

# **NEWS TRACKER APPLICATION – PROJECT REPORT**

Date	19 November 2022
Team ID	PNT2022TMID13865
Project Name	News Tracker Application

## **1. INTRODUCTION**

### **1.1 Project Overview**

As our lives are very busy these days, we often feel we need more than 24 hrs. a day to cope up with everything we have in our schedule. Well, that's not possible but reducing the time by changing the conventional method of reading news can help. Just tell us what market news you're interested in and get a quick peek for the day. Only read what you feel is relevant and save your time. This app helps you to query for all information about Indices, Commodities, Currencies, Future Rates, Bonds, etc.... as on official websites.

### **1.2 Purpose**

The purpose of this project is to make the things we enjoy a little simpler in these busy days. Most of us have the habit of reading news, but are overwhelmed by the unwanted news that are notified with the ones we love. Sometimes the unwanted news spoils our mood. The purpose of this project is to allow users to specify the categories they like to be notified and send notification based on their own preferences.

## **2. LITERATURE SURVEY**

### **2.1 Existing problem**

Vijay is a busy business man who needs to read news on the go without any hassles while travelling because he considers carrying around a physical newspaper a nuisance to him and the people around him. Vijay needs to read news in such a way that he doesn't have to worry about ever buying physical newspapers or carrying with him everywhere. Something which should fit in the palm of his hands, which he could carry everywhere, access from everywhere, something digital such as an Application hosted on the internet which could be accessed from any device that is connected to the Internet. Such as smartphones and computers.

### **2.2 References**

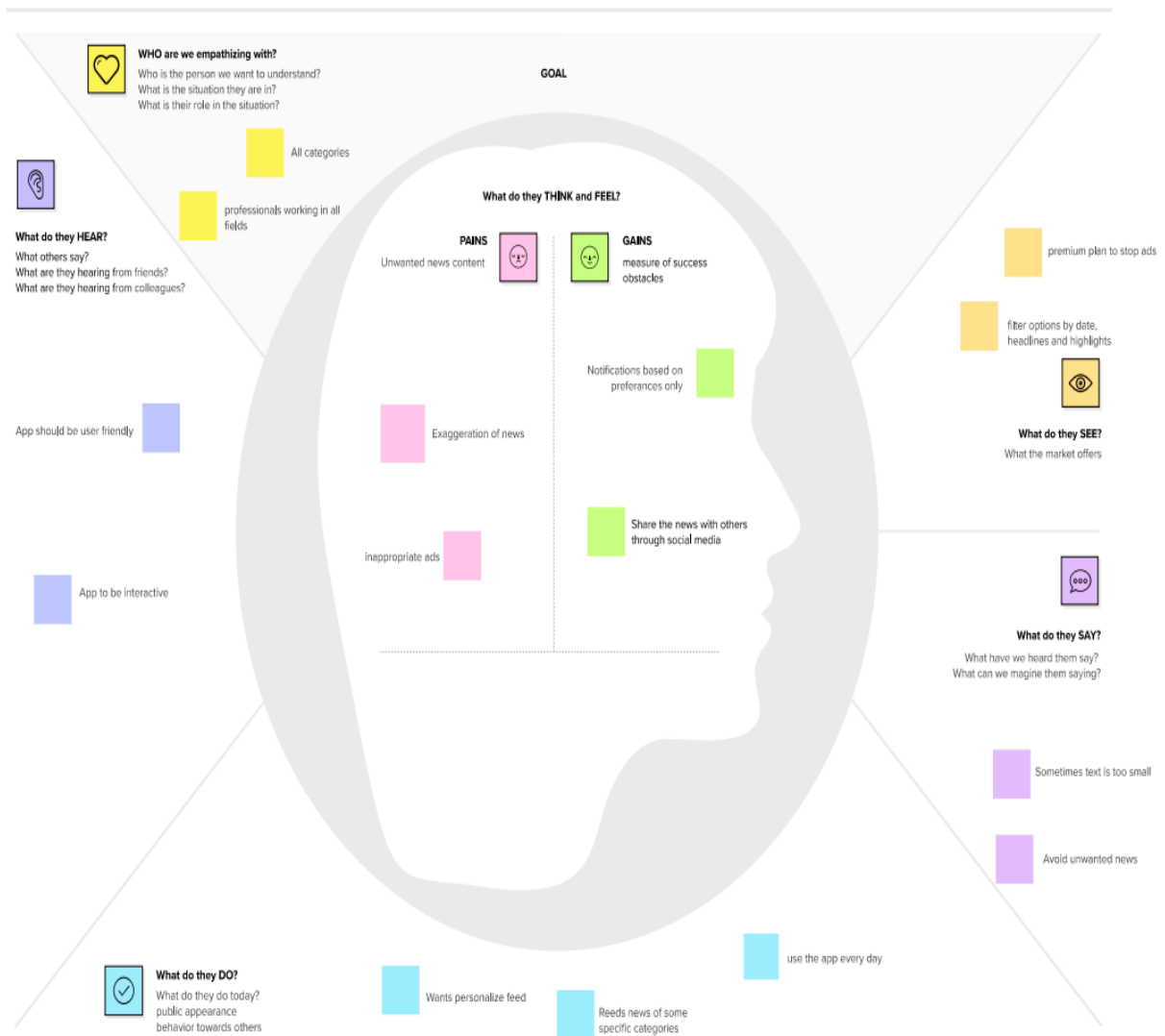
### **2.3 Problem Statement Definition**

Physical newspapers are old fashioned in this digital era. They cost money to buy, can easily be damaged, limited amount of information, not flexible to modifications, poor quality. Fixing these in such a way can make physical newspapers become extinct and their use can be abolished. If the problem isn't solved, it would become a greater problem to integrate people to become digitally aware. The issue occurs when the

customer wants to read the news. The issue occurs when people try to access information i.e during the usage. Accessing information is flawed through the usage of physical newspapers in the digital era. It is important to fix this problem because since everything in our day to day life is becoming/being converted to digital from a physical/analog entity. It is necessary to access information from anywhere. It reduces the hassles of getting knowledge and information that has happened before and will promote everyone to know better about the current events that's happening and will motivate everyone to gain a profound knowledge in the field of their interests.

### 3. IDEATION & PROPOSED SOLUTION

#### 3.1 Empathy Map Canvas



## 3.2 Ideation & Brainstorming

### 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

Most of the news applications from all over the world serve the live news to the user in English language only.

Few applications serve the news from single source & websites are restricted to provide news in local language.

App load time.

News on the basis of the user's geographical location.

News push notification

Reader retention.

Able to automatically schedule

### 2 Brainstorm

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

10 minutes

TP You can select a sticky note and hit the pencil (switch to sketch) icon to start drawing!

#### HARIHARAN K

- News in different languages
- Attractive UI
- Short formation of news title
- Back up option
- Faster data fetching
- Provides an option for help

#### GOKUL A

- Different categories of views
- Interactive UI
- News Broadcast before media
- Identify readers interest
- Can provide alternate suggestions
- News from all around the world

#### ANEESH KUMAR M

- No Ads
- Maintenance cost low
- 24/7 availability
- Choices of views
- Location based news
- Regular notification & updates

#### BOOPATHI RAJ

- News search based on users interest
- News sharing
- More secure
- Language selecting option
- User friendly
- Responsive UI

### 3 Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

10 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

#### APP FEATURES

- Use in different languages
- Location based news
- 24/7 availability
- Provides an option for help
- Can provide alternate suggestions

#### MAINTAINS

- User friendly
- No Ads
- Provides option for help
- More secure
- Regular updates & estimation

#### UI

- Responsive UI
- Interactive UI
- Maintenance cost low
- Simple UI
- Attractive UI

#### DATA COLLECTION

- Different categories of news
- Faster data fetching
- Identify readers interest
- Using different languages
- Location based news

TP Add customizable tags to sticky notes to make it easier to find, browser, organize, and categorize important ideas as themes within your mind.

TP If each of these sticky notes get done without any difficulty or cost, which would have the most positive impact?

TP Participants can use their cursor to point at where sticky notes should go on the grid. The facilitator can confirm the user is using the laser pointer holding the R key on the keyboard.

Importance

Feasibility

News in Different language

Location based news

More secure

Identify Readers interest

Regular updates

User friendly

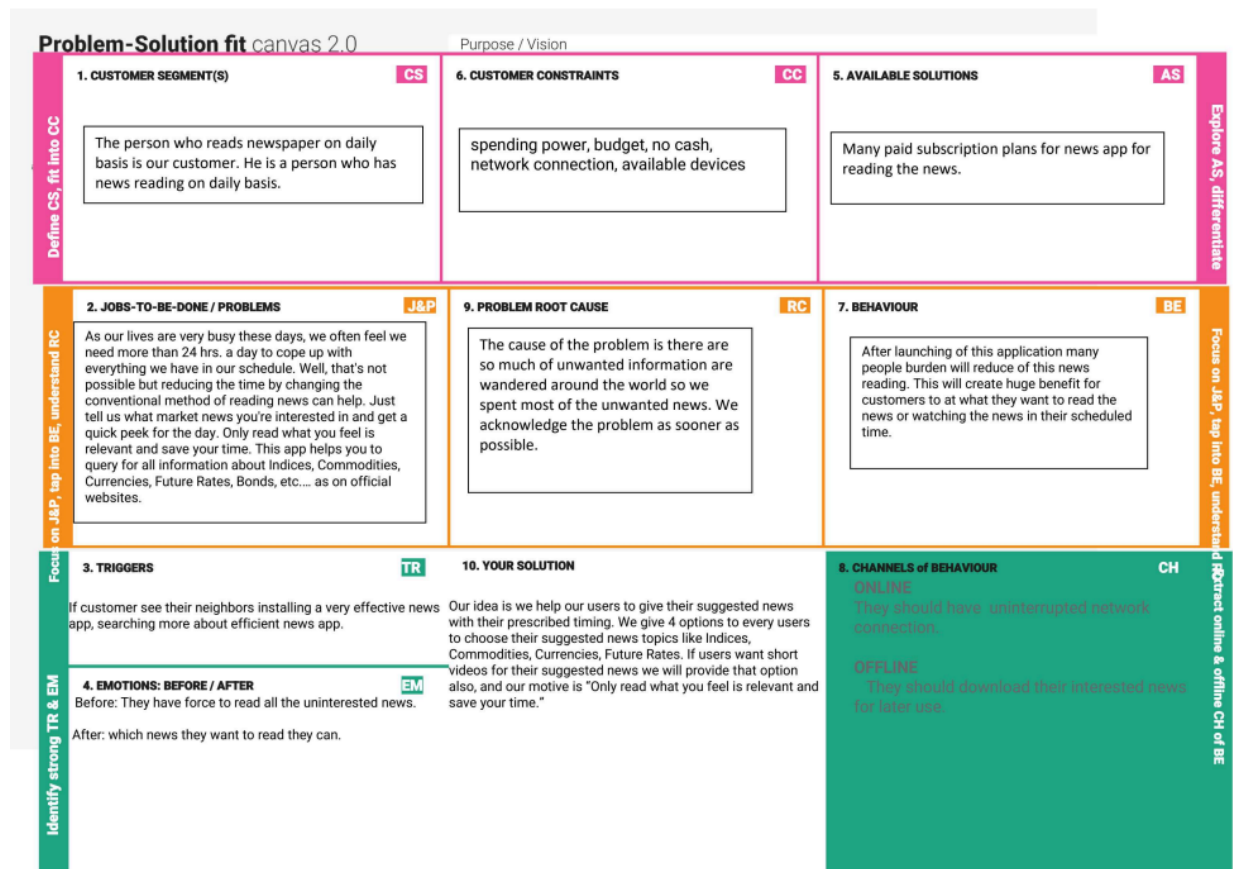
NO Ads

Faster data fetching

### 3.3 Proposed Solution

As our lives are very busy these days, we often feel we need more than 24 hrs. a day to cope up with everything we have in our schedule. Well, that's not possible but reducing the time by changing the conventional method of reading news can help. Just tell us what market news you're interested in and get a quick peek for the day. Only read what you feel is relevant and save your time. This app helps you to query for all information about Indices, Commodities, Currencies, Future Rates, Bonds, etc.... as on official websites. Our idea is we help our users to give their suggested news with their prescribed timing. We give 4 options to every users to choose their suggested news topics like Indices, Commodities, Currencies, Future Rates. If users want short videos for their suggested news we will provide that option also, and our motive is "Only read what you feel is relevant and save your time". Our uniqueness is all users are same no user is superior than other users we treat all users has same. After many discussion we conclude in our application no premium plans or subscription our entire application is a premium so we didn't want any other plans. After launching of this application many peoples burden will reduce of this news reading. This will create huge benefit for customers to at what they want to read the news or watching the news in their scheduled time.

### 3.4 Problem Solution fit



#### 4. REQUIREMENT ANALYSIS

##### 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 Installation	User can install the app from Google play store or from the website
FR-2	User Registration	Registration through Gmail
FR-3	User Confirmation	Confirmation via Email Confirmation via OTP
FR-4	User Login	User should login the app with the user's name and password credentials

##### 4.2 Non-Functional requirements

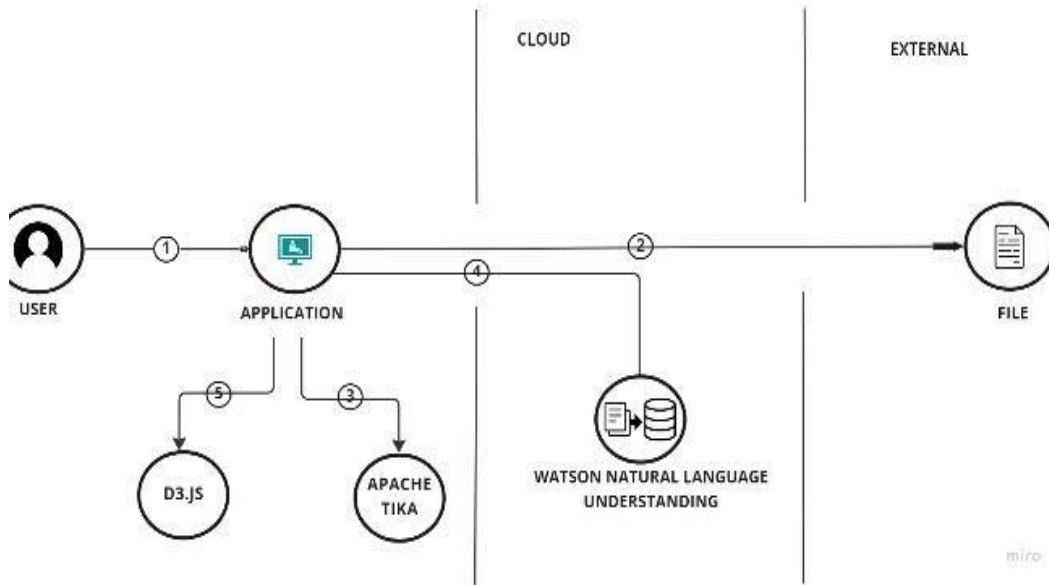
Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Everyone can understand the process of using the app easily by the user guide given in the app.
NFR-2	<b>Security</b>	It is extremely secured app. Fake news cannot be shared.
NFR-3	<b>Performance</b>	Performance of the app is very accurate
NFR-4	<b>Availability</b>	More sub categories are available

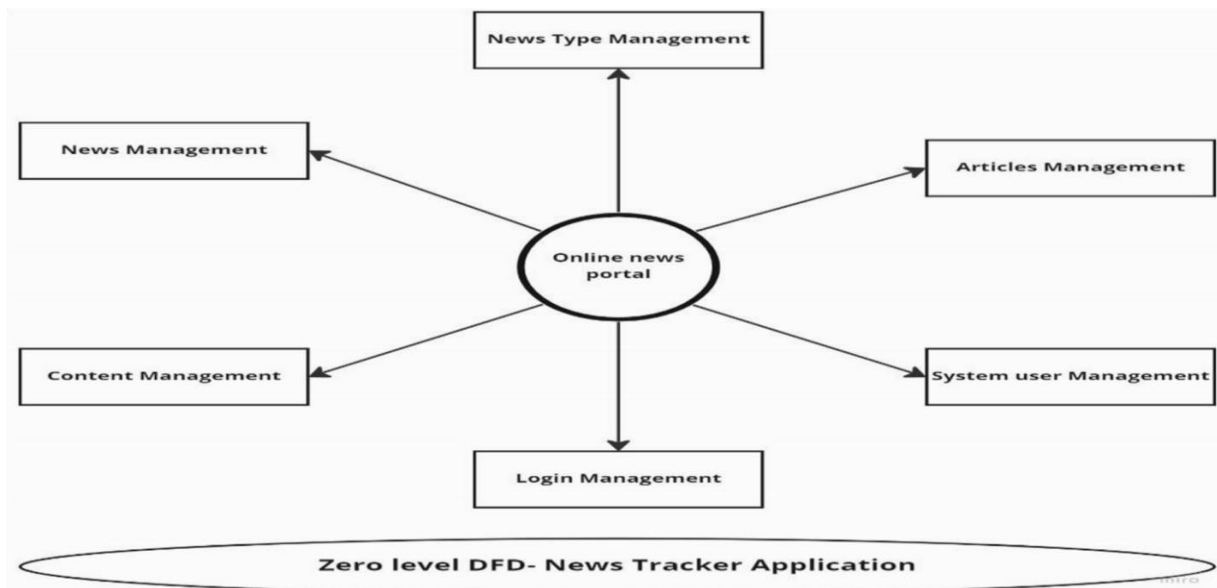
## 5. PROJECT DESIGN

### 5.1 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.



1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the DS.js library.

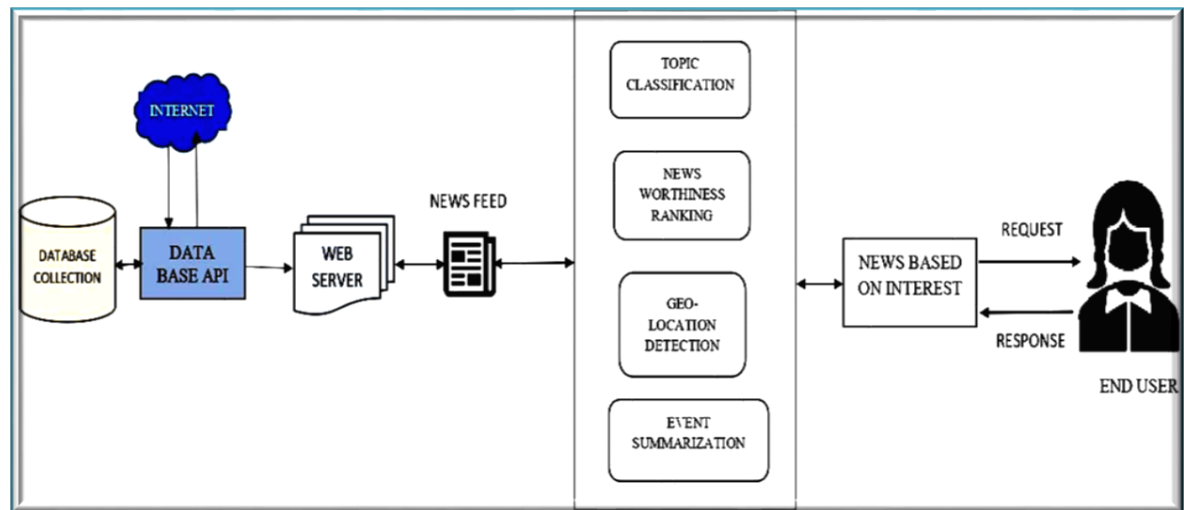


## 5.2 Solution & Technical Architecture

Solution architecture is an complex process ,with many sub-processes that 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 to the project.
- Provide specifications according to which the solution is defined, managed, and delivered to the customers.

Solution Architecture diagram :



## 5.3 User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Web App)	User Login	USN-1	As a user, I can log into the application by entering email & password	I must be able to login	Medium	Sprint-1
	User Registration	USN-2	As a user, I can register for the application by entering my email, password and confirming my password and phone number.	I must be able to register as a new user	High	Sprint-1
	User Search Page	USN-3	Even without logging in User must be able to search for news in the home page	I must be able to view all news	High	Sprint-2
		USN-4	After logging in, news specified in his favorite category must be grouped in the top	I must be able to query through all news	Medium	Sprint-2
		USN-5	I must be able to visit the source news website	I must be redirected to the source website	Low	Sprint-3
	User News Category Selection	USN-6	As a user, I must be able to choose categories based upon my interest	I must be able to change my favorite categories	High	Sprint-3
	User Notification	USN-7	As a user, I must be notified with my favorite news through mail	I must be receiving news based on my interest through mail	High	Sprint-4
		USN-8	As a user I must be able to specify whether I must be notified	I must be able to disable the the notifier	Low	Sprint-4

## 6. PROJECT PLANNING & SCHEDULING

### 6.1 Sprint Planning & Estimation

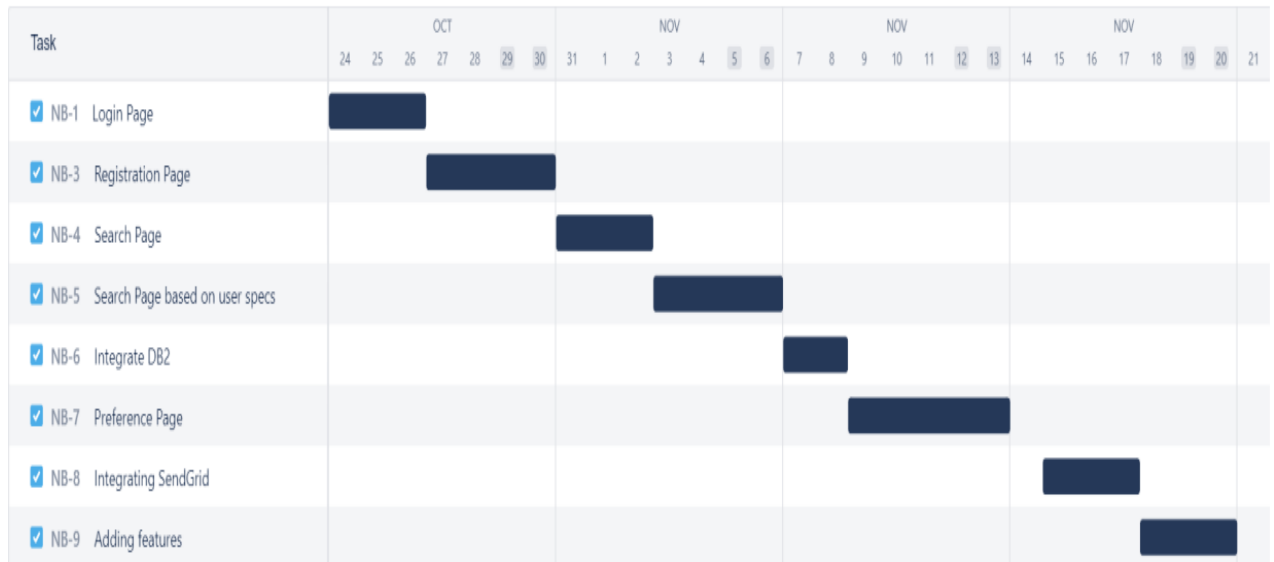
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority	Team Members
Sprint-1	User Login	USN-1	As a user, I can log into the application by entering email & password	MEDIUM	BOOPATHIRAJ B ANEESHKUMAR M
	User Registration	USN-2	As a user, I can register for the application by entering my email, password and confirming my password and phone number.		HARIHARAN K GOKUL A
Sprint-2	User Search Page	USN-3	Even without logging in User must be able to search for news in the home page	HIGH	BOOPATHIRAJ B ANEESHKUMAR M
		USN-4	After logging in, news specified in his favorite category must be grouped in the top	HIGH	HARIHARAN K GOKUL A
Sprint-3		USN-5	I must be able to visit the source news website	High	BOOPATHIRAJ B ANEESHKUMAR M
	User News Selection choice	USN-6	As a user, I must be able to choose categories based upon my interest	Low	HARIHARAN K GOKUL A
Sprint-4	User Notification	USN-7	As a user, I must be notified with my favorite news through mail	High	BOOPATHIRAJ B ANEESHKUMAR M
		USN-8	As a user I must be able to specify whether I must be notified	Low	HARIHARAN K GOKUL A

### 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	1	3 Days	24 Oct 2022	26 Oct 2022	1	26 Oct 2022
Sprint-2	1	3 Days	31 Oct 2022	02 Nov 2022	1	02 Nov 2022
Sprint-3	1	3 Days	07 Nov 2022	09 Nov 2022	1	09 Nov 2022
Sprint-4	1	3 Days	14 Nov 2022	16 Nov 2022	1	16 Nov 2022

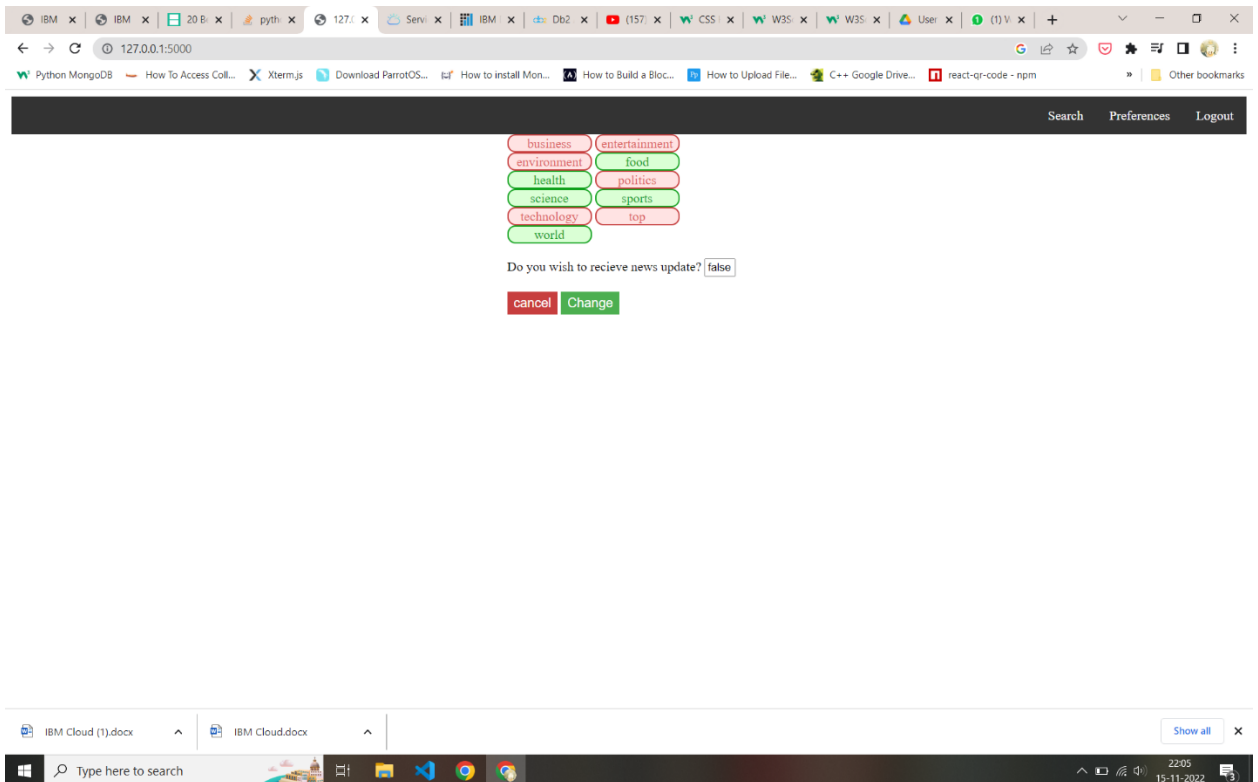


## 6.3 Reports from JIRA



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

### 7.1 Feature 1



This feature is used to get the user wish for receiving any update related to recommended news.

## 7.2 Database Schema (if Applicable)

Table 1 name : User credentials

Columns :

- ID
- USERNAME
- PASSWORD
- NAME
- CATEGORY
- EMAIL\_PREFERENCE

Table 2 name : News data

Columns :

- TITLE
- CATEGORY
- LINK
- SOURCE

## 8. TESTING

### 8.1 Test Cases

Feature Type	Component	Test Scenario	Steps To Execute	Expected Result	Actual Result	Status
Functional	Home Page	Verify user is able to Login when user credentials are entered correctly	1.Go to login page 2.Enter credentials and login 3.User must be redirected according to their status of their login authentication	Login should redirect correctly	Working as expected	Pass
Functional	Registration Page	Verify user is able to register when user credentials are entered correctly	1.Go to register page 2.Enter credentials and register 3.User must be redirected to the login	When all the criteria is matched the user must be redirected to the <a href="#">login page</a>	Working as expected	Pass
Functional	Preference page	Verify user is able to change their preferences according to their choices	1.Go to Preference page 2. <del>Updated</del> preference must be updated in the DB2 3.The mail he receives must contain news of his own interest	Change of preference must be reflected in the search page and the <del>update</del> mail	Working as expected	Pass
Functional	<a href="#">Search page</a>	Verify user is able to search through the news through API	1.Go to Search page 2.Search with a particular query	Even without login everyone must be able to search for their news of interest	Working as expected	Pass

## 8.2 User Acceptance Testing

### DEFECT ANALYSIS

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	1	0	0	0	1
External	0	1	0	0	1
Fixed	1	0	0	0	1
Skipped	1	0	0	0	1
Totals	3	1	0	0	4

### TESTCASE ANALYSIS

Section	Total Cases	Not Tested	Fail	Pass
Login Page	1	0	0	1
Register Page	1	0	0	1
Preference Page	1	0	0	1
Search Page	1	0	0	1

## 9. RESULTS

### 9.1 Performance Metrics

			NFT - Risk Assessment						
S. No	Project Name	Scope/feature	Functional Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Volume Changes	Risk Score	Justification
1	News Tracker Application	Preference of notification	Low	No Changes	Moderate	Low	>5 to 10%	ORANGE	As we have seen the changes

## 10. ADVANTAGES & DISADVANTAGES

### Advantages

- Application shows only user recommended news.
- No subscription needed only registration is enough to receive news updates.
- Ad free application.
- Simple and minimalistic Ui.

### Disadvantages

- News are sent only at the scheduled time.
- Only 20 news updates are sent important news may be missed.
- App can able to sent only 20 news updates which is not enough.

## 11. CONCLUSION

A day to cope up with everything we have in our schedule. Just tell us what market news you're interested in and get a quick peek for the day. Only read what you feel is relevant and save your time. This app helps you to query for all information about Indices, Commodities, Currencies, Future Rates, Bonds, etc.... as on official websites. The purpose of this project is to make the things we enjoy a little simpler in these busy days. Most of us have the habit of reading news, but are overwhelmed by the unwanted news that are notified with the ones we love. Sometimes the unwanted news spoils our mood. The purpose of this project is to allow users to specify the categories they like to be notified and send notification based on their own preferences.

## 12. FUTURE SCOPE

A news application has simple goals: Capture and retain reader attention, and repeat the process, several times a day. If mobile is to become the dominant vector for news, retaining readers will be much more challenging than it is on a PC or tablet (though the latter tends to engage readers 10x or sometimes 20x more). A news app needs to be steered with precision. Today's digital marketing tools allow publishers to select multiple parameters monitoring the use of a application. They can measure how long the app is used, when, for how long, why and where people tend to drop it, what kind of news they like, if they hit a paywall and give up, and why they do so, etc. Similarly, when an app remains unopened for too long, smart tools can pinpoint the user and remind her of the product's benefits. These tools are as good as the people who (a) set the parameters, (b) monitor them on a daily basis, and (c) take appropriate action such as launching a broadside of super-targeted emails.

## 13. APPENDIX

Source Code : [Click here](#)

Git hub Repo : [Click here](#)

Project Demo Link : [Click here](#)

