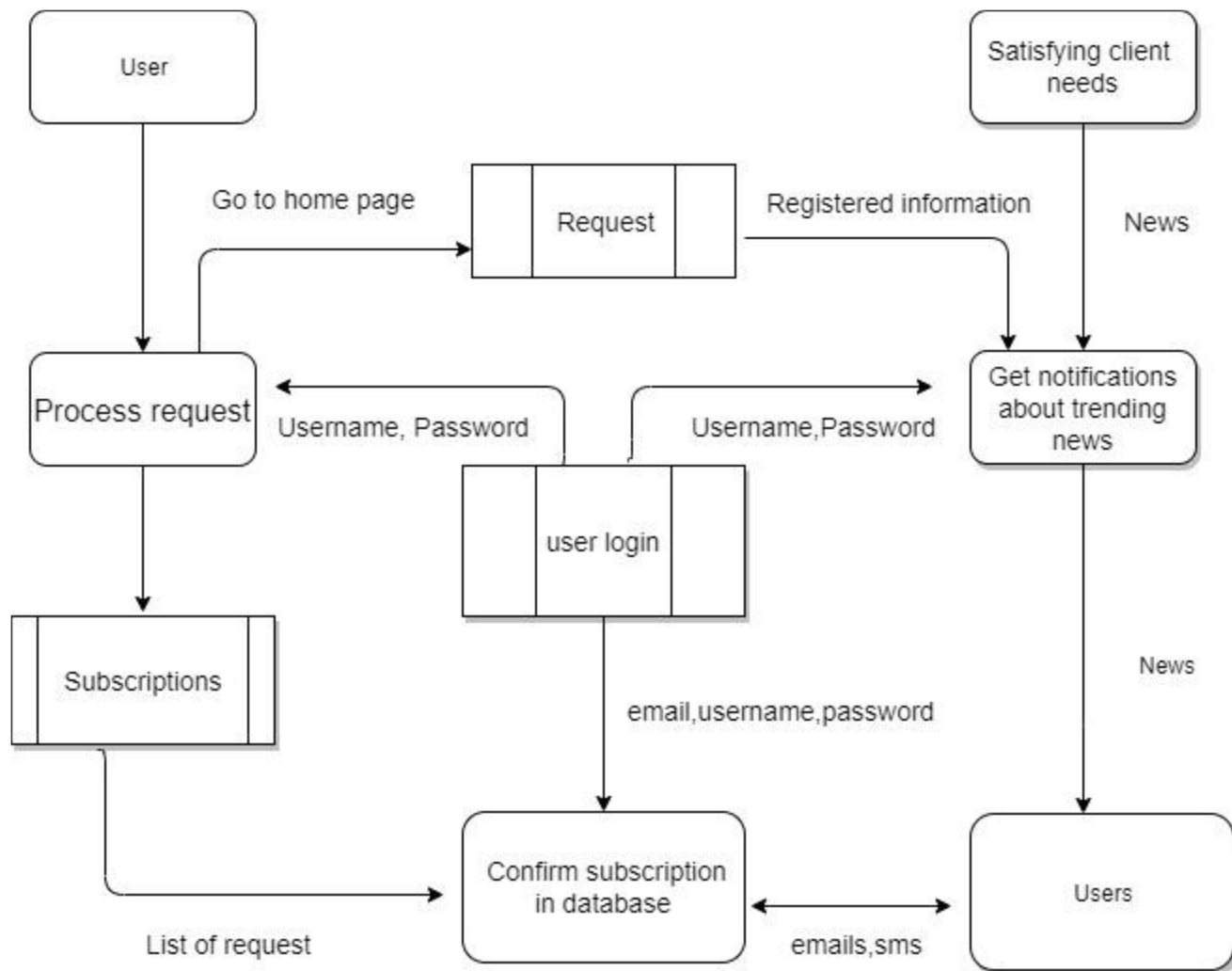
### ***Data Flow Diagrams:***

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

**Example: (Simplified)**



**Example: DFD Level 0 (Industry Standard)**



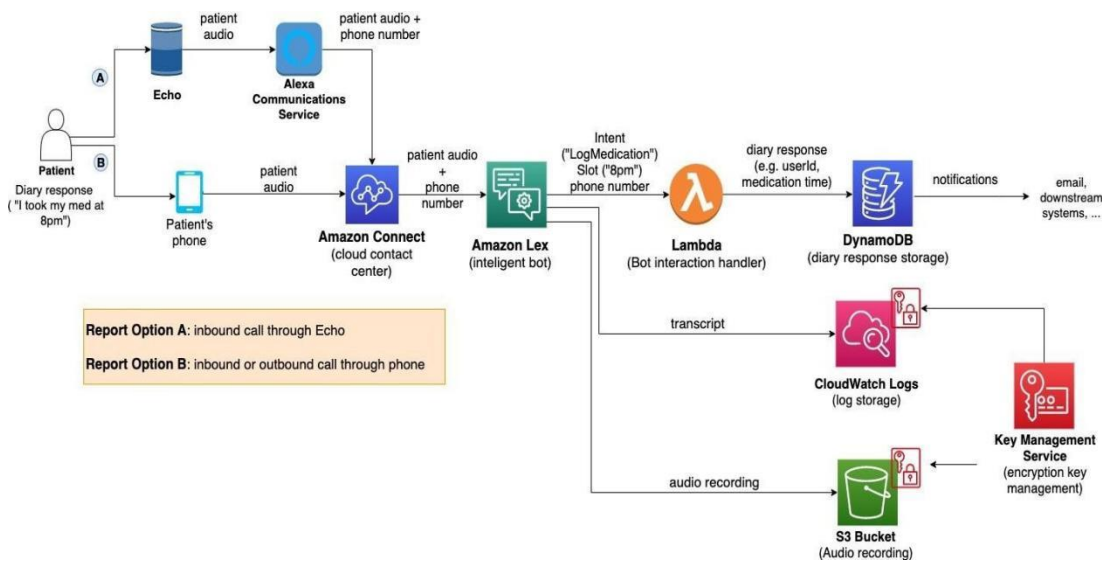
## 5.2 Solution & Technical Architecture

### **SolutionArchitecture:**

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

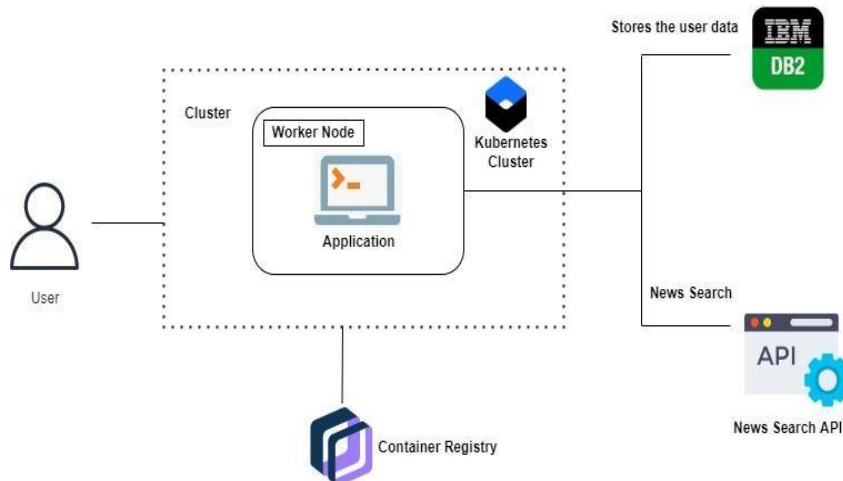




### Example-SolutionArchitectureDiagram:

Figure 1: Architecture and data flow of the voice patient diary sample application

Reference: <https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/>



### TechnicalArchitecture:

**TABLE1: COMPONENTS AND TECHNOLOGIES:**

S.No	Component	Description	Technology
1.	UserInterface	Theusercaninteractwiththeap plicationtoknow aboutthetrendingnews	HTML,CSS, JavaScript/ AngularJs/ReactJset c.
2.	Application Logic-1	Theapplicationcontainsthisres ourcegives youbasicunderstandingofFlas k	Flask
3.	Applicati onLogic-2	Theapplicationcontainsthene wssub- divisionlikegeographicalne ws,economic newsandsocietynews	IBMWatsonSTTser vice
4.	Application Logic-3	Theusercanviewthegrowthofthe economyinindustrythroughgr aph	IBM Watson Assistant
5.	Database	Updationoftrendingnewsarest oredin the	MySQL, NoSQL, etc.

		MySQLdatabase	
6.	Cloud Database	Withtheuseofcloud,mediacov erageissue cannotbeoccurred	IBM DB2, IBM Cloudantetc.

**TABLE 2:APPLICATION CHARACTERISTICS:**

S.No	Characteristics	Description	Technology
1.	Open-SourceFrame works	Flaskisflexibleanddoesn'trequireto useanyparticularprojectorcode la youtusedinthis application	Python-Flask
2.	Security Implementations	Thiscanbeaccessonlybythe journalist.So,ItisahighSecurity	Container Registry, KubernetesCluster.
3.	ScalableArch itecture	NewsTrackerisasocio-economicaccessbecausehelpstokno wabout thedailyactivityoftheworld	Container Registry,Kubernetes
4.	Availability	Thisapplicationwillbeavailabletothe alltheuserwhoareusingthis application	Container Registry,Kubernetes
5.	Performance	The updatation of trending newsoccurswithoutanyinterru ption.So, itperformanceisgood	KubernetesCluster.

### **References:**

<https://github.com/IBM-EPBL/Assignments-CaP/tree/main><https://ieeexplore.ieee.org/document/5616930><https://ieeexplore.ieee.org/document/1565880><https://ieeexplore.ieee.org/document/8703401>

### 5.3 User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story/Task	Acceptance criteria	Priority	Release
Customer (Searchig news)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account/dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through their given website	I can register & access the dashboard with Gmail or in Browser Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password	I can view all types of information through this application	High	Sprint-1
	Dashboard	USN-6	To see their histories about			

			utrecentlyviewed,updatesforsearchrelatednews,currentprogress,feedback			
--	--	--	---	--	--	--

UserType	Functional Requirement (Epic)	User Story Number	UserStory/Task	Acceptance Criteria
Customer( Webuser)	Browser	USN-7	Have interactive medium between client and server	I have to use this application in a simple and easy manner as per my specification
Customer Care Executive	Chatbot	USN-8	Rectify the issues related to subscription, account, terms and conditions, privacy policy	

## 6. PROJECT PLANNING & SCHEDULING

### 6.1 Sprint Planning & Estimation

Functional Requirement(Epic)	User Story Number	UserStory/Task	Story Points	Priority	Team Members
Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	K.SATHISHS.NARMATH HAA.SHANTHINI M.VIGNESH
Confirmation Email	USN-2	As a user, I will receive confirmation email once I have registered for the application	2	High	K.SATHISHS.NARMATH HAA.SHANTHINI M.VIGNESH
User profile	USN-3	Once the registration is done, a separate profile will be created for a user and they can access the information securely from their profile.	2	High	K.SATHISHS.NARMATH HAA.SHANTHINI M.VIGNESH
Search the information	USN-4	After the profile creation as a user, I can search the news information to be needed.	2	High	K.SATHISHS.NARMATH HAA.SHANTHINI M.VIGNESH
Category	USN-5	A user can search the information by selecting their category like sports, food, politics, weather etc ...	2	High	K.SATHISHS.NARMATH HAA.SHANTHINI M.VIGNESH

Sprint	Functional Requirement(Epic)	User Story Number	UserStory/Task	Story Points
Sprint-6	Location	USN-6	As per user location or selected location by user, the information will be feeded.	
Sprint-7	Language	USN-7	As a user, I can read or view the information as my needed language.	

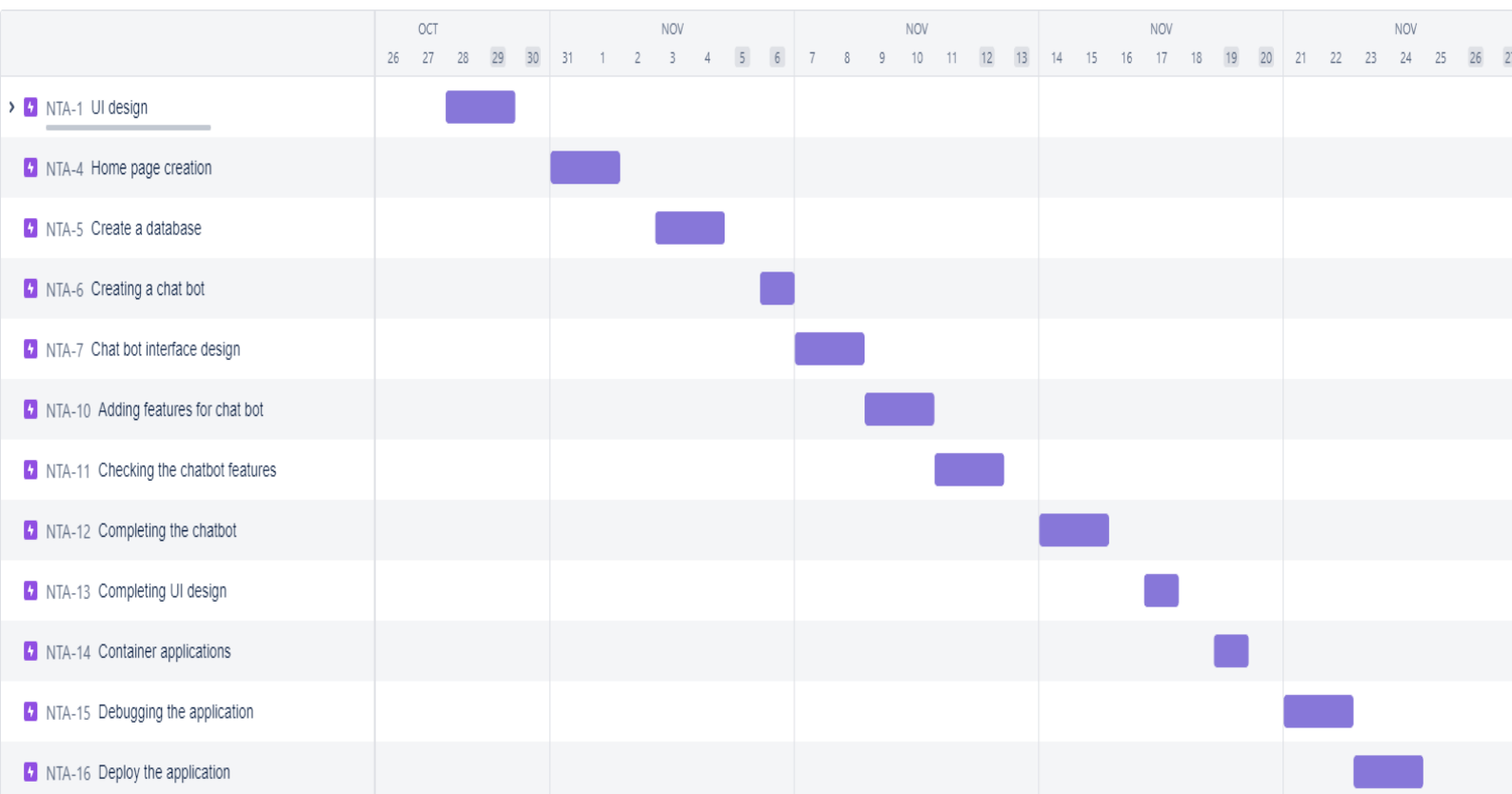
## 6.2 Sprint Delivery Schedule

### ProjectTracker, Velocity&BurndownChart:

Sprint	Total StoryPoints	Duration	Sprint StartDate	Sprint End Date(Planned)	Story PointsCompleted on PlannedEnd
Sprint-1	20	6 Days	24 Oct2022	29 Oct2022	
Sprint-2	20	6 Days	31 Oct2022	05Nov2022	
Sprint-3	20	6 Days	07Nov2022	12Nov2022	
Sprint-4	20	6 Days	14Nov2022	19Nov2022	

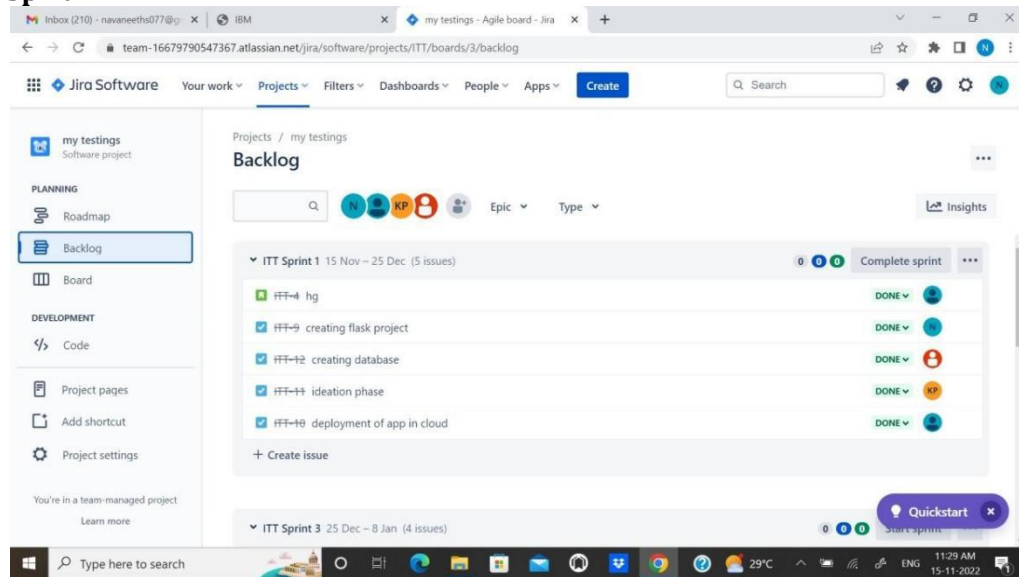
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

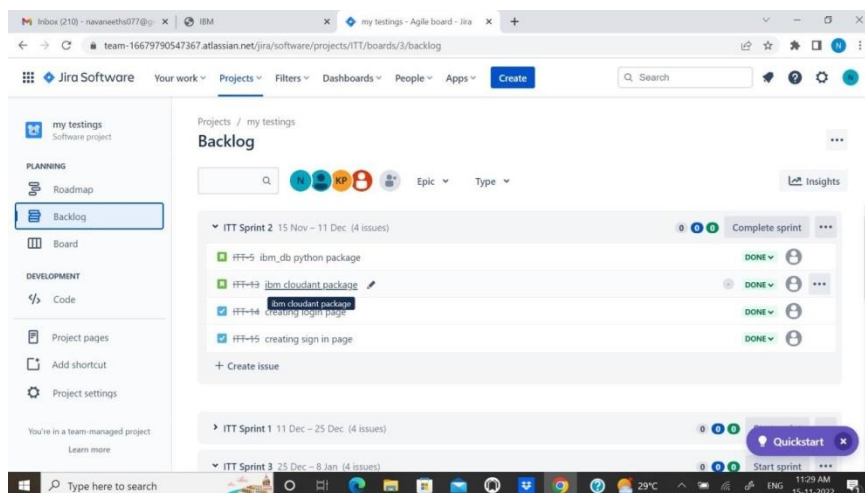


## 6.3 Reports from JIRA

### Sprint-1

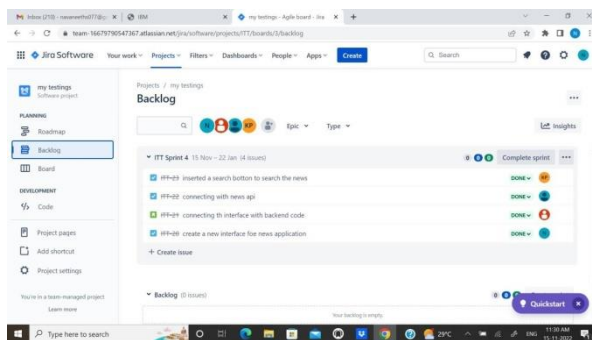
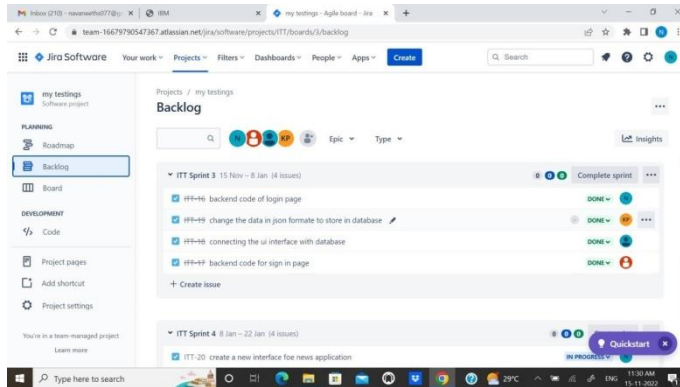


### Sprint-2





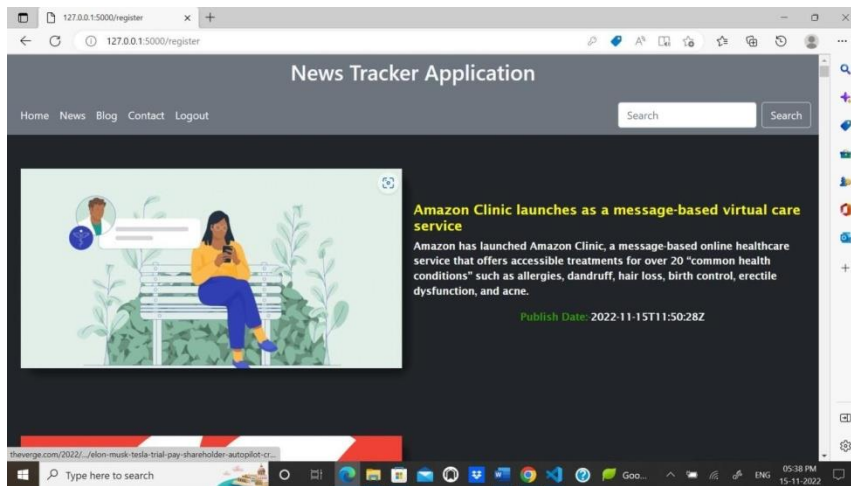
## Sprint-3



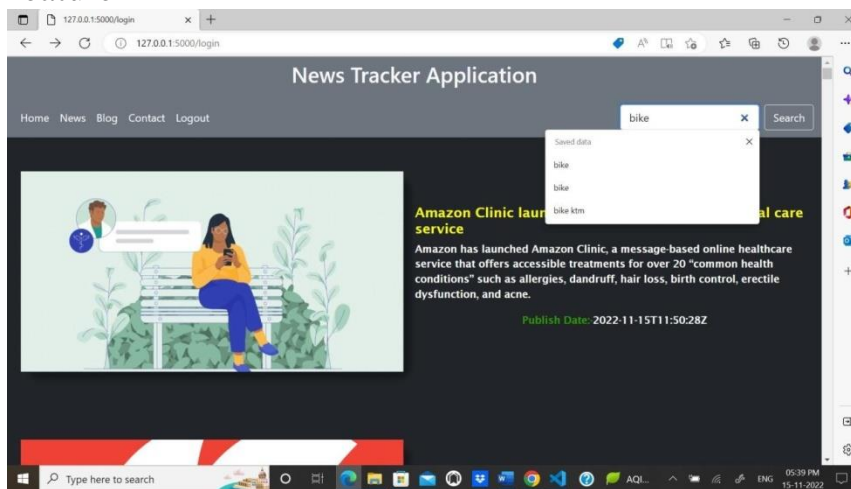
## Sprint-4

### 7. CODING & SOLUTIONING (Explain the features added in the project along with code)

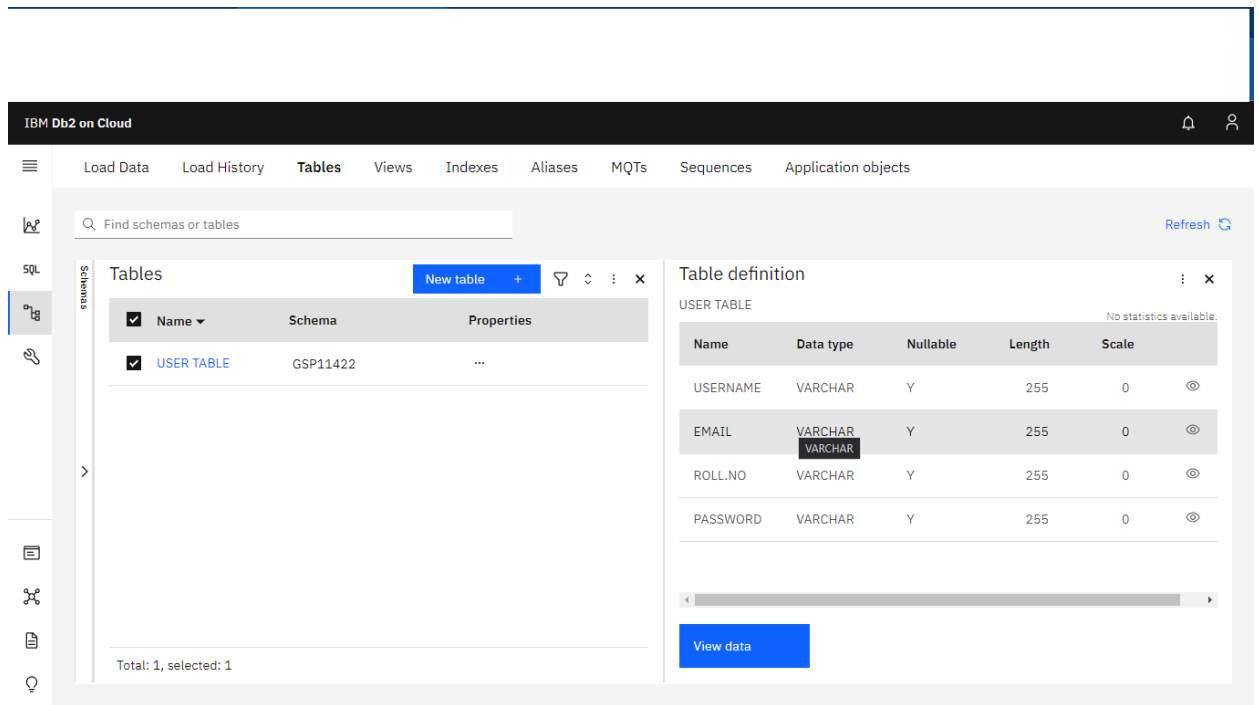
#### 7.1 Feature 1



## 7.2 Feature 2



## 7.3 Database Schema (if Applicable)



## 8. TESTING

### 8.1 Test Cases

### 8.2 User Acceptance Testing

Test case ID	Feature Type	Component	Test Scenario	Pre-Req	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments	TC for Automation (Y/N)	BUG ID	Executed By
..asp@page_TC_01	Functional	Home Page	Verify user is able to see the Login/Register popup when user clicked on My account button	1. User is logged in as a user	1. Enter URL and click go 2. Click on My Account dropdown button 3. Verify login/register popup displayed or not	<a href="http://localhost:3000/">http://localhost:3000/</a>	Login/register popup should display	Working as expected	Pass				Karupis
..asp@page_TC_02	UI	Home Page	Verify the UI elements in Login/register popup	1. User is logged in as a user	1. Enter URL and click go 2. Click on My Account dropdown button 3. Verify login/register popup with below UI elements: a. Email text box b. Password text box c. Login button d. Register button e. Forgot password? Create account link f. Login password? Recovery password link	<a href="http://localhost:3000/">http://localhost:3000/</a>	Application should show below UI elements: a. Email text box b. Password text box c. Login button with orange color d. Register button? Create account link e. Login password? Recovery password link	Working as expected	Fail	Steps are not clear to follow		BUG-1234	Koushik Srinivas
..asp@page_TC_03	Functional	Home page	Verify user is able to log into application with valid credentials	1. User is logged in as a user	1. Enter URL( <a href="http://localhost:3000/">http://localhost:3000/</a> ) and click go 2. Click on My Account dropdown button 3. Enter valid username/email in Email text box 4. Enter valid password in password text box 5. Click on login button	Username: admin@gmail.com password: Turing123	User should navigate to user account homepage						Navaneeth
..asp@page_TC_04	Functional	Login page	Verify user is able to log into application with invalid credentials	1. User is logged in as a user	1. Enter URL( <a href="http://localhost:3000/">http://localhost:3000/</a> ) and click go 2. Click on My Account dropdown button 3. Enter invalid username/email in Email text box 4. Enter valid password in password text box 5. Click on login button	Username: admin@gmail.com password: Turing123	Application should show "Incorrect email or password" validation message						Navaneeth
..asp@page_TC_05	Functional	Login page	Verify user is able to log into application with invalid credentials	1. User is logged in as a user	1. Enter URL( <a href="http://localhost:3000/">http://localhost:3000/</a> ) and click go 2. Click on My Account dropdown button 3. Enter valid username/email in Email text box 4. Enter invalid password in password text box 5. Click on login button	Username: admin@gmail.com password: Turing123678901234567890	Application should show "Incorrect email or password" validation message						Navaneeth
..asp@page_TC_06	Functional	Login page	Verify user is able to log into application with invalid credentials	1. User is logged in as a user	1. Enter URL( <a href="http://localhost:3000/">http://localhost:3000/</a> ) and click go 2. Click on My Account dropdown button 3. Enter invalid username/email in Email text box 4. Enter invalid password in password text box	Username: admin@gmail.com password: Turing123678901234567890	Application should show "Incorrect email or password" validation message						Navaneeth

## 1. Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the [ProductName] project at the time of the release to User Acceptance Testing (UAT).

## 2. Defect Analysis

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	10	4	2	3	20
Duplicate	1	0	3	0	4
External	2	3	0	1	6
Fixed	11	2	4	20	37
Not Reproduced	0	0	1	0	1
Skipped	0	0	1	1	2
Won't Fix	0	5	2	1	8
Totals	24	14	13	26	77

## 3. Test Case Analysis

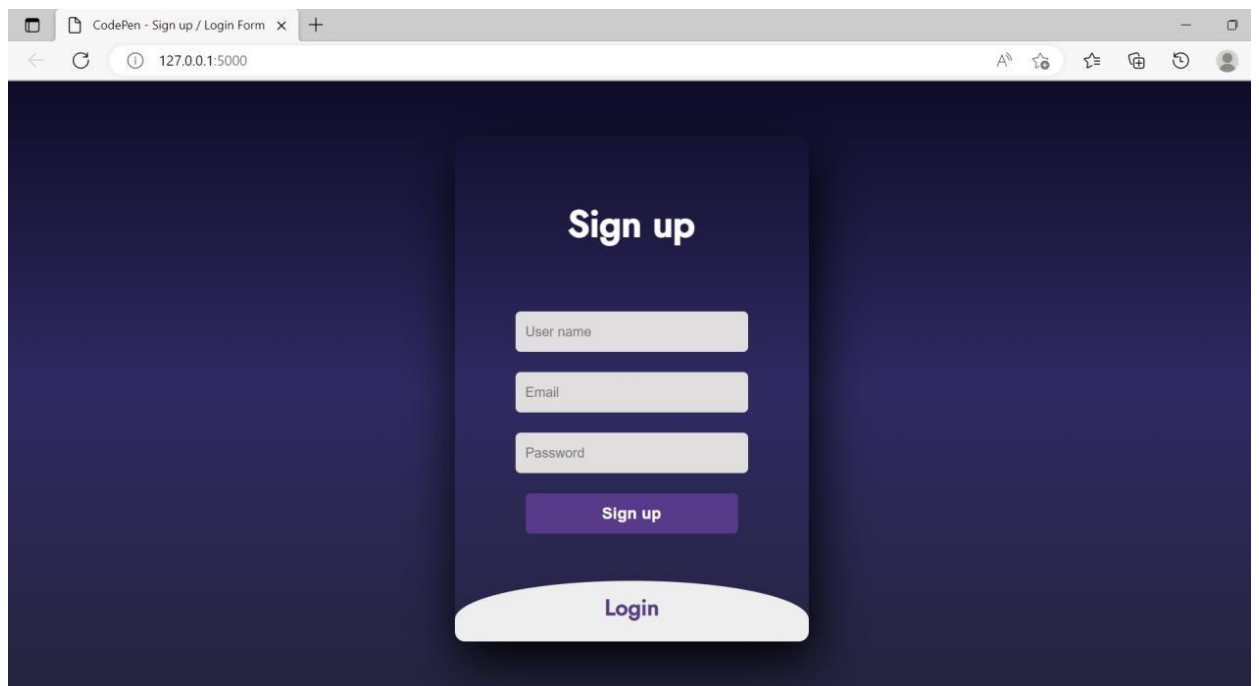
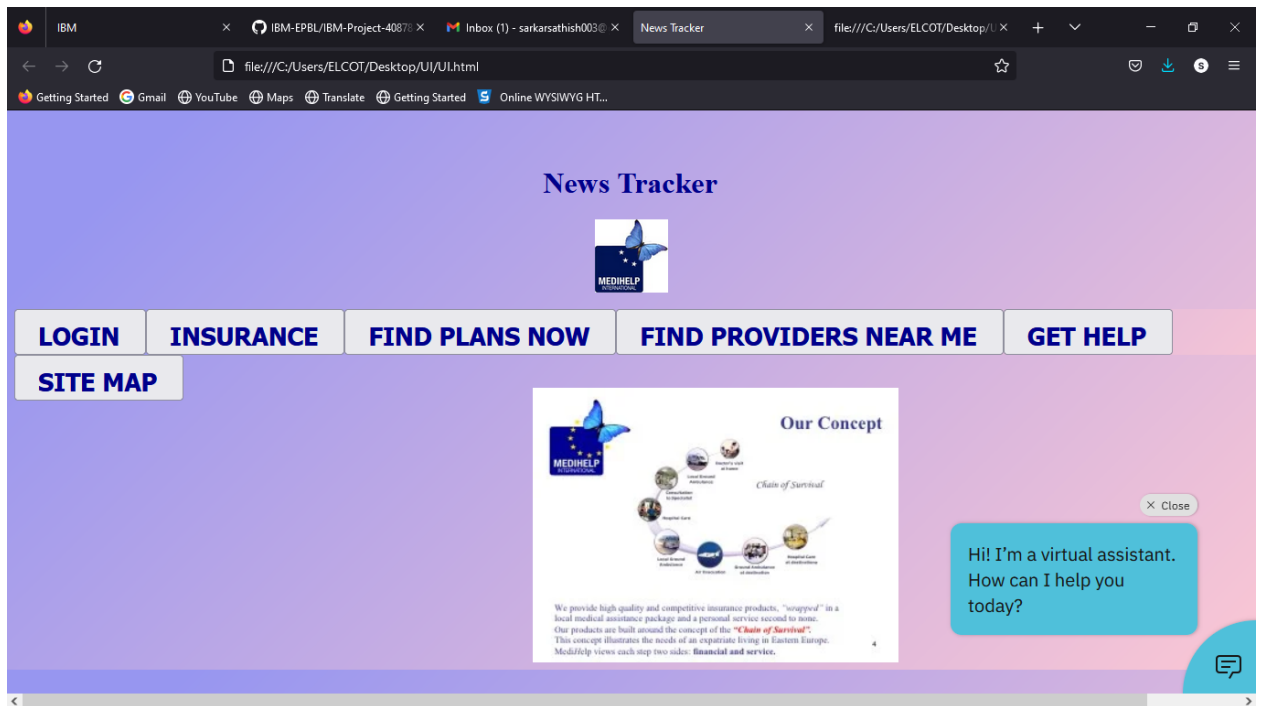
This report shows the number of test cases that have passed, failed, and untested

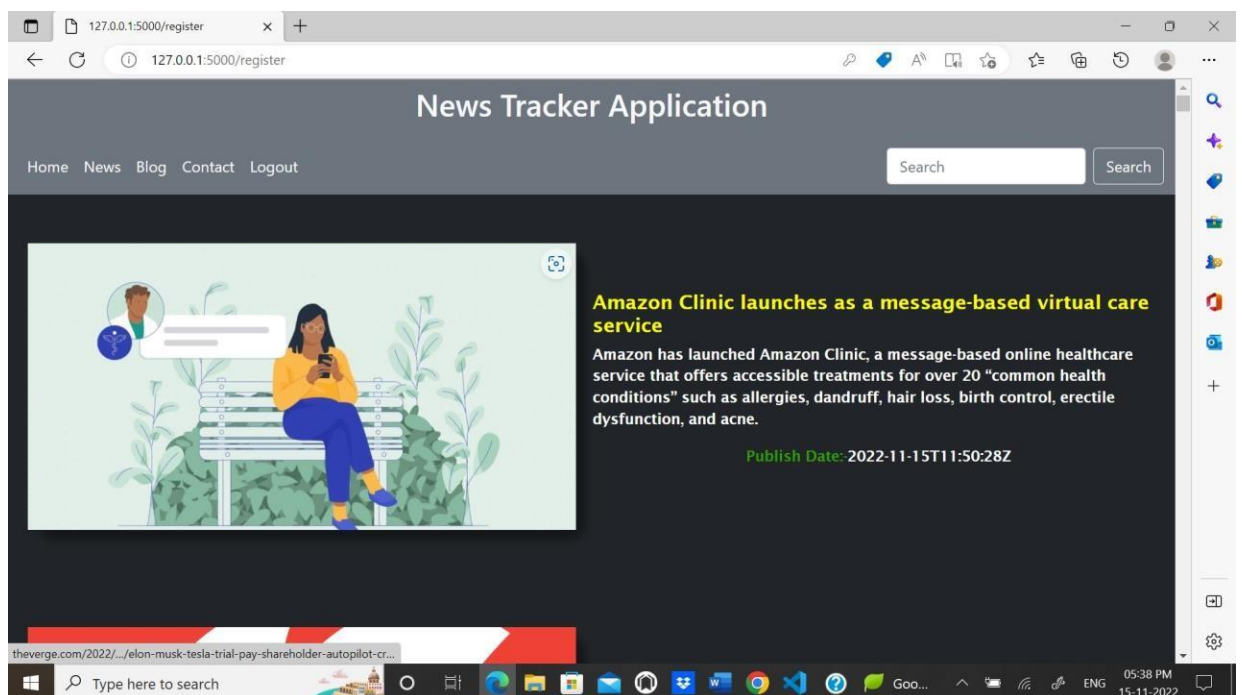
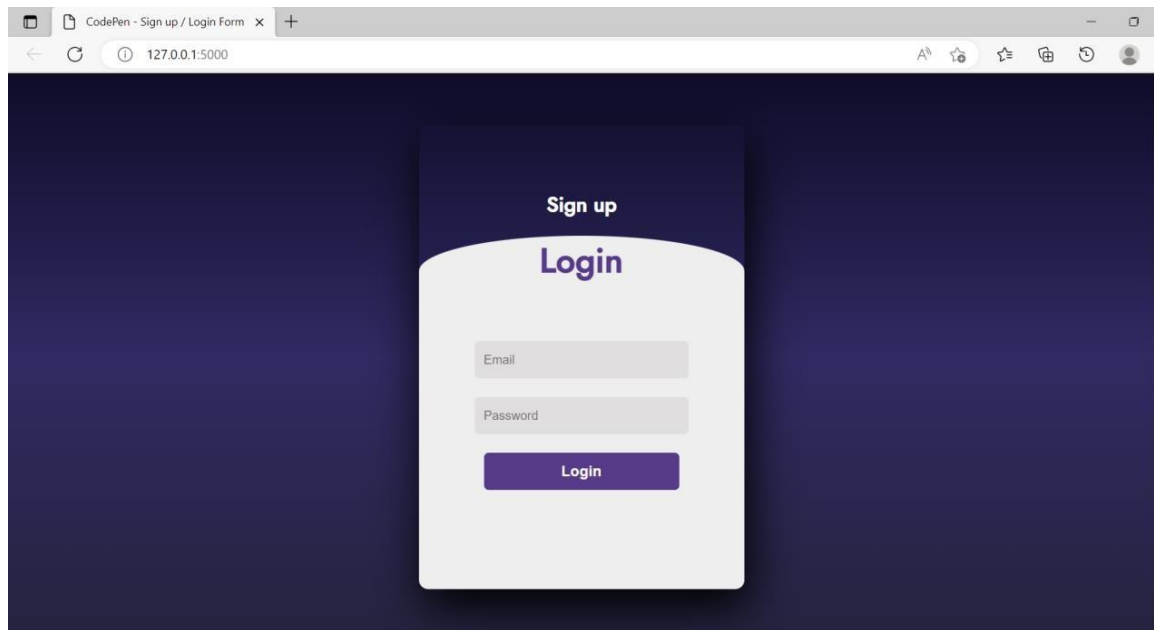
Section	Total Cases	Not Tested	Fail	Pass
Print Engine	7	0	0	7
Client Application	51	0	0	51
Security	2	0	0	2
Outsource Shipping	3	0	0	3

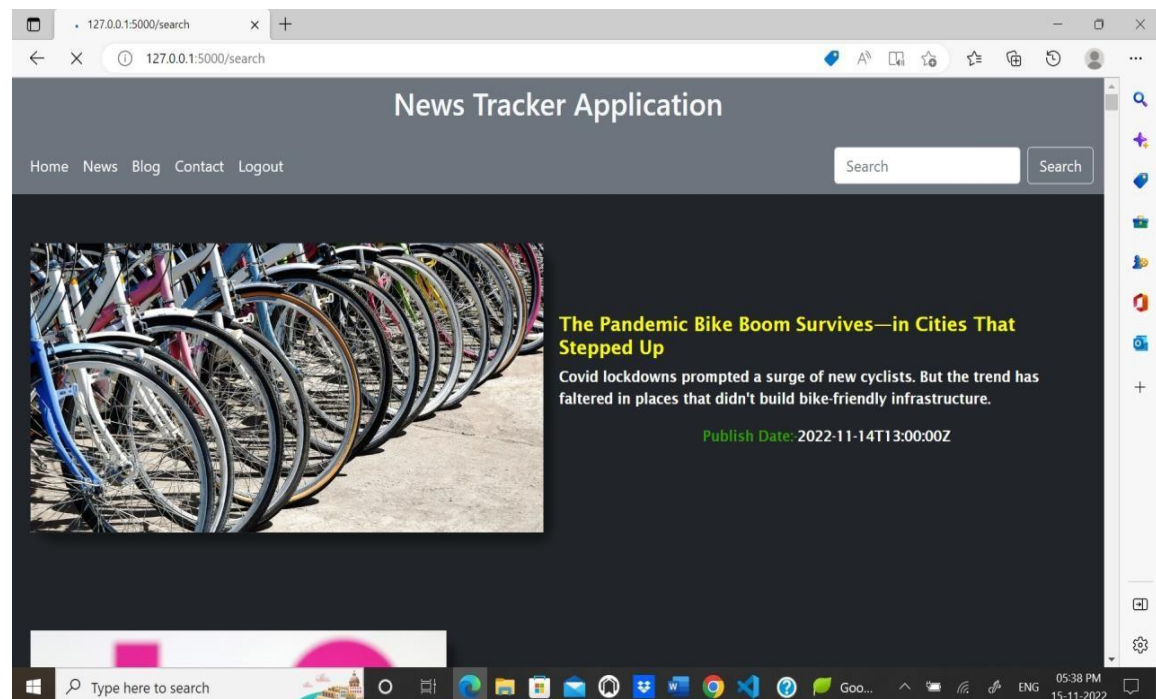
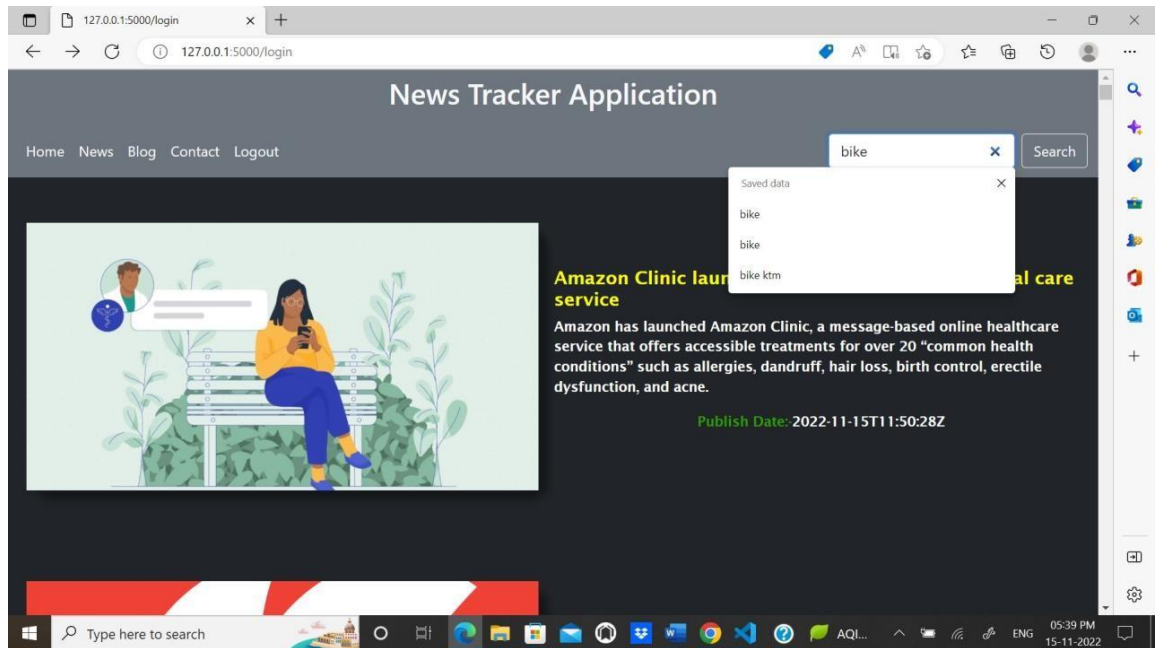
Exception Reporting	9	0	0	9
Final Report Output	4	0	0	4
Version Control	2	0	0	2

# 9. RESULTS

## 9.1 Performance Metrics







## 10.ADVANTAGES & DISADVANTAGES

### ADVANTAGES

- All trending news will be displayed in a orderly manner.
- We can customize the topic which we are interested and make them display
- The user experience are quite simple and friendly

### **DISADVANTAGES**

- Same news which is published in different websites can be displayed.
- Delay response of news API can make the news collapse

## **11. CONCLUSION**

The developed algorithm personalize news feeds saves the user time and give him only interesting articles, news etc. By single click.

## **12. FUTURE SCOPE**

In future, we planned to implement this project in large scale which will be helpful and used by all the people.

## **13. APPENDIX**

### **Source Code**

```
from cloudant.error import CloudantException
from cloudant.result import Result, ResultByKey
from flask import Flask, render_template, request
from newsapi import NewsApiClient

service_username = "50ab9a31-993d-4eaf-abf1-21c6f737b08c-blue mix"
service_password = "6864bc1c41f5701310846a0a80700140c138e7c82b8c7f678ce5ab877f8b90b9"
service_url = "https://50ab9a31-993d-4eaf-abf1-21c6f737b08c-blue mix:6864bc1c41f5701310846a0a80700140c138e7c82b8c7f678ce5ab877f8b90b9@50ab9a31-993d-4eaf-abf1-21c6f737b08c-blue mix.cloudantnosqldb.appdomain.cloud"

client = Cloudant(service_username, service_password, url=service_url)
client.connect()

app = Flask(__name__)

@app.route("/news")
def news():
    api_key = '4f625485702d4929a546bcf4eb9d5c79'

    newsapi = NewsApiClient(api_key=api_key)

    top_headlines = newsapi.get_top_headlines(sources="the-verge")
    all_articles = newsapi.get_everything(sources="the-verge")

    t_articles = top_headlines['articles']
    a_articles = all_articles['articles']
```



```

news= []
desc= []
img= []
p_date= []
url= []

foriinrange (len(t_articles)):
    main_article=t_articles[i]

    news.append(main_article['title'])
    desc.append(main_article['description'])
    img.append(main_article['urlToImage'])
    p_date.append(main_article['publishedAt'])
    url.append(main_article['url'])

    contents=zip( news,desc,img,p_date,url)

news_all= []
desc_all= []
img_all= []
p_date_all= []
url_all= []

forjinrange(len(a_articles)):
    main_all_articles=a_articles[j]

    news_all.append(main_all_articles['title'])
    desc_all.append(main_all_articles['description'])
    img_all.append(main_all_articles['urlToImage'])
    p_date_all.append(main_all_articles['publishedAt'])
    url_all.append(main_article['url'])

    all=zip( news_all,desc_all,img_all,p_date_all,url_all)

    returnrender_template('home.html',all=all)

@app.route("/search",methods = ['POST', 'GET'])
defsearchFunct():
    inputText=request.form['nm']
    api_key='4f625485702d4929a546bcf4eb9d5c79'

    newsapi=NewsApiClient(api_key=api_key)

    top_headlines=newsapi.get_top_headlines(sources="bbc-news")
    all_articles=newsapi.get_everything(q=inputText)

    t_articles=top_headlines['articles']
    a_articles=all_articles['articles']

    news= []
    desc= []
    img= []
    p_date= []
    url= []

    foriinrange (len(t_articles)):
        main_article=t_articles[i]

        news.append(main_article['title'])
        desc.append(main_article['description'])
        img.append(main_article['urlToImage'])
        p_date.append(main_article['publishedAt'])
        url.append(main_article['url'])

        contents=zip( news,desc,img,p_date,url)

```

```

news_all= []
desc_all= []
img_all= []
p_date_all= []
url_all= []

forjinrange(len(a_articles)):
    main_all_articles=a_articles[j]

    news_all.append(main_all_articles['title'])
    desc_all.append(main_all_articles['description'])
    img_all.append(main_all_articles['urlToImage'])
    p_date_all.append(main_all_articles['publishedAt'])
    url_all.append(main_article['url'])

all=zip( news_all,desc_all,img_all,p_date_all,url_all)

returnrender_template('home.html', all=all)

defaddNewUser(userName,userEmail,userPassword):
    jsondata= {}
    jsondata["userName"] =str(userName)
    jsondata["userEmail"] =str(userEmail)
    jsondata["userPassword"] =str(userPassword)

    myDataBase=client['database1']
    newDocument=myDataBase.create_document(jsondata)

defauthenticate(userName,userEmail):
    myDataBase=client['database1']
    result_collection=Result(myDataBase.all_docs, include_docs=True)
    fordatainresult_collection:

    ifdata['doc']['userName'] ==str(userName):
        returnTrue
    ifdata['doc']['userEmail'] ==str(userEmail):
        returnTrue
    returnFalse

defauthenticateLogin(userEmail,userPassword):
    myDataBase=client['database1']
    result_collection=Result(myDataBase.all_docs, include_docs=True)

    fordatainresult_collection:
    ifdata['doc']['userPassword'] ==str(userPassword) anddata['doc']['userEmail']
    ==str(userEmail):
        returnTrue
    returnFalse

@app.route("/login",methods = ['POST', 'GET'])
defloginUser():

    userEmail=request.form.get("email")
    userPassword=request.form.get("pswd")

    if(authenticateLogin(userEmail,userPassword)):
        returnnews()
        returnrender_template("index.html")

@app.route("/register",methods = ['POST', 'GET'])
defregisterUserData():
    userName=request.form.get("un")
    userEmail=request.form.get("ue")

```

```

userPassword=request.form.get("up")

print(userEmail,userName,userPassword)
if(authenticate(userName=userName,userEmail=userEmail)):
    returnrender_template("index.html")
    addNewUser(userName,userEmail,userPassword)
    returnnews()

@app.route("/")
defhome():
    returnrender_template("index.html")

@app.route("/contact")
defhh():
    returnrender_template("contact.html")

if __name__ == '__main__':
    app.run(debug=True)
Footer

```

## GitHub & Project Demo Link

[https://github.com/IBM-EPBL/IBM-Project-40878-1660636900/blob/main/Final%20Deliverables/News%20Tracker/Project%20Execution/News%20tracker\\_compress\\_1.mp4](https://github.com/IBM-EPBL/IBM-Project-40878-1660636900/blob/main/Final%20Deliverables/News%20Tracker/Project%20Execution/News%20tracker_compress_1.mp4)