

# NEWS TRACKER APPLICATION

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*PROJECT DONE BY,*

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## **1.INTRODUCTION:**

The main objective of the project is to provide people with a handy 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 redundancy in the information. Sometimes, people even spread fake news, which circulates and spread more like a disease of false information on 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. So this app will prevent people from those things.

### **1.1 Project Overview:**

In the current scenario, there is no single platform (in application) present right now which provides cybersecurity information, E-Sport information, Science and Technology Information, etc. in one place. Cybersecurity users have to visit different websites to gather news related to the cyber world. Many people do not have the time to visit different sites to gather information. Ultimately, this would be a waste of time and effort. Visiting different websites, the user might get redundancy in the information.

## 1.2 Purpose:

The purpose is to develop an 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 that are in trend in one place. So, it will save time and efforts for the users by making it more efficient. Using, this application will terminate the possibility of information redundancy.

## 2.LITERATURE SURVEY :

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

Source: IEEE Xplore

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

Websites: <https://ieeexplore.ieee.org/document/8048142>

About the Paper: 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 hot spot. 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.

### II. Exploring Mobile News Reading Interactions for News App Personalization

Source: ResearchGate

Authors: Marios Constantinides, John Dowell, David Johnson, Sylvain Malacria.

Websites: [https://www.researchgate.net/publication/299870645\\_Exploring\\_mobile\\_ws\\_reading\\_interactions\\_for\\_news\\_app\\_personalisation](https://www.researchgate.net/publication/299870645_Exploring_mobile_ws_reading_interactions_for_news_app_personalisation)

About the Paper: As news is increasingly accessed on smartphones and tablets, the need for personalizing news app interactions is apparent. We report a series of three studies

addressing key issues in the development of adaptive news app interfaces. We first surveyed users' news reading preferences and behaviors; analysis revealed three primary types of reader. We then implemented and deployed an Android news app that logs users' interactions with the app. We used the logs to train a classifier and showed that it is able to reliably recognize a user according to their reader type. Finally, we evaluated alternative, adaptive user interfaces for each reader type. The evaluation demonstrates the differential benefit of the adaptation for different users of the news app and the feasibility of adaptive interfaces for news apps.

### III. Android News App

Source: Research India Publications

Authors: Brijesh Joshi, Nehal Patel.

Websites: [https://www.ripublication.com/ijaer18/ijaerv13n11\\_78.pdf](https://www.ripublication.com/ijaer18/ijaerv13n11_78.pdf)

About the Paper: As world's technology is rapidly growing, we have fast connection and network to instantly connect to other person. Day to day use in mobile, tablets and laptop is increasing, most of the people already have this facilities. In this fast and information oriented world we need to stay updated with every incidents and news too. This News app is android mobile application where user have access to latest news from 120+ newspapers from 50+ countries. The main focus of this application is to connect news articles from all around the world and deliver it to user as fast as possible in best visualize way.

### IV. Research on Topic Detection and Tracking for Online News Texts

Source: IEEE Xplore

Authors: Guixian Xu, Yueting Meng, Zhan Chen, Xiaoyu Qiu, Changzhi Wang, Haishen Yao.

Websites: <https://ieeexplore.ieee.org/document/8703401>

About the Paper: With the rapid development of the Internet, the amount of data has grown exponentially. On the one hand, the accumulation of big data provides the basic support for artificial intelligence. On the other hand, in the face of such huge data information, how to extract the knowledge of interest from it has become a matter of general

concern. Topic tracking can help people to explore the process of topic development from the huge and complex network texts information. By effectively organizing large-scale news documents, a method for the evolution of news topics over time is proposed in this paper to realize the tracking and evolution of topics in the news text set. First, the LDA (latent Dirichlet allocation) model is used to extract topics from news texts and the Gibbs Sampling method is used to speculate parameters. The topic mining using the K-means method is compared to highlight the advantages of using LDA for topic discovery. Second, the improved single pass algorithm is used to track news topics. The JS (Jensen-Shannon) divergence is used to measure the topic similarity, and the time decay function is introduced to improve the similarity between topics with the similar time. Finally, the strength of the news topic and the content change of the topic in different time windows are analyzed. The experiments show that the proposed method can effectively detect and track the topic and clearly reflect the trend of topic evolution.

## 2.1 Existing problem:

News organizations whose mobile apps only provide users with their articles or videos are missing a big opportunity. An application, by definition, should be applied to perform a task or to solve a problem. Most news doesn't do that.

- Rather than just feed readers recent stories you wrote *about* their problems, apps can provide tools and data that enable users to *solve* their problems. When you solve problems, you get more loyal users and a chance to make more money. This solves the problem of the user having to reach out to other sources or to the Internet to verify/double-check if the news was real or fake administers extra efforts on the user's part and also demolishes the main intent of the news app to provide a single-stop credible news platform and also causes irritation to the user.
- The "like metric" solves the problem of the user not understanding whether it is worth spending his energy and time on this article. Also, it helps the user indicates that it is

credible information

## 2.2 References:

### References and Bibliography

1. Ofcom, News consumption in the UK, Public report (2014).
  2. Pew Research Centre, The Future of Mobile News, Public report (2012).
  3. Reuters Institute, Tracking the future of news, Public Report (2014)
  4. Tavakolifard, M., Gulla, J., Almeroth, K., Ingvaldesn, J., Nygreen, G. & Berg, E. Tailored news in the palm of your hand: a multi-perspective transparent approach tonews recommendation. In ACM WWW 2013.
  5. Westlund, O. From mobile phone to mobile device: News consumption on the go. Canadian Journal of Communication (2008), 33(3).
  6. Woerndl, W., Manhardt, A., & Prinz, V. A framework for mobile user activity logging. In MUSE 2010.
- 
- Python Flask: <https://flask.palletsprojects.com/en/2.2.x/>
  - HTML,CSS,JAVASCRIPT: <https://www.w3schools.com/>
  - Bootstrap: <https://getbootstrap.com/docs/5.2/getting-started/introduction/>
  - Sendgrid: <https://sendgrid.com/>
  - Cloud: <https://cloud.ibm.com/login>
  - GitHub: <https://github.com/IBM-EPBL/IBM-Project-52374-1660999079>
  - Doubts and Questions: <https://stackoverflow.com/>

## 2.3 Problem Statement Definition:

### Customer Problem Statement Template

<b>Problem Statement (PS)</b>	<b>I am (Customer)</b>	<b>I'm trying to</b>	<b>But</b>	<b>Because</b>	<b>Which makes me feel</b>
PS-1 24/7 Working people find it hard for reading the news.	Aravindh is an Employee who wants to read newspaper, without any hassle while travelling because he doesn't want to carry the physical newspaper.	I am looking for the easier method to read news.	I am unable to find the time to read news.	It is challenging to manage time on working days.	I feel being not updated with the news and current affairs that revolving around me.
PS-2 Finding the right content about specific news topics in single platform is challenging.	Hari is an HR who want get updated in the company recruitment and business-related news in a single application or website.	I am looking for the right website or Application which update and notify me in every aspect.	I am unable to find the right application or website.	It is challenging and hard to find single place to find the news.	I feel redirected to some other news which consumes a lot of time by giving me irrelevant data.



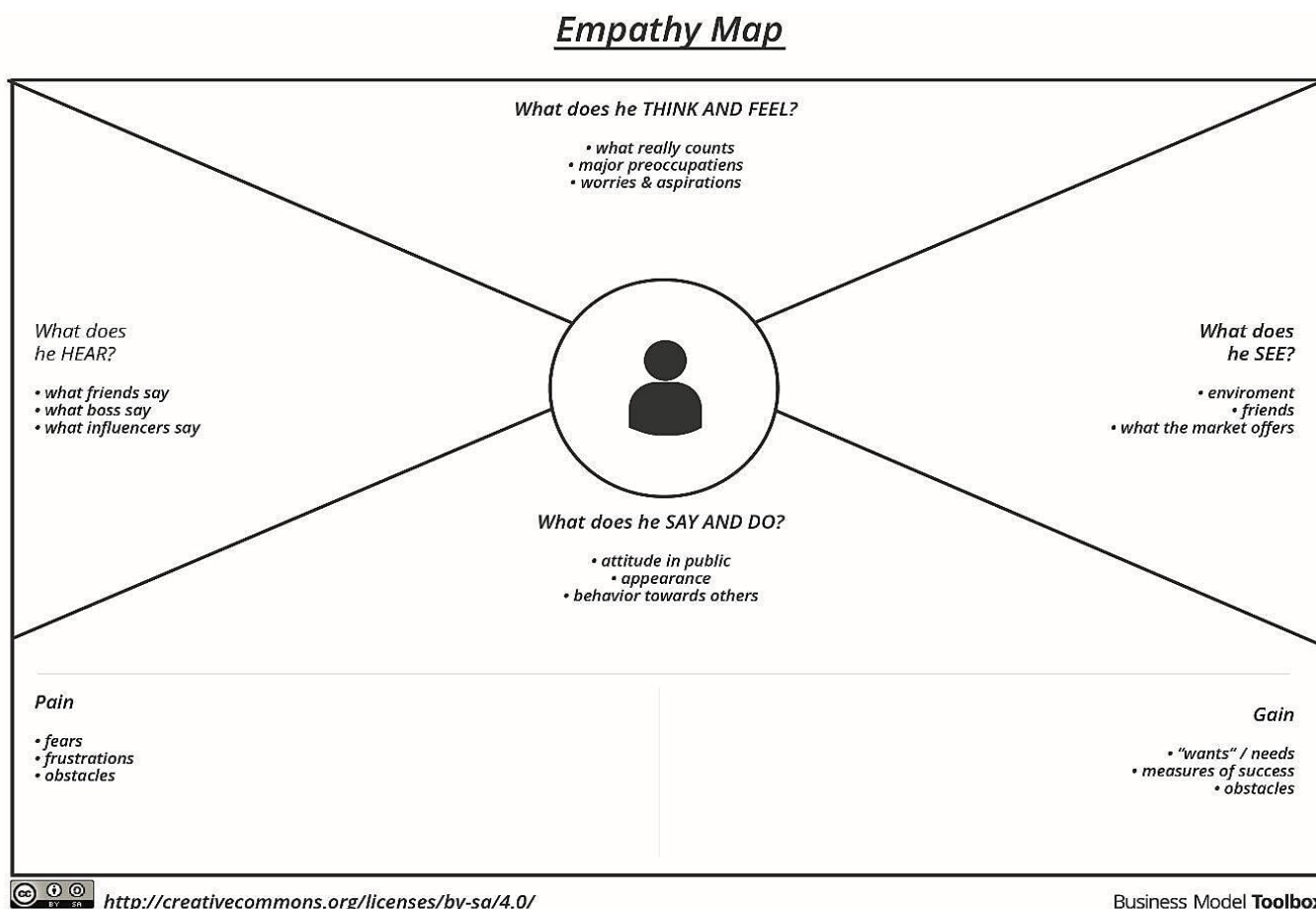
### 3. IDEATION & PROPOSED SOLUTION:

With HMWs in hand, our team members had all hands on deck once again to move to the ideation and brainstorming session. All members tried to solve the HMW statements with their solutions and in the end, we voted for the most liked. Out of the top solutions, we had an extensive brainstorming session where we discussed the feasibility and impact of each solution on users and businesses.

#### 3.1 Empathy Map Canvas:

An empathy map is a simple, easy-to-digest visual that captures knowledge about user's behaviours and attitudes. It is a useful tool to help teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.


Example:



## 3.2 Ideation & Brainstorming:

While the user signs up, ask for which categories they'll like to view the news on. And only push notifications regarding those categories. Also, use this category to show relevant news. Show 8 out of 10 new related to the selected category only. And, an option to edit the preferences. Ask the user to set up Do Not Disturb Time. During this time, do not push any notifications to the user. Providing customizable options to the user to select the time and frequency of notifications required. Allowing the user to customize the topics for which he requires to receive notifications. By continuously taking feedback from the users regarding the notifications are they creating any disturbance or showing the relevant content for the customer?

Template




## Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- 🕒 10 minutes to prepare
- 🕒 1 hour to collaborate
- 👤 2-8 people recommended

Share template feedback



### Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕒 10 minutes

A

Team gathering

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B

Set the goal

Think about the problem you'll be focusing on solving in the brainstorming session.

C

Learn how to use the facilitation tools

Use the Facilitation Superpowers to run a happy and productive session.

Open article

→

1


### Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕒 5 minutes


PROBLEM


How might we [your problem statement]?





### Key rules of brainstorming


To run a smooth and productive session


 Stay in topic.

 Encourage wild ideas.

 Defer judgment.

 Listen to others.

 Go for volume.

 If possible, be visual.

2

## Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

### TIP



You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

### Aravindh.A

All in one place

Receive only the information you need

Use only trusted sources

Weather updates

### Hariharan.B

Very little resource usage

Curated and focused

Market trends tracking

Track how often user visit area

### Dharun.A

Keep the news relevant and short

Customisable profile

Bookmark news

Deliver news, according to the persons internet

### Sivaprakash.S

Saves user Time

Create better and more targeted content

Deliver news in daily basis

Browsing with keyword

### Visweswaran.R

Improved OnTime Performance

Focus on lead

Syndicate your content

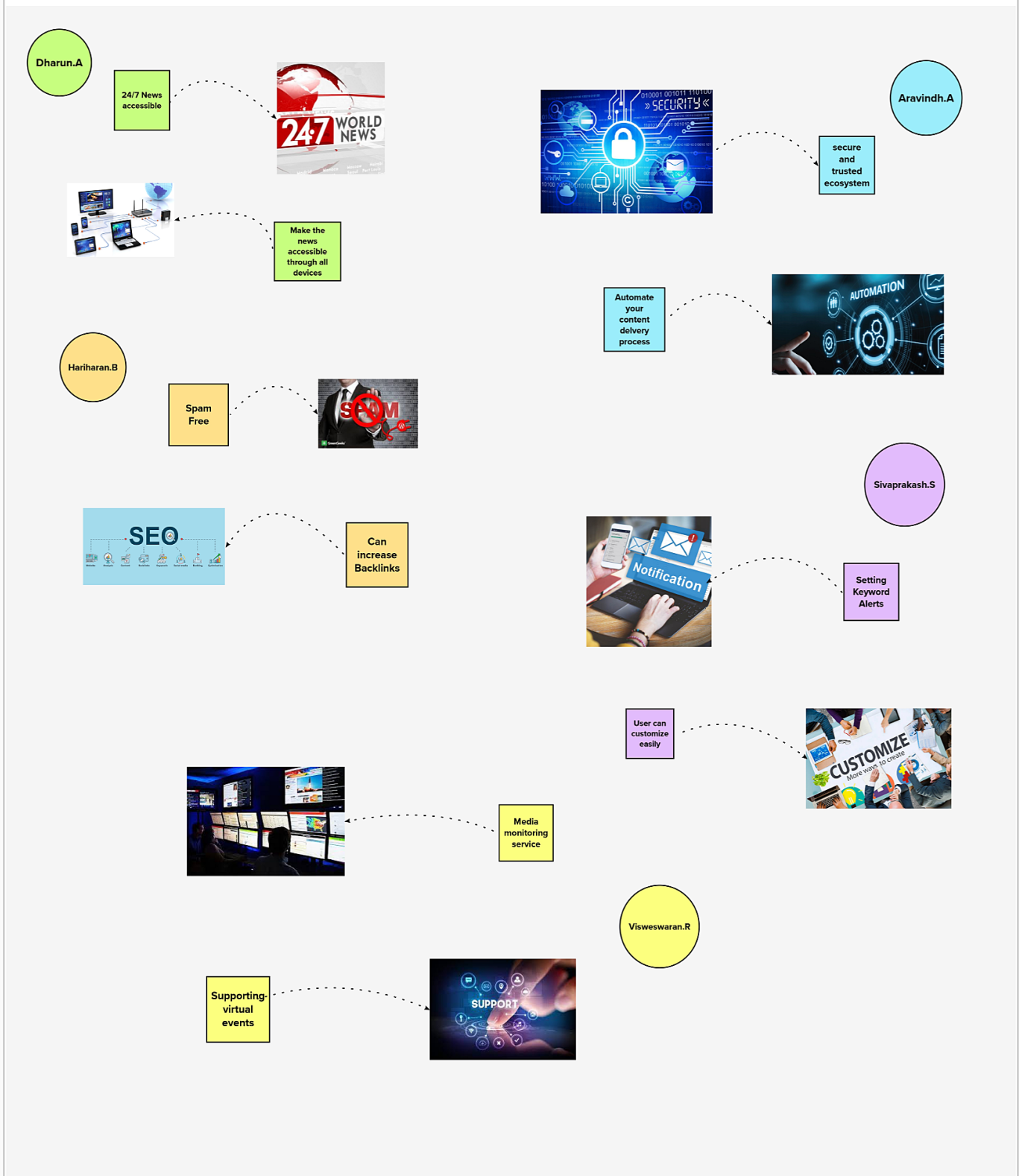
Competitive

3

## Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes

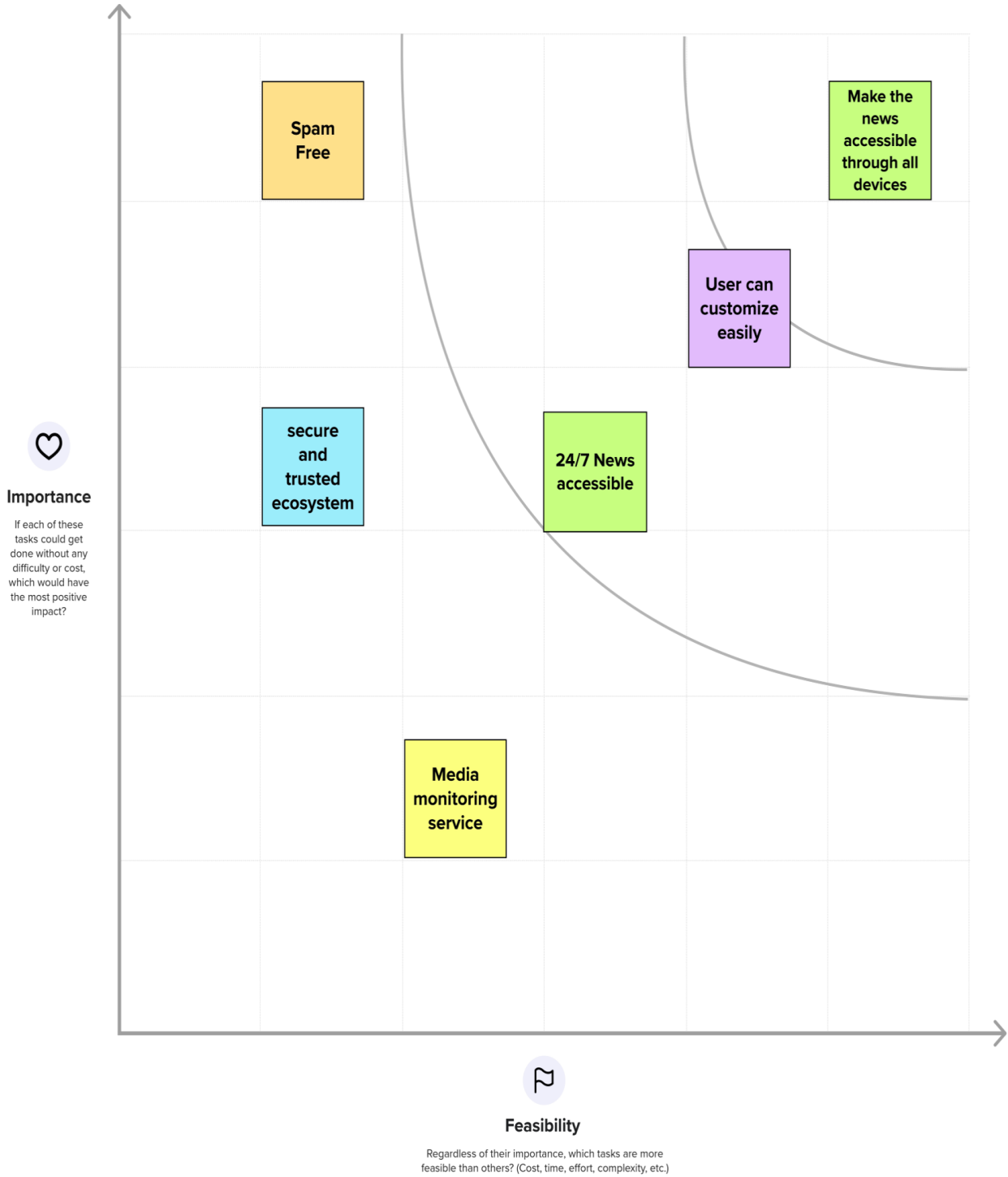


4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

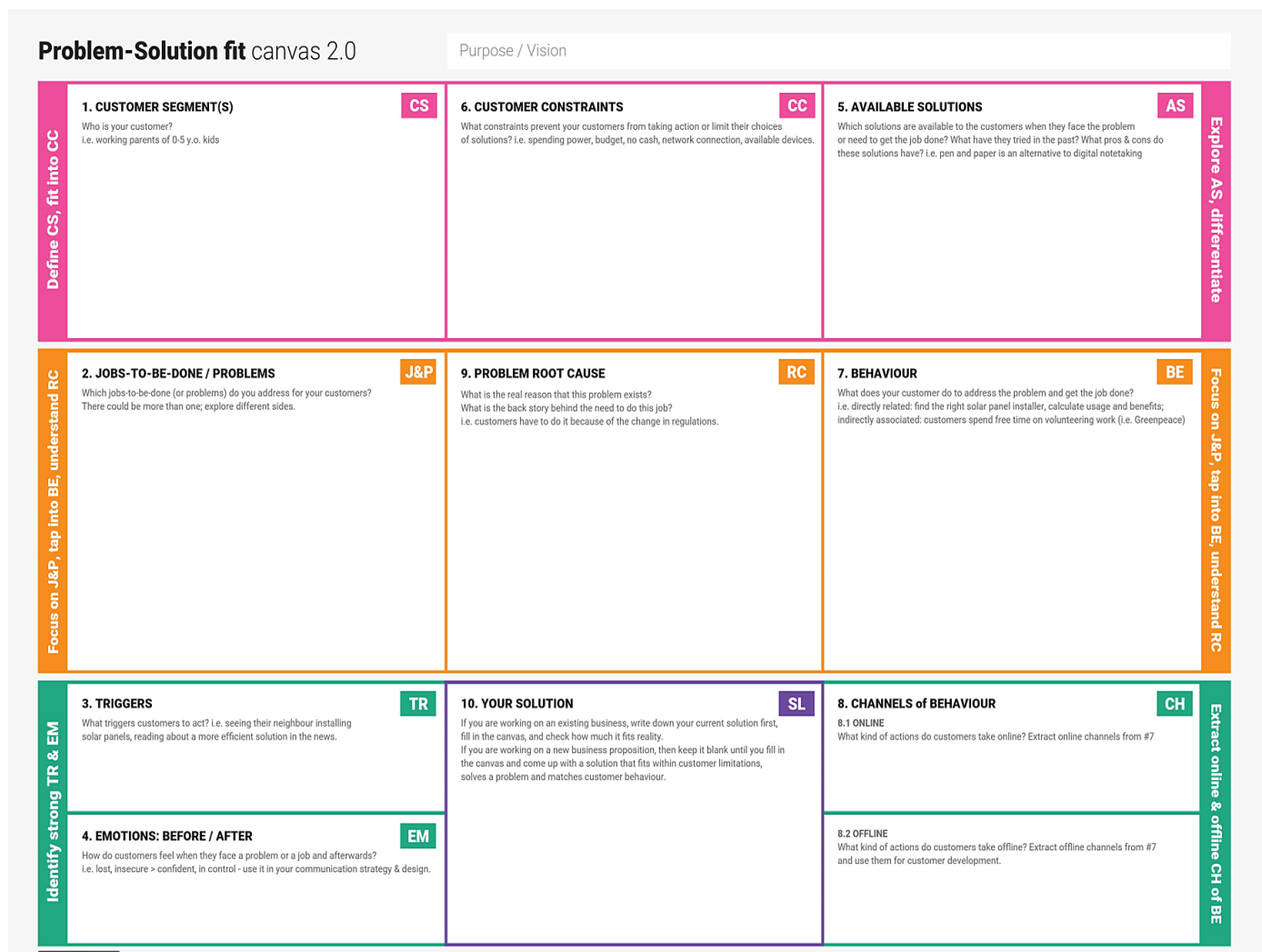
🕒 20 minutes



### 3.3 Proposed Solution:

S. No	Parameter	Description
1.	Problem Statement (Problem to be solved)	Most people don't like to carry a newspaper with them. Some people want them to be updated only in the area they are interested in.
2.	Idea / Solution description	An application needs to be developed in which users can read news whenever they want and they will be able to customize their area of interest. So that they will be notified, if any new news is updated in their interested areas.
3.	Novelty / Uniqueness	<p>A user can read news only from their interested fields rather than reading all the news.</p> <p>This application provides users with a trusted and secured ecosystem. News shared through the application is original and spam free.</p>
4.	Social Impact / Customer Satisfaction	This application encourages its users to provide feedback. Based on that feedback, developments were made eventually.
5.	Business Model (Revenue Model)	<p>Add advertisements to the application, so that we can get revenue from those advertisement-sponsored organizations. More advertisements may irritate the user.</p> <p>Add premium subscription, users who subscribe for premium won't get advertisements.</p>
6.	Scalability of the Solution	As it was an application-based project, correct ideation and execution can develop an application with no bugs and errors, so that the user might like our application and some might suggest and share it to their surroundings, resulting in an increase in our application insights.

### 3.4 Problem Solution fit:



### 4. REQUIREMENT ANALYSIS:

- There are plenty of media monitoring tools that are your go-to solution for real-time news tracking. The media monitoring market is becoming highly competitive, and while these tools seem similar, you want to look out for a set of critical features that sort out the best of them.
- Once you’ve selected the right tool for news tracking in real-time, it’s time to set it up. The sky is the limit here, but our first suggestion is to track your brand and product names. For example, if you’re working at Adidas, track your brand name but also the name of your competitor.

➤ As new mentions of your target terms show up, you'll get notified immediately. When you log into your Mediatoolkit account, you'll get an overview of the latest mentions of those terms, neatly sorted by order of appearance.

#### 4.1 Functional requirement:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (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
FR-5	User friendliness	Application have tools to share this news in social networks



#### 4.2 Non-Functional requirements:

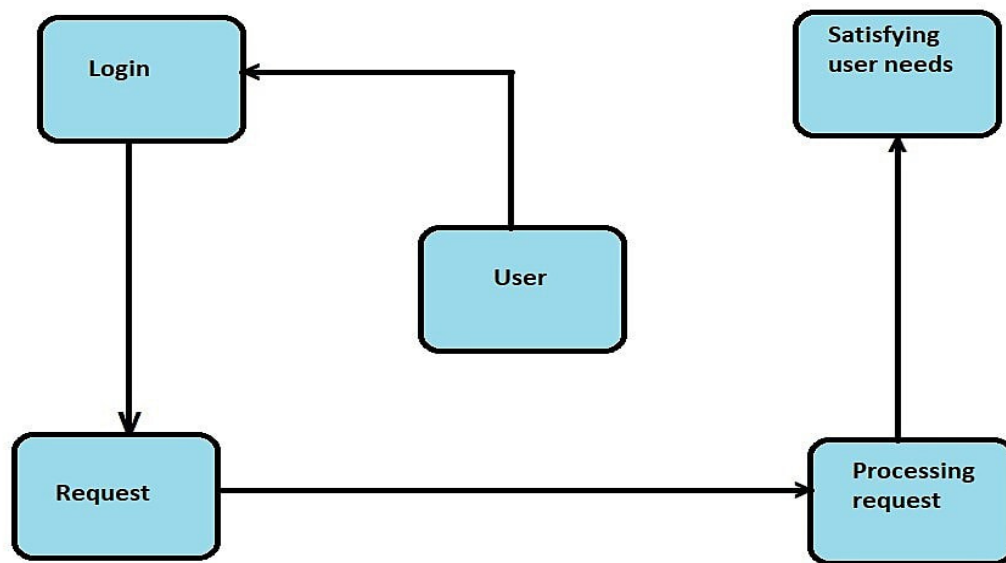
Following are the non-functional requirements of the proposed solution.

<b>FR No.</b>	<b>Non-Functional Requirement</b>	<b>Description</b>
NFR-1	Usability	End users can receive push updates for new content on a site by subscribing to the site's news feed
NFR-2	Security	How well are the system and its data protected against attacks
NFR-3	Reliability	How often does the system experience critical failures? How much time does it take to fix the issue when it arises ?And how is user availability time compared to downtime?
NFR-4	Performance	Performance is the core non-functional requirements no system can do without. It defines how fast a software system or a particular piece of it responds to certain users actions under a certain workload. In most cases, this metric explains how long a user must wait before the target operation happens (the page renders, a transaction is processed, etc.) given the overall number of users at the moment. But it's not always like that. Performance requirements may describe background

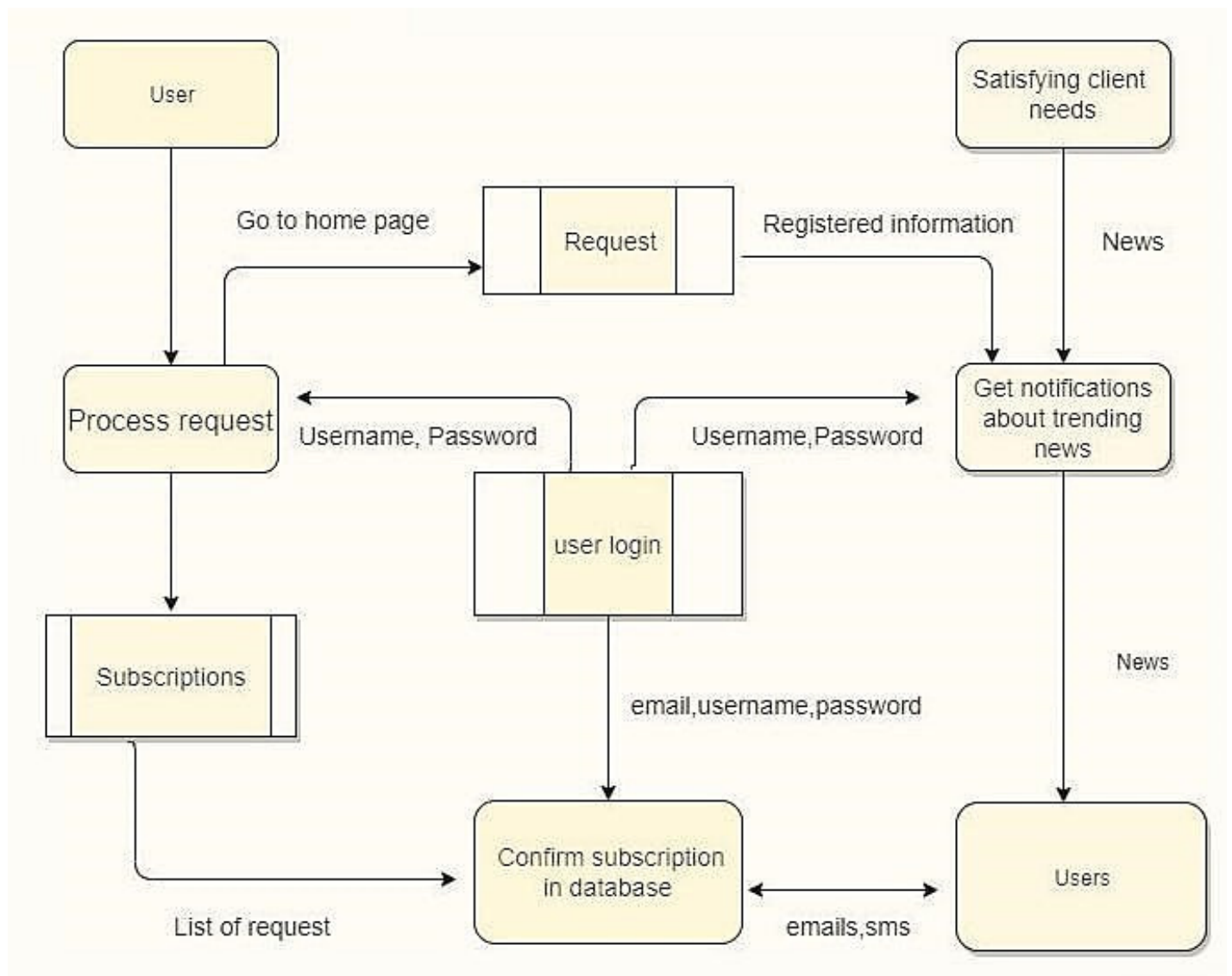
		<p>processes invisible to users, e.g. backup.</p> <p>But let's focus on user-centric performance.</p>
NFR-5	Availability	<p>Availability describes how likely the system is accessible to a user at a given point in time. While it can be expressed as an expected percentage of successful requests, you may also define it as a percentage of time the system is accessible for operation during some time period. For instance, the system may be available 98 percent of the time during a month. Availability is perhaps the most business-critical requirement, but to define it, you also must have estimations for reliability and maintainability.</p>
NFR-6	Scalability	<p>Scalability assesses the highest workloads under which the system will still meet the performance requirements. There are two ways to enable your system scale as the workloads get higher: horizontal and vertical scaling.</p>

## 5. PROJECT DESIGN:

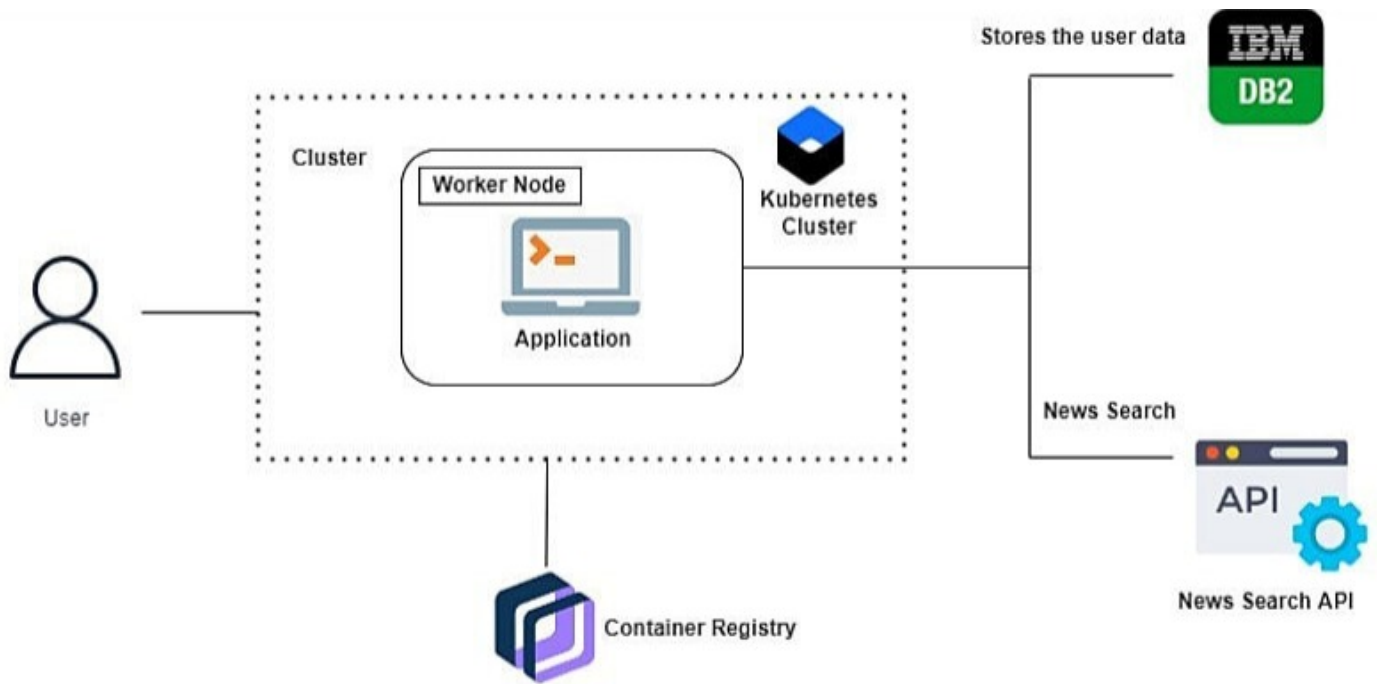
### 5.1 Data Flow Diagrams:



### DFD Level 0 (Industry Standard):



## 5.2 Solution & Technical Architecture:



## 5.3 User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	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 Gmail	I can register through Gmail by OTP authentication	Medium	Sprint-2
	Login	USN-4	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-5	To see their histories about recently viewed, updates for search related news, current progress, feedback		Medium	Sprint-2
Customer (Web user)	Browser	USN-6	Works as an interactive medium between client and server	I can access the resources through browser	High	Sprint-1
Customer Care Executive	Chat bot	USN-7	Rectify the customer's issues related to account, subscription and customization	Chat bot can resolve simple issues for customers	Low	Sprint-2
Feedback	Feedback Form	USN-8	Getting feedback from customers helps application's administrator to improve the quality of the application	Customers can tell their opinions	High	Sprint-1
Administrator	Admin module	USN-9	As an admin, I will modify the application as per customer requirements and fix the bugs to give customers a bug free service	I can modify the entire application	High	Sprint-2

## 6. PROJECT PLANNING & SCHEDULING :

When it comes to managing projects, it can be hard to get everyone on the same page. With multiple moving parts, different deliverables, and cross-departmental collaboration, sometimes an initial project meeting just isn't enough.

Project design is an opportunity to align ideas, processes, and deliverables. It's an early phase in the project lifecycle and often comes before a project plan or charter. This is because it focuses on the project overview rather than the specific details. Visual aids such as flowcharts, Gantt charts, and timelines are often used to help paint a picture for project stakeholders in this early step.

## 6.1 Sprint Planning & Estimation:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Dharun A Aravindh A Hariharan B Sivaprakash S Visweswaran R
		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Dharun A Aravindh A Hariharan B Sivaprakash S Visweswaran R
		USN-3	As a user, I can register for the application through Gmail	2	Medium	Dharun A Aravindh A Hariharan B Sivaprakash S Visweswaran R
	Login	USN-4	As a user, I can log into the application by entering email & password	2	High	Dharun A Aravindh A Hariharan B Sivaprakash S
						Visweswaran R
	Dashboard	USN-5	To see their histories about recently viewed, updates for search related news, current progress, feedback	1	Medium	Dharun A Aravindh A Hariharan B Sivaprakash S Visweswaran R
Customer (Web user)	Browser	USN-6	Works as an interactive medium between client and server	2	High	Dharun A Aravindh A Hariharan B Sivaprakash S Visweswaran R
Customer Care Executive	Chat bot	USN-7	Rectify the customer's issues related to account, subscription and customization	1	Low	Dharun A Aravindh A Hariharan B Sivaprakash S Visweswaran R

Feedback	Feedback Form	USN-8	Getting feedback from customers helps application's administrator to improve the quality of the application	2	High	Dharun A Aravindh A Hariharan B Sivaprakash S Visweswaran R
Administrator	Admin module	USN-9	As an admin, I will modify the application as per customer requirements and fix the bugs to give customers a bug free service	2	High	Dharun A Aravindh A Hariharan B Sivaprakash S Visweswaran R

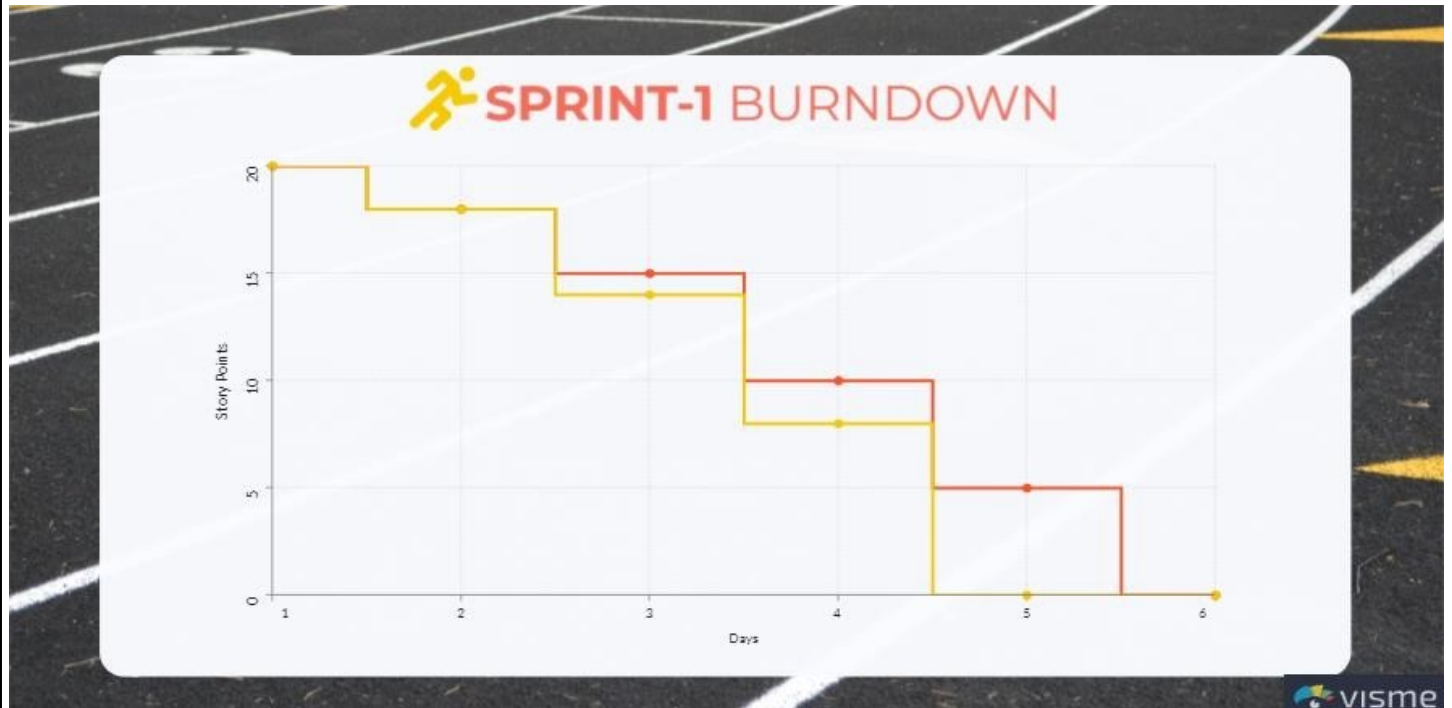
## 6.2 Sprint Delivery Schedule:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	18	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	22	31 Oct 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	07 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	14 Nov 2022

### 6.3 Reports from VISME:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

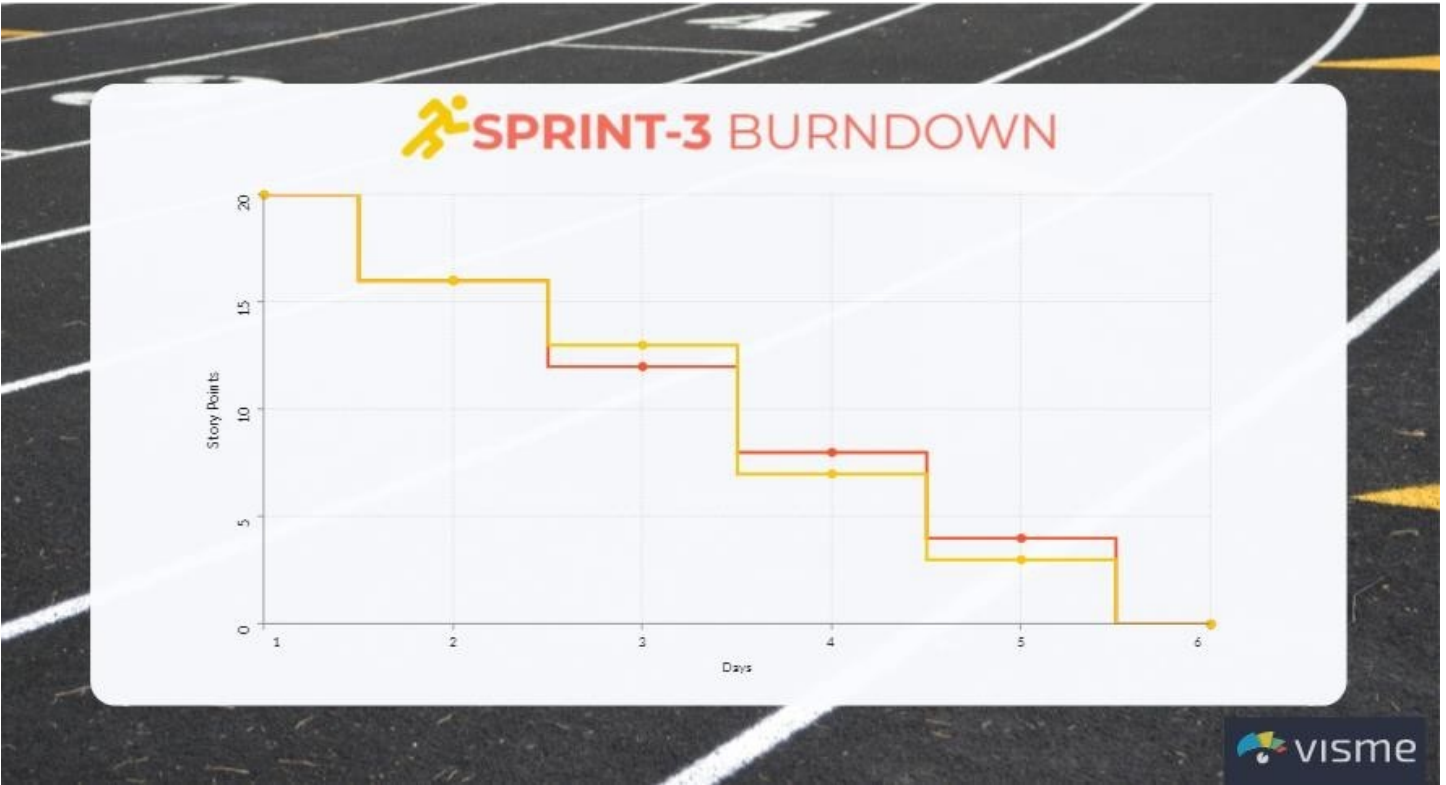
#### Sprint-1:



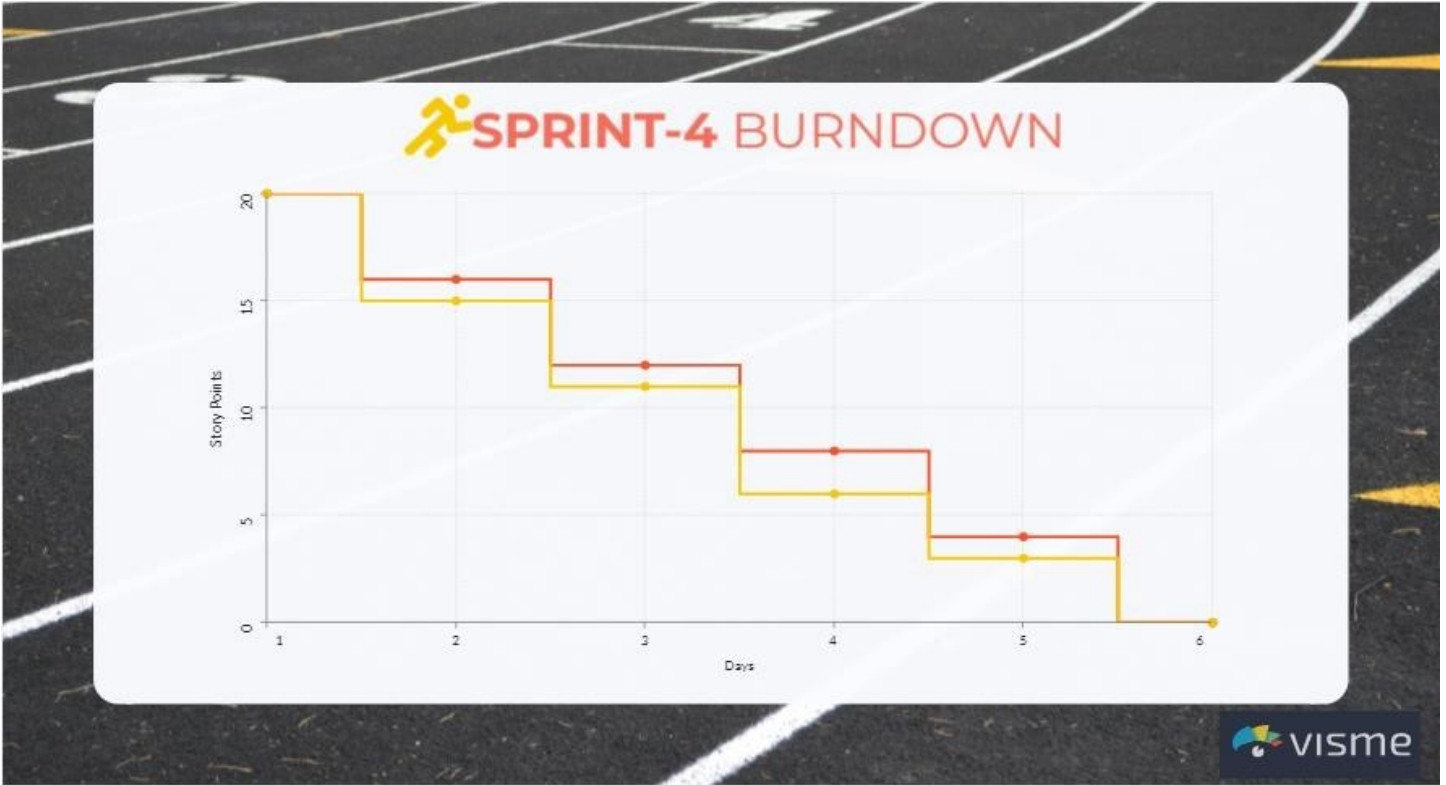
#### Sprint-2:



Sprint-3:



Sprint-4:



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

### 7.1 Feature 1:

#### Voice Recognition:

We can search through the voice input also. So, that user can use their mobile device single handedly. No need to type the words. Mic button was placed after the search bar.

Coding:

```
let mic = document.getElementById("mic");
let searchinput = document.getElementById("searchinput");

// vibrate
function vibrate(ms) {
  navigator.vibrate(ms);
}

function runSpeechRecognition() {
  vibrate(100);

  let recognition = new webkitSpeechRecognition();
  // let recognition = new SpeechRecognition();
  recognition.onstart = () => {
    // toast
    Toastify({
      text: "We are listening you !",
      duration: 2000,
      newWindow: true,
      gravity: "bottom", // `top` or `bottom`
      position: "center", // `left`, `center` or `right`
```

```

stopOnFocus: true, // Prevents dismissing of toast on hover
style: {
  background: "linear-gradient(to right, #00b09b, #96c93d)",
},
onClick: function(){} // Callback after click
}).showToast();
};

```

```

recognition.onresult = (event) => {
  var transcripts = event.results[0][0].transcript;
  console.log(transcripts);
  searchinput.value = "";
  searchinput.value = transcripts;
};

```

```

recognition.onspeechend = () => {
  recognition.stop();
  // toast
Toastify({
  text: "Speech recognition ended",
  duration: 4000,
  newWindow: true,
  gravity: "bottom", // `top` or `bottom`
  position: "center", // `left`, `center` or `right`
  stopOnFocus: true, // Prevents dismissing of toast on hover
  style: {
    background: "linear-gradient(to right, #00b09b, #96c93d)",
  },
  onClick: function(){} // Callback after click
}).showToast();

```

```

};

recognition.start();

}

searchinput.addEventListener('keypress', function (e) {
  if (e.key === 'Enter') {
    // code for enter
    if(!navigator.onLine){
      Toastify({
        text: "You are offline",
        duration: 4000,
        newWindow: true,
        gravity: "bottom", // `top` or `bottom`
        position: "center", // `left`, `center` or `right`
        stopOnFocus: true, // Prevents dismissing of toast on hover
        style: {
          background: "linear-gradient(to right, #00b09b, #96c93d)",
        },
        onClick: function(){} // Callback after click
      }).showToast();
    }
  }
});

```

## 7.2 Feature 2:

### Chat-Bot:

Watson Assistant Chatbot

```
window.watsonAssistantChatOptions = {  
  integrationID: "a6d7e889-59ed-46da-8168-775bffd4611e", // The ID of this integration.  
  region: "us-east", // The region your integration is hosted in.  
  serviceInstanceID: "97212d7f-a694-4baf-a9a3-40807857702a", // The ID of your service  
instance.  
  onLoad: function(instance) { instance.render(); }  
};  
setTimeout(function(){  
  const t=document.createElement('script');  
    t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +  
(window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js";  
  document.head.appendChild(t);  
});
```

## 8. TESTING :

Software testing is the process of evaluating and verifying that a software product or application does what it is supposed to do. The benefits of testing include preventing bugs, reducing development costs and improving performance. Test Management is a collaborative, quality management solution that offers end-to-end test planning and test asset management, from requirements to defects. Teams can seamlessly share information and use automation to speed complex project schedules and report on metrics in real time for informed release decisions.

### 8.1 Test Cases:

In software engineering, a test case is a specification of the inputs, execution conditions, testing procedure, and expected results that define a single test to be executed to achieve a particular software testing objective, such as to exercise a particular program path or to verify compliance with a specific requirement. Test cases underlie testing that is methodical rather than haphazard. A battery of test cases can be built to produce the desired coverage of the software being tested. Formally defined test cases allow the same tests to be run repeatedly against successive versions of the software, allowing for effective and consistent regression testing.

### 8.2 User Acceptance Testing :

**Purpose of Document:** The purpose of this document is to briefly explain the test coverage and open issues of the News Tracker Application project at the time of the release to User Acceptance Testing (UAT).

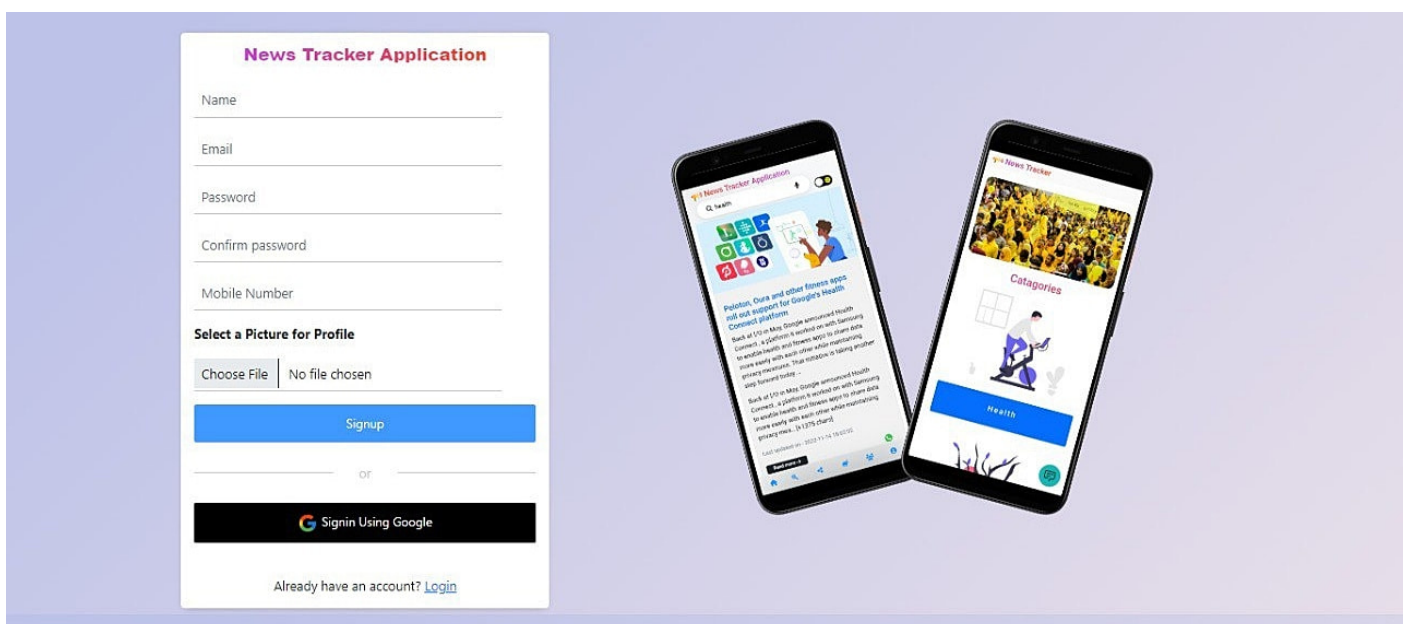
**Defect Analysis:** This report shows the number of resolved or closed bugs at each severity level, and how they were resolved.

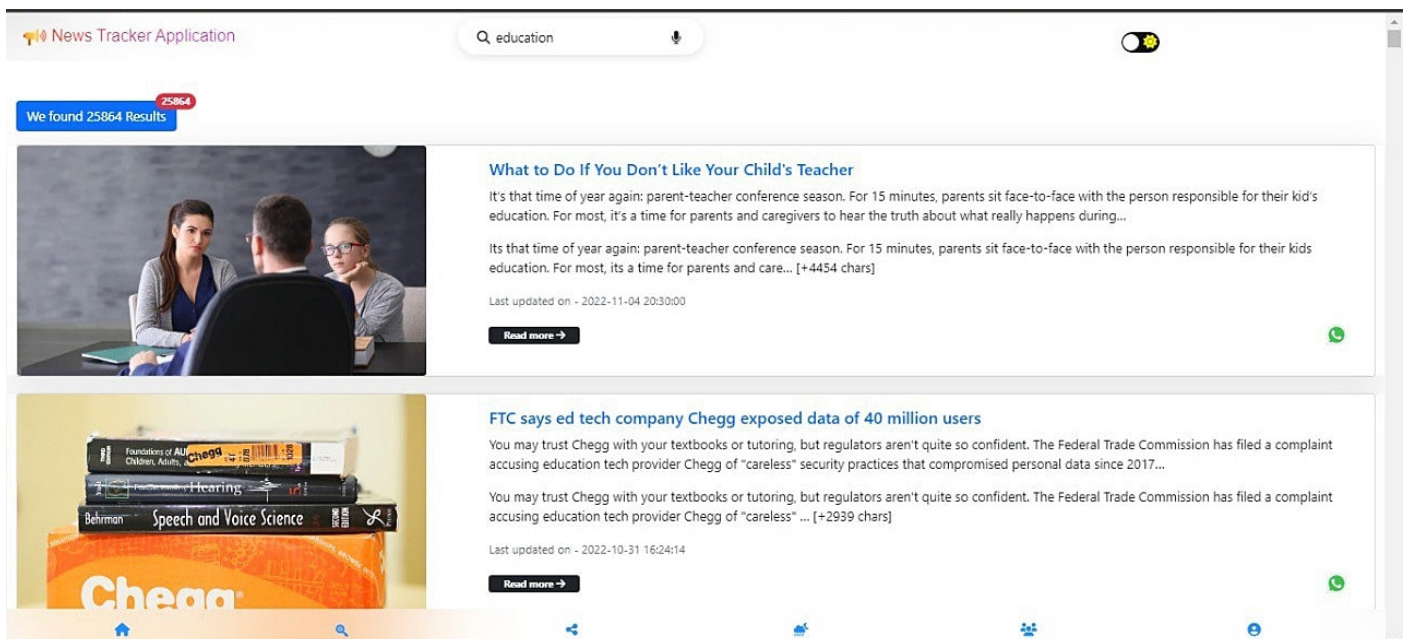
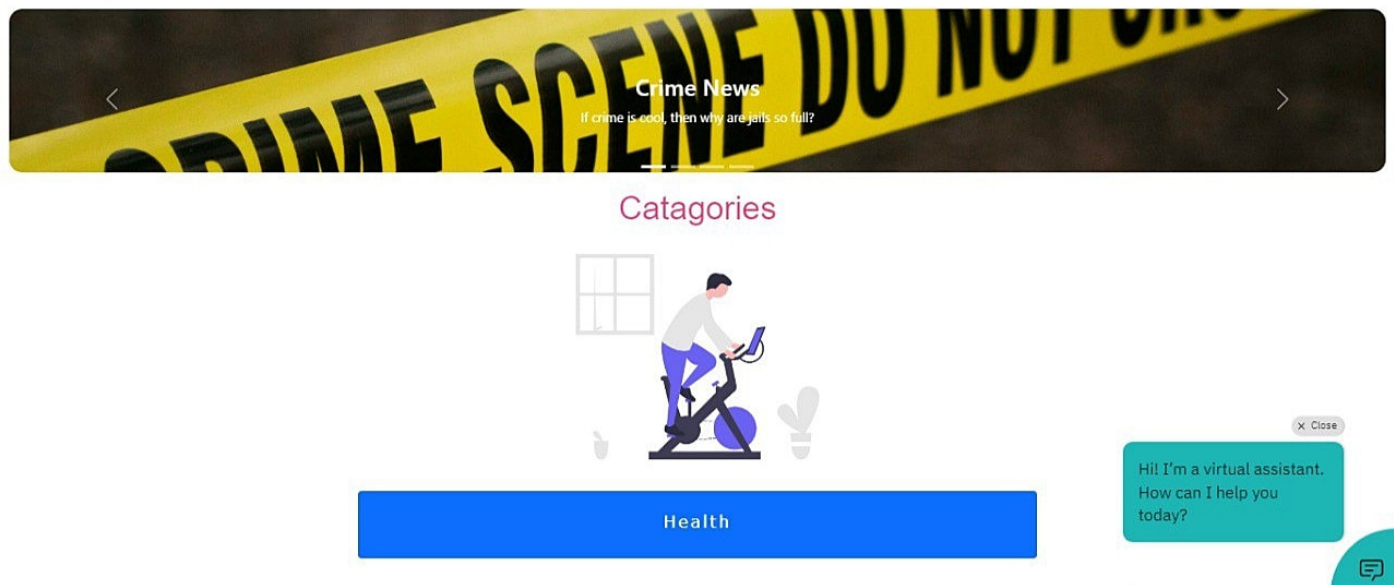
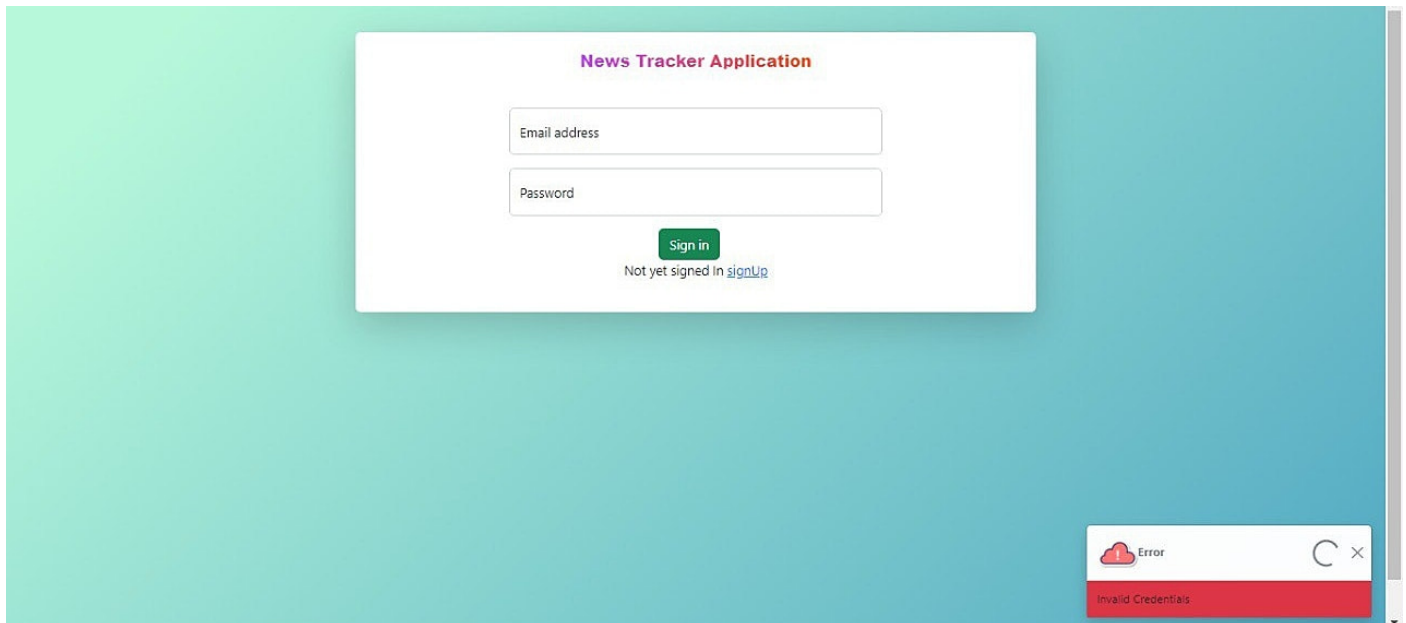
Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	10	4	2	3	20
Duplicate	1	1	3	1	6
External	2	3	0	1	6
Fixed	11	2	4	20	37
Not Reproduced	0	0	1	0	1
Skipped	0	0	1	1	2
Won't Fix	0	5	2	1	8
Totals	24	14	13	26	80

Test Case Analysis: This report shows the number of test cases that have passed, failed, and untested.

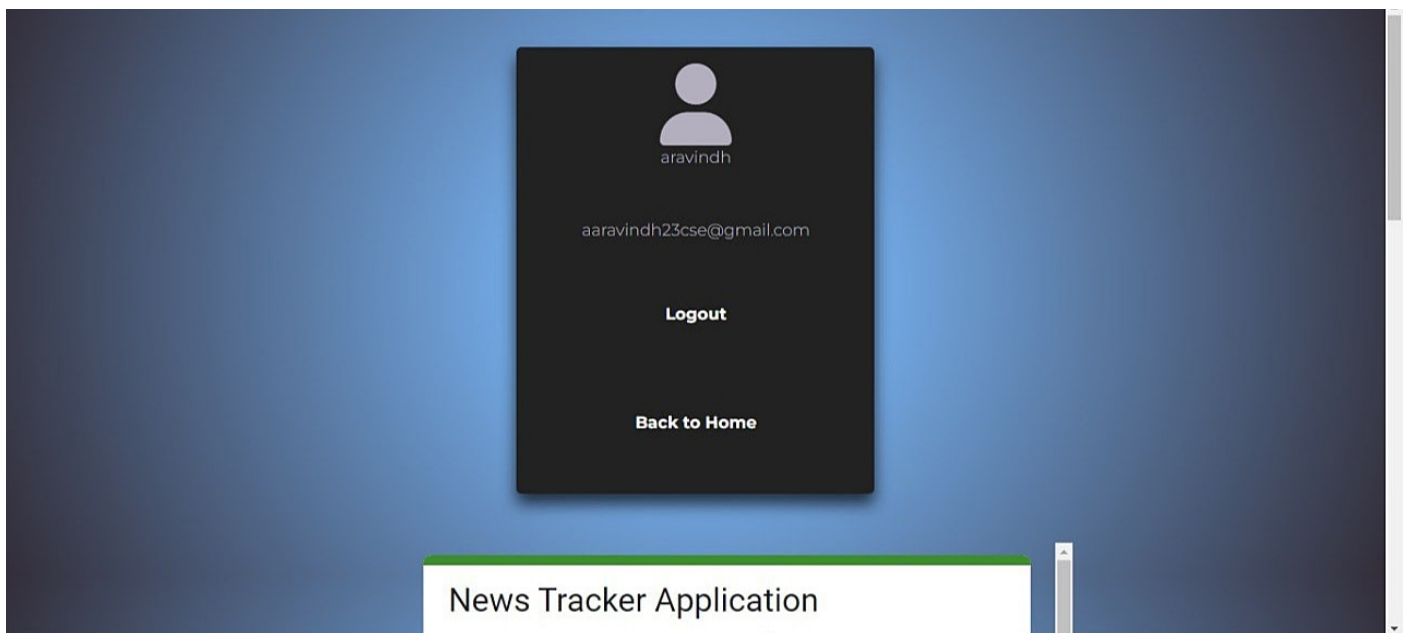
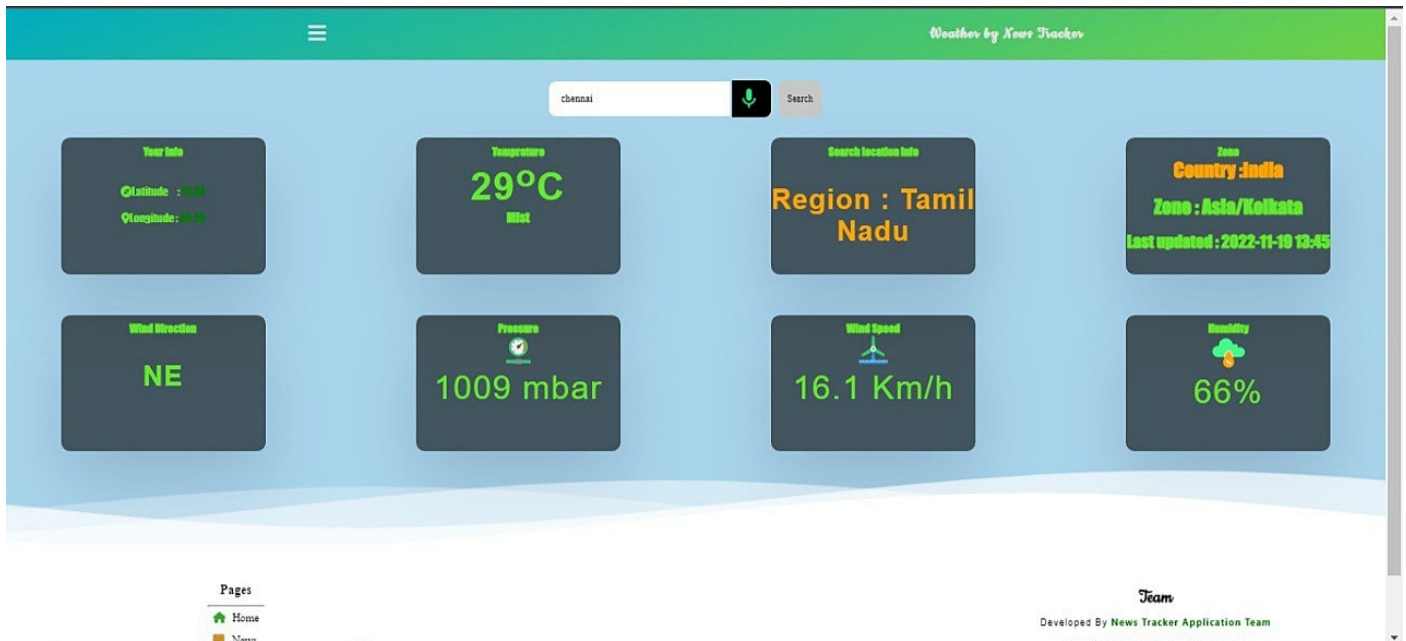
Outsource Shipping	3	0	1	3
Exception Reporting	9	0	1	9
Final Report Output	4	0	1	4
Version Control	2	0	0	2

## 9. RESULTS :









## 9.1 Performance Metrics:

These application performance metrics, commonly known as key performance indicators (KPIs), are a quantitative measure of how effectively the organization achieves the business objectives. Capturing the right metrics will give you a comprehensive report and powerful insights into ways to improve your application.

## Key steps in the KPI process



## 10. ADVANTAGES & DISADVANTAGES:

### ADVANTAGES

- ✓ Real-time application is allowed and has live layout.
- ✓ It has a Built-in support for Google Platform.
- ✓ News accuracy of specialised API
- ✓ Authenticated users are allowed
- ✓ Up to date and daily information is available

### DISADVANTAGES

- ✓ Require data/wifi to get online.
- ✓ Companies not making as much money due to free reading for audiences.
- ✓ News spreads quicker online - people find out news before they should.
- ✓ Lose money - can't get people to pay for digital.
- ✓ Older audiences may not access digital platforms.

## **11. CONCLUSION:**

In our project work, an attempt has been made to develop a News or information-based website. We develop this project that helps people and make them aware so that they can know any news. To establish this website we use various methodologies. To develop this project we faced many problems but we hardly tried to develop this project. The project we've offered here is just the beginning of a new way of interacting with our society. In the meantime, don't forget that compelling visual content will help you be more visible and viral than offline or online newspapers.

## **12. FUTURE SCOPE:**

- We are in a process of developing a algorithm that will help the user to read the new postings and news from his recent data sources.
- In pandemic situations, offline news won't be delivered to anyone, in those time these news apps are the most suitable.
- In the future, we are going to develop a new categories according to their user locations.

### 13. APPENDIX:

Source Code:

```
import json
import bcrypt
import ibm_db
import requests
from flask import (Flask, redirect, render_template, request)

app = Flask(__name__)

# ===== for database with
IBM=====

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=3883e7e4-18f5-4afe-be8c-
fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=31498;SECURITY=
SSL;SSLServerCertificate=credentials/DigiCertGlobalRootCA.crt;UID=bgh36879;PWD=Tv
SzQQQ6Jhaaiwg6",",")
print(conn)
print(" connection successfull with IBM_DB ✓")

# signup form data
@app.route('/')
def index():
    return render_template('signup.html')

# signup form validation
@app.route('/signUpFormData',methods = ['POST', 'GET'])
def signUpFormData():
    if request.method == "POST":
        userName = request.form.get("userName",False)
        userEmail = request.form.get("userEmail")
```

```
userPassword = request.form.get("userPassword")
userConfirmPassword = request.form.get("userPasswordConfirm")
userMobile = request.form.get("userMobile")
picture = request.form.get("picture")
```

```
if userPassword == userConfirmPassword:
```

```
    sql = "SELECT * FROM news_tracker_application WHERE userEmail =?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,userEmail)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    # print(account)
```

```
    bytes = userPassword.encode('utf-8')
```

```
    salt = bcrypt.gensalt()
```

```
    hashed_password = bcrypt.hashpw(bytes, salt)
```

```
    userPassword = hashed_password
```

```
    if account:
```

```
        return render_template('login.html', msg="You are already a member, please  
login using your details")
```

```
    else:
```

```
        insert_sql = "INSERT INTO news_tracker_application VALUES (?, ?, ?, ?, ?)"
        prep_stmt = ibm_db.prepare(conn, insert_sql)
        ibm_db.bind_param(prepare_stmt, 1, userName)
        ibm_db.bind_param(prepare_stmt, 2, userEmail)
```

```
ibm_db.bind_param(prepare_stmt, 3, userPassword)
```

```
ibm_db.bind_param(prepare_stmt, 4, userMobile)
```

```
ibm_db.bind_param(prepare_stmt, 5, picture)
```

```
ibm_db.execute(prepare_stmt)
```

```
from sendgrid import SendGridAPIClient
```

```
from sendgrid.helpers.mail import Mail
```

```
message = Mail(
```

```
    from_email='applicationnewstracker@gmail.com',
```

```
    to_emails=userEmail,
```

```
    subject='Welcome to News Tracker Application',
```

```
    html_content='')
```

```
    try:
```

```
        sg =
```

```
SendGridAPIClient('SG.29Td0tbNSkyliF9SSPnQNA.4DBECk8ka8RmmYRE5OIsRKGOR2  
QI2raRG3CLmdsVBVc')
```

```
        response = sg.send(message)
```

```
        print(response.status_code)
```

```
        print(response.body)
```

```
        print(response.headers)
```

```
    except Exception as e:
```

```
        print(str(e))
```

```
        return render_template('login.html', msg="user Data saved successfully..  
Please login use your credentials")
```

```
    else:
```

```

        return render_template('signup.html', msg = 'Password and Confirm Password are
not matched' )

# ===== for serve
=====

# login form validation
@app.route('/loginForm', methods=['GET', 'POST'])
def loginForm():
    if request.method == 'POST':

        global email
        email = request.form['userEmail']
        pwd = request.form['userPassword']

        var = email

        sql = "SELECT * FROM news_tracker_application WHERE userEmail =?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt, 1, email)
        ibm_db.execute(stmt)
        auth_token = ibm_db.fetch_assoc(stmt)
        print("auth",auth_token)

        if auth_token:
            # encoding user password
            userBytes = pwd.encode('utf-8')
            byte_pwd = bytes(auth_token['USERPASSWORD'], 'utf-8')

            # checking password

```

```

result = bcrypt.checkpw(userBytes, byte_pwd)

if result:
    print("succ")

    url = (' https://newsapi.org/v2/top-
headlines?country=in&apiKey=7c7062c3a98649b5bc6ffda7fdc5a01b')
    TopHeadlinesResponse = requests.get(url).json()
    return render_template('index.html', msg="Logged in Successfully",
responseData=TopHeadlinesResponse, tmp = 1)
else:
    return render_template('login.html', msg="Invalid Credentials", tmp = 0)
else:
    return render_template('signup.html', msg="User doesn't exist, Please Register using
your details!")
else:
    return render_template('login.html', title='Sign In')

# home page
@app.route('/home')
def userdata():
    print(email)

    url = (' https://newsapi.org/v2/top-
headlines?country=in&apiKey=7c7062c3a98649b5bc6ffda7fdc5a01b')
    TopHeadlinesResponse = requests.get(url).json()
    return render_template('index.html',responseData=TopHeadlinesResponse)

# signup form
@app.route('/')
@app.route('/signup')
def signUp():

```



```
    return render_template('signup.html')

# login form
@app.route('/login')
def login():
    return render_template('login.html')

# logout
@app.route('/logout')
def logout():
    return redirect('/login')

# redirect Home
@app.route('/redirectHome')
def redirectHome():
    return redirect('/home')

# about us
@app.route('/aboutus')
def aboutus():
    return render_template('aboutus.html')

# weather
@app.route('/weather')
def weather():
    return render_template('weatherinfo/weatherpage.html')

# education
@app.route('/education')
def education():
```

```

value = 'education'

crimenews = ('https://newsapi.org/v2/everything?' 'q='+value+'&"from=2022-10-
29&"sortBy=popularity&"apiKey=7c7062c3a98649b5bc6ffda7fdc5a01b')

educationResponse = requests.get(crimenews).json()

print(educationResponse)

# return render_template('NewsTemplate.html',responseData=crimeNewsresponse)

dharun    API    key    =    7c7062c3a98649b5bc6ffda7fdc5a01b    aravindh    =
9b6f57afe98440b8b362b1046559d71d

result_count = educationResponse.get('totalResults')

if(result_count>0):

                                                    return

render_template('NewsTemplate.html',responseData=educationResponse,returned_input_searc
h_value=value,result_count=result_count)

else:

    return render_template('notfound.html')

# Top headlines

@app.route('/TopHeadlines')

def TopHeadlines():

    value ='Top Headlines'

                                                    url    =    ('    https://newsapi.org/v2/top-
headlines?country=in&apiKey=7c7062c3a98649b5bc6ffda7fdc5a01b')

    TopHeadlinesResponse = requests.get(url).json()

    result_count = TopHeadlinesResponse.get('totalResults')

                                                    return

render_template('NewsTemplate.html',responseData=TopHeadlinesResponse,returned_input_s
earch_value=value,result_count=result_count)

# science news

@app.route('/sciencenews')

```

```

def crimenews():
    value = 'science'
    sciencenews = ('https://newsapi.org/v2/everything?'
    'q='+value+'&'
    'from=2022-10-29&'
    'sortBy=popularity&'
    'apiKey=7c7062c3a98649b5bc6ffda7fdc5a01b')
    scienceNewsresponse = requests.get(sciencenews).json()
    print(scienceNewsresponse)

    # dharun API key = 7c7062c3a98649b5bc6ffda7fdc5a01b aravindh =
9b6f57afe98440b8b362b1046559d71d

    result_count =scienceNewsresponse.get('articles')
    result_count = len(result_count)

    if(result_count>0):
        return
    render_template('NewsTemplate.html',responseData=scienceNewsresponse,returned_input_se
arch_value=value,result_count=result_count)
    else:
        return render_template('notfound.html')

# health news
@app.route('/healthnews')
def healthnews():
    value = 'health'
    healthnews = ('https://newsapi.org/v2/everything?'
    'q='+value+'&'
    'from=2022-10-29&'
    'sortBy=popularity&'
    'apiKey=7c7062c3a98649b5bc6ffda7fdc5a01b')

```

```

healthNewsresponse = requests.get(healthnews).json()
result_count = healthNewsresponse.get('totalResults')
if(result_count>0):
    return
render_template('NewsTemplate.html',responseData=healthNewsresponse,returned_input_search_value=value,result_count=result_count)
else:
    return render_template('notfound.html')

# sports news
@app.route('/sportsnews')
def sportsnews():
    value = 'sports'
    sportsnews = ('https://newsapi.org/v2/everything?'
    'q='+value+'&'
    'from=2022-10-29&'
    'sortBy=popularity&'
    'apiKey=7c7062c3a98649b5bc6ffda7fdc5a01b')
    sportsNewsresponse = requests.get(sportsnews).json()
    # return render_template('NewsTemplate.html',responseData=crimeNewsresponse)
    result_count = sportsNewsresponse.get('totalResults')
    if(result_count>0):
        return
    render_template('NewsTemplate.html',responseData=sportsNewsresponse,returned_input_search_value=value,result_count=result_count)
    else:
        return render_template('notfound.html')

@app.route('/searchResults', methods =["POST"])
def searchResults():

```

```

if request.method == "POST":
    search_value_name = request.form.get("searchvalue")

    print(search_value_name)

    searchURL = ('https://newsapi.org/v2/everything?'
    'q='+search_value_name+'&'
    'from=2022-10-29&'
    'sortBy=popularity&'
    'apiKey=7c7062c3a98649b5bc6ffda7fdc5a01b')

    searchResponse = requests.get(searchURL).json()
    result_count = searchResponse.get('totalResults')

    print(result_count) # NUMBER

    if(result_count>0):
                                                                    return
    render_template('NewsTemplate.html',responseData=searchResponse,returned_input_search_v
    alue=search_value_name,result_count=result_count)
    else:
                                                                    return
    render_template('notfound.html',responseData=searchResponse,returned_input_search_value=
    search_value_name)

# tab user
@app.route('/tabuser')
def tabuser():

    userEmail = email

```

```

print('email', userEmail)
sql = "SELECT * FROM news_tracker_application WHERE userEmail =?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, userEmail)
ibm_db.execute(stmt)
auth_token = ibm_db.fetch_assoc(stmt)

return render_template('userinfo.html', msg=auth_token)

```

# logout

```
@app.route('/logout')
```

```
def logoutform():
```

```
    email = "
```

```
    return render_template('login.html', msg= 'successfully logged out')
```

```

#=====
=====

```

server

details

```
if __name__=='__main__':
```

```
    app.run(host='0.0.0.0', port=5000, debug=True)
```

GitHub:

<https://github.com/IBM-EPBL/IBM-Project-52374-1660999079>

ProjectDemoLink:

[https://careereducation.smartinternz.com/Student/guided\\_project\\_workspace/52431](https://careereducation.smartinternz.com/Student/guided_project_workspace/52431)