

NEWS TRACKER APPLICATION

TEAM ID: PNT2022TMID53234

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1. INTRODUCTION

1.1. Project Overview

People like to get the latest news on the go, anytime and anywhere on demand. It's not difficult these days to access the latest news: the internet and the intermingling of social media with critical worldwide events have made it almost impossible to live under a rock. But finding a reliable one-stop shop to engage with your news can be somewhat of a challenge

1.2.Purpose

Our Project aims to overcome this challenge faced by the people by developing a one-stop solution which aggregates the News from all the reliable sources and also categorises them under different sections for the best user experience.

2. LITERATURE SURVERY:

2.1. Existing problem

There are some applications at present which are solve the above-mentioned challenge that is faced by the people and most of them pull from the same news sources. Some of them, like NewsBreak and Google News, also prioritize free stories over subscription-only sources. As a result, those news apps tend to pull articles from lesser-known publications, providing a wider selection of news than apps like Apple News, which mainly promotes news from more prominent sources

2.2. References

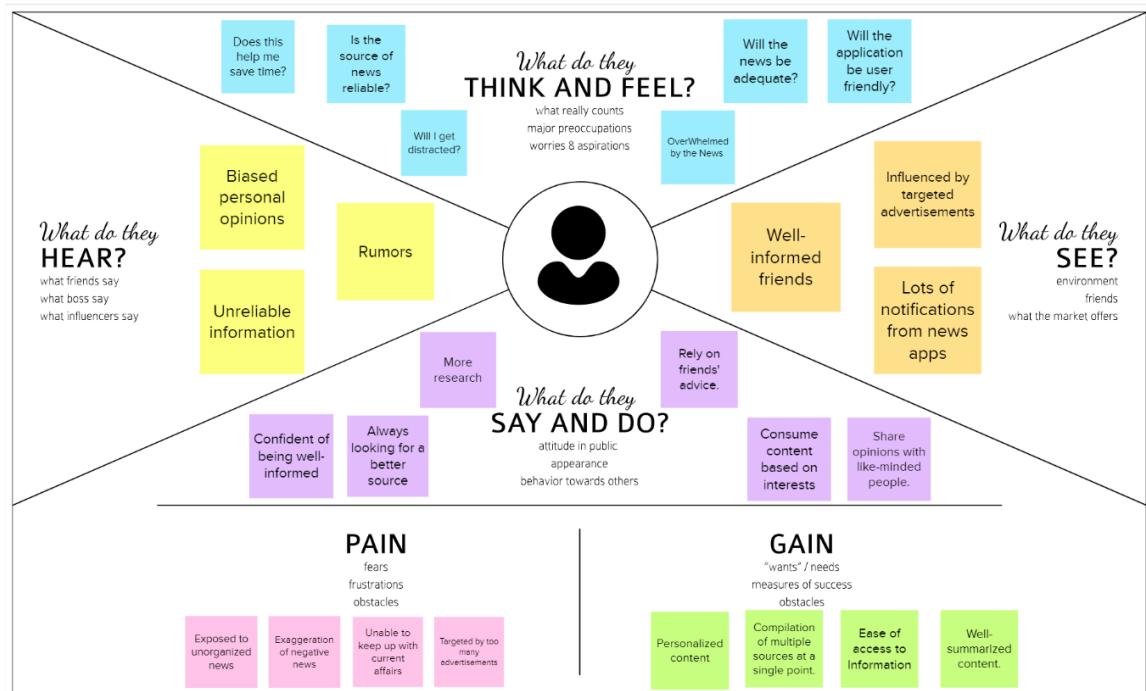
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- <https://www.ibm.com/docs/en/db2-for-zos/11?topic=zos-db2-basics-tutorial-working-db2-interactively>

2.3. Problem statement definition

There are multiple news apps available in the market where users are often spammed with irrelevant information. There is also a lot of contexts that is shared which requires the user to go through the entire article to understand the news. This is time consuming and doesn't cater to the immediate needs of the user. This News Tracker Application helps users find relevant and important news easily every day from multiple news sources and also get crisp summaries for quick reading.

3. IDEATION AND PROPOSED SOLUTION:

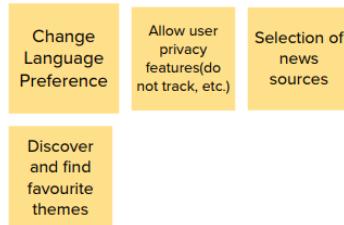
3.1. Empathy Map Canvas



3.2. Ideation & Brainstorming

Mohana	Nabeel Hussain	Paarkeshvaran	Ujjwaleshwar
Trending news	Integration to social media	Very Attractive User Interface	Provide Puzzles and Brain Teasers
Comments / opinions	Categorization of content	Provide Reward Points for User Activity	Users can Maintain Daily Streak
Brief summaries beside headline.	National and international news.	Provide Detailed Weather Predictions	Users Publish their Articles
Font size modification for readability.	Add duration of article, to decide if to spend time on it.	Provide Users with Social Media Login	Allow Users to Improve other Articles
Credibility score beside news source.	Selection of news sources	Provide Fun Facts	Provide the Television series time schedules
		Provide the daily rates of all commodities	Save Articles to read Later
		Bookmark Articles and News	Enable HashTags to tag topics of Discussion
		Provide ChatBot for Customer Service	

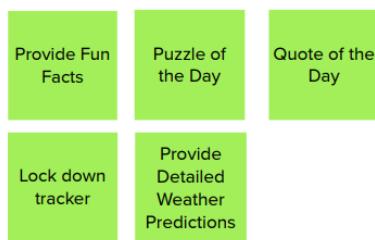
Personalization



Core Functionalities



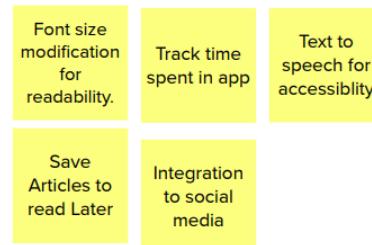
Miscellaneous



Additional Functionalities



Accessibility and User Experience



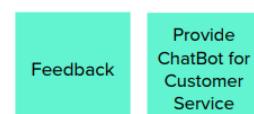
Reliability



User Interface



Customer Feedback



User Engagement



3.3. Proposed solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">● News Readers are busy people who need all the News from different sources to be aggregated in a single place because it's time-consuming for them to look at multiple sources.● News Readers are selective people who need news that is personalized to them because they have their own personal preferences.● News Readers are intellectual people who need only reliable and accurate information because they want to make the right decisions using information from legitimate sources.● News readers are engaged people who need short and crisp news on the go because they do not want to spend ample time reading the entire content.● News Readers are smart vocal people who need an open platform to comment and voice out their thoughts because they believe they can add value and influence mass opinion.
0.	Idea / Solution description	The Project aims to overcome this challenge described in the problem statement above faced by the people by developing a one-stop solution which aggregates the News from all the reliable sources and categorises them under different sections for the best user experience.
0.	Novelty / Uniqueness	<ul style="list-style-type: none">● Short & crisp summarisation● News feed Personalization● Ensuring reliability of sources.● Easy to navigate design
0.	Social Impact / Customer Satisfaction	Help people consume reliable information in a short span of time and keep them well-informed.
0.	Business Model (Revenue Model)	<ul style="list-style-type: none">● Advertisements● In-app purchase for an Ad-free version of the application.
0.	Scalability of the Solution	This solution is highly scalable since it's enabled through cloud technologies offered by IBM enabling scalability on a consumer-demand basis.

3.4. Problem solution fit

Project Title: News Tracker Application		Project Design Phase-I - Solution Fit Template		Project ID: PNT2022TMID53234
1. CUSTOMER SEGMENT(S) Who is your customer? i.e. working parents of 0-5 y.o. kids General Public from different segments of the society particularly the working class of the society (age group: above 20 yrs)	CS <small>Define CS, fit into CC</small>	6. CUSTOMER CONSTRAINTS What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices. <ul style="list-style-type: none"> • No choices • No reliable sources • No budget • Tight schedule 	CC <small>Explore AS, differentiate</small>	5. AVAILABLE SOLUTIONS Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking <ul style="list-style-type: none"> • Newspaper • News apps with no user personalization and news summaries • Apps like Google news, Flipboard, etc... • News apps without search and filter option • News apps with just single source of information retrieval
2. JOBS-TO-BE-DONE / PROBLEMS Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides. <ul style="list-style-type: none"> • Summarization of News • Aggregation of News from multiple sources • Personalization of News Feed • Providing Reliable News 	J&P <small>Focus on J&P, tap into BE, understand RC</small>	9. PROBLEM ROOT CAUSE What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations. People are busy with their tight schedule and hence have no time read news and also have trust issues with the sources.	RC <small>Focus on J&P, tap into BE, understand RC</small>	7. BEHAVIOUR What does your customer do to address the problem and get the job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace) <ul style="list-style-type: none"> • Enquire with people who are well-informed • Look out for sources online • Consume news via social media
3. TRIGGERS What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news. Seeing people around them being well informed of all the current affairs	TR <small>Identify strong TR & EM</small>	10. YOUR SOLUTION If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour. A simple web application to summarize and aggregate the news from multiple reliable sources and as per the user's preferences.	SL	8. CHANNELS of BEHAVIOUR <small>CH</small> 8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7 <ul style="list-style-type: none"> • Look out for sources online • Consume news via social media 8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development. <ul style="list-style-type: none"> • Enquire with people who are well-informed
				<small>Extract online & offline CH of BE</small>

4. REQUIREMENT ANALYSIS:

4.1. Functional requirements

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email
FR-3	Reading news	The website should have a simple interface with the possibility to observe many news with small descriptions in one page. Pushing the link/button "read more" to see full information.
FR-4	Sharing	The website should have tools to share this news in social media.
FR-5	Searching	Search for a specific topic of news.
FR-6	News personalization	Select news topics that user wants to see Populate feed with the relevant news

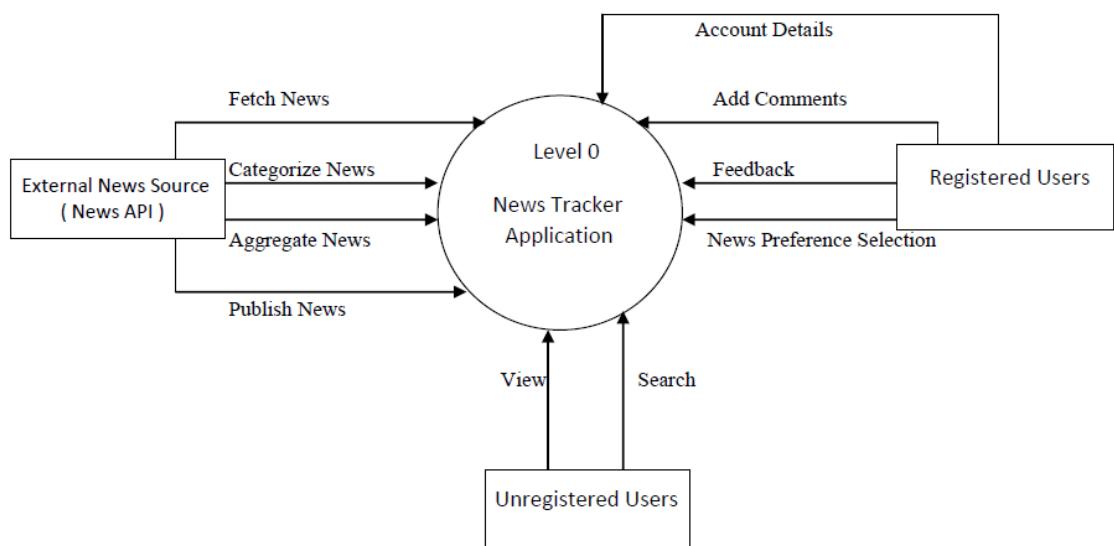
4.2. Non-functional requirements

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none"> • Clear and elegant UI • Clear, precise and well formatted content. • Accessibility features
NFR-2	Security	<ul style="list-style-type: none"> • Set standards for strong password • No sensitive user data is stored. • Privacy and anonymity. Protects against doxxing or other such attacks.
NFR-3	Reliability	<ul style="list-style-type: none"> • Reliable sources of news.
NFR-4	Performance	<ul style="list-style-type: none"> • light-weight (should not have lags on non-powerful devices, and should load fast even if the user has a low-speed connection).
NFR-5	Availability	<ul style="list-style-type: none"> • Should be available over the internet • Minimal downtime for maintenance
NFR-6	Scalability	<ul style="list-style-type: none"> • Easily scalable to large number of users

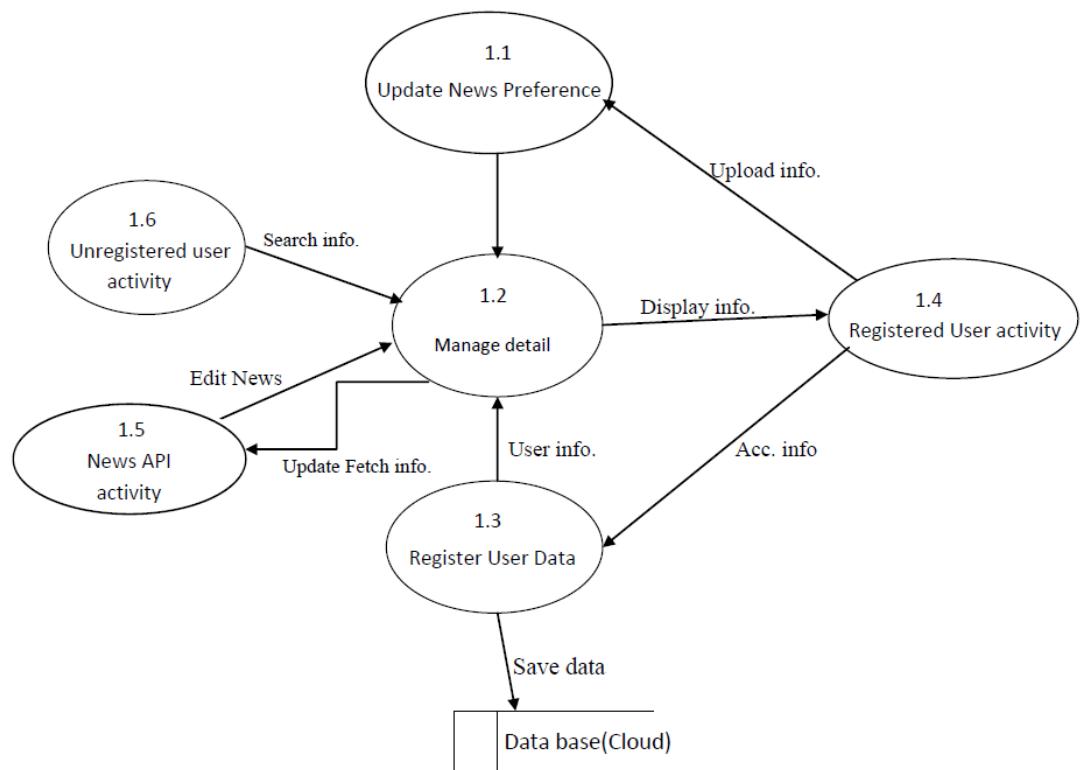
5. PROJECT DESIGN

5.1. Data Flow Diagrams

Level 0 Data Flow Diagram

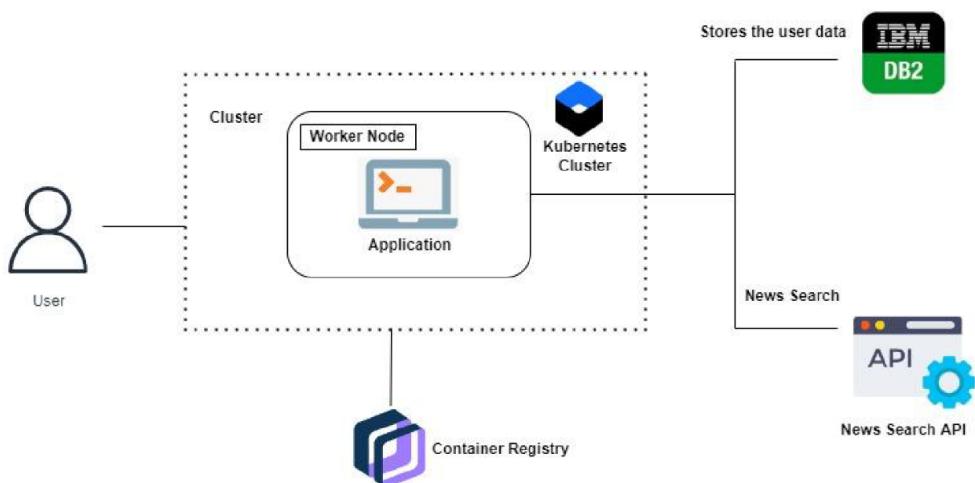


Level 1 Data Flow Diagram

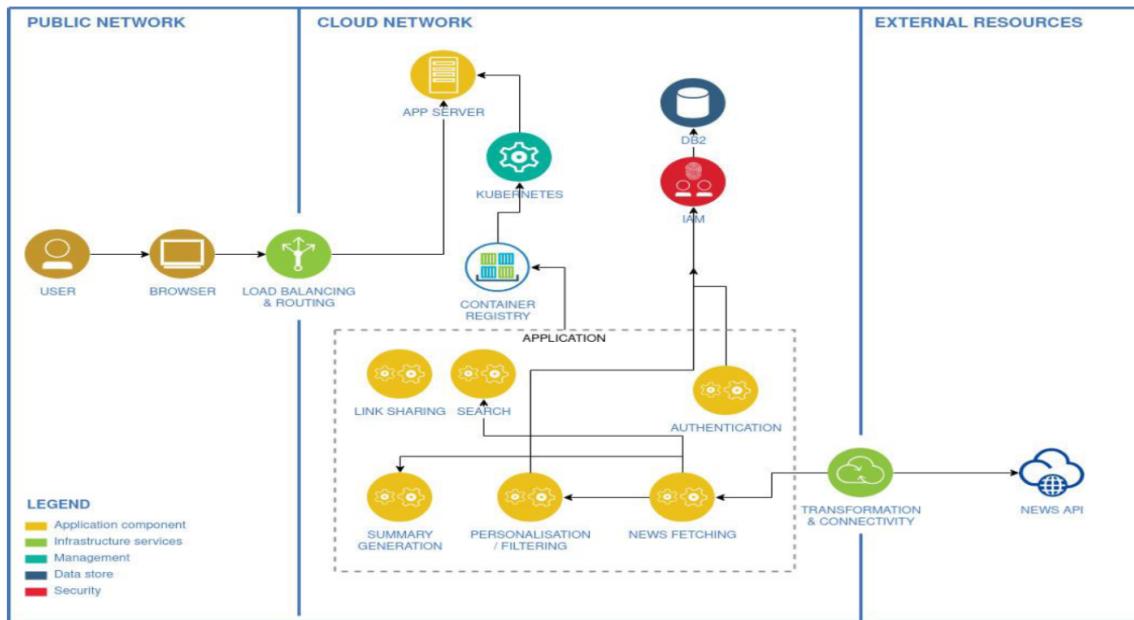


5.2. Solution & Technical Architecture

Solution architecture:
(News Tracker Application)



Technology architecture:



.	Component	Description	Technology
1.	User Interface	Web UI, Browser	HTML, CSS, JavaScript, Python, Flask
2.	Application Logic-1	Authentication	Python
3.	Application Logic-2	News Fetching	REST
4.	Application Logic-3	Searching	Python, REST
5.	Application Logic-4	Personalization	Python, IBM DB2
6.	Application Logic-5	Summary generation	Python, REST
7.	Application Logic-6	Link Sharing	Python, REST
8.	Cloud Database	Database Service on Cloud	IBM DB2
9.	External API-1	News API returns results for current and historic news published over various sources	Rapid API
10.	Infrastructure (Cloud)	Application Deployment on Cloud Cloud Server Configuration:	Cloud Foundry, Kubernetes, Container Registry

5.3. User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Registered Customer (Web 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 receive confirmation emails & password reset emails.	Medium	Sprint-1
	Login	USN-4	As a user, I can log into the application by entering email & password.	I can access my account / dashboard	High	Sprint-1
	Log out	USN-5	As a user, I can log out of the web app.	I can log out when not in use.	High	Sprint-1
	Dashboard	USN-6	As a logged user, I can view articles of my preference on my dashboard.	I can view articles based on content preferences given at the time of registration.	High	Sprint-2
	Reset Password	USN-7	As a registered user I can reset my password, so that I can login again when I forget I forgot my password	I can receive a reset password link via email.	High	Sprint-2
	Post Comment	USN-8	As a logged user, I can add comments to a news article.	I can view comments posted by other users and add comments.	High	Sprint-2

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
	Share article	USN-9	As a logged user, I can share an article in social media (Google).	I can share information with peers on social media.	Medium	Sprint-3
	Search article	USN-10	As a logged user, I can search / view articles on specific topics.	I can view articles on topics of question.	High	Sprint-3
Unregistered Customer (Web user)	View article	USN-11	As an unregistered user, I can view articles that are trending.	I can view recent & trending articles.	High	Sprint-3
	Search article	USN-12	As an unregistered user, I can search articles on specific topics.	I can view articles on topics of question.	High	Sprint-3
External Source (API)	News Retrieval	USN-13	As an external system, it can return content based on parameters received in the request.	It can provide results based on request query.	High	Sprint-4
	Categorize news	USN-14	As an external system, it can categorize news based on topics.	It can split content based on a given parameter.	High	Sprint-4
	Aggregate news	USN-15	As an external system, it can aggregate news on similar topics.	It can group content based on a given parameter.	High	Sprint-4
	Publish news	USN-16	As an external system, it can fetch and publish news from sources.	It can gather content from news sources.	High	Sprint-4

6. PROJECT PLANNING & SCHEDULING

6.1. Sprint Planning & Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team members
1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Mohana R
1		USN-2	As a user, I will receive confirmation email once I have registered for the application	2	High	Nabeel Hussain M N
1		USN-3	As a user, I can register for the application through Gmail	2	Medium	Paarkeshvaran R
1	Authentication	USN-4	As a user, I can log into the application by entering email & password.	2	High	Ujjwaleshwar Srikanth
1		USN-5	As a user, I can log out of the web app.	2	High	Paarkeshvaran R
1		USN-7	As a registered user I can reset my password, so that I can login again when I forget I forgot my password	3	High	Mohana R
2	Sharing	USN-8	As a logged user, I can add comments to a news article.	5	High	Ujjwaleshwar Srikanth, Paarkeshvaran R
3		USN-9	As a logged user, I can share an article in social media (Google).	5	Medium	Ujjwaleshwar Srikanth Paarkeshvaran R
2	Reading News	USN-12	As an unregistered user, I can view articles that are trending.	3	High	Mohana R

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SSNCE195002073, SSNCE195002074, SSNCE195002077, SSNCE195002121

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team members
2		USN-13	As an external system, it can return content based on parameters received in the request.	2	High	Nabeel Hussain M N
3	Searching	USN-10	As a logged user, I can search / view articles on specific topics.	3	High	Ujjwaleshwar Srikanth
3		USN-11	As an unregistered user, I can search articles on specific topics.	3	High	Nabeel Hussain M N
4	News Personalization	USN-14	As an external system, it can categorize news based on topics.	8	High	Nabeel Hussain M N Mohana R Ujjwaleshwar Srikanth
4		USN-15	As an external system, it can aggregate news on similar topics.	3	High	Paarkeshvaran R
2		USN-6	As a logged user, I can view articles of my preference on my dashboard.	5	High	Mohana R, Nabeel Hussain M N

6.2. Sprint Delivery Schedule

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)
Sprint-1	13	6 Days	24 Oct 2022	29 Oct 2022
Sprint-2	15	6 Days	31 Oct 2022	05 Nov 2022
Sprint-3	11	6 Days	07 Nov 2022	12 Nov 2022
Sprint-4	11	6 Days	14 Nov 2022	19 Nov 2022

6.3. Reports from JIRA

Velocity Report



Insights on Sprint Commitment



Total Commitment Report

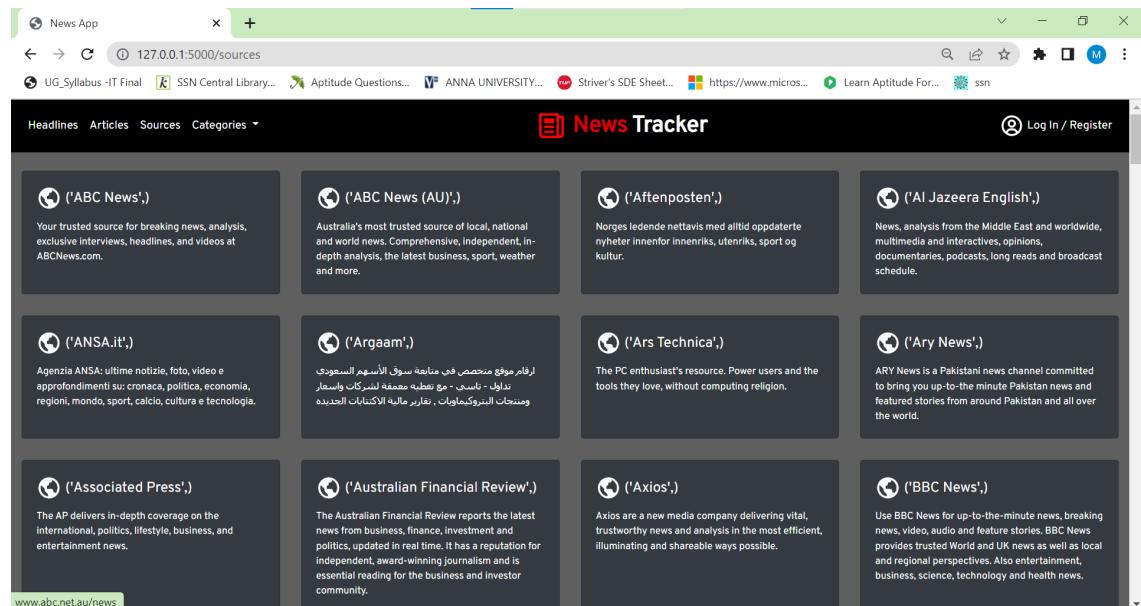
Sprint	Commitment	Completed
NTA Sprint 1	13	13
NTA Sprint 2	15	10
NTA Sprint 3	11	11
NTA Sprint 4	11	11

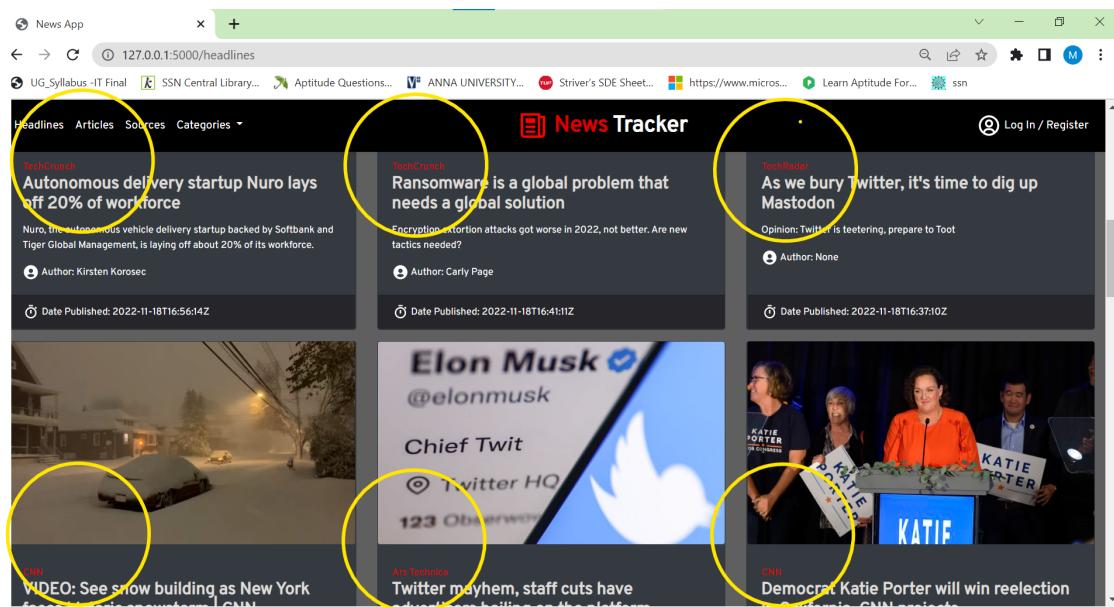
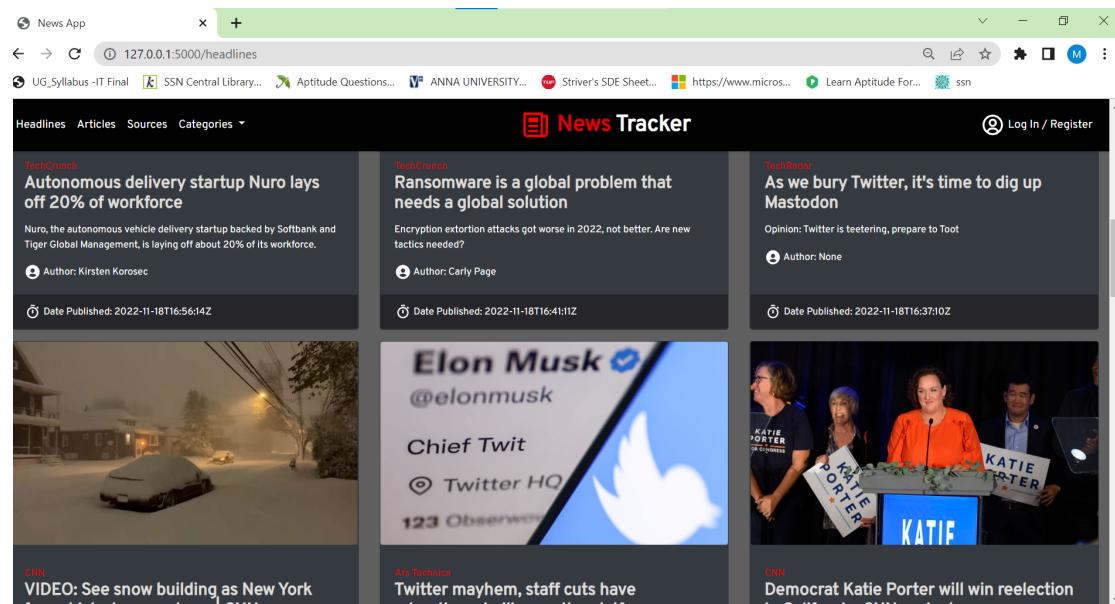
7. CODING AND SOLUTIONING

Final code

7.1. Feature 1 – Aggregation

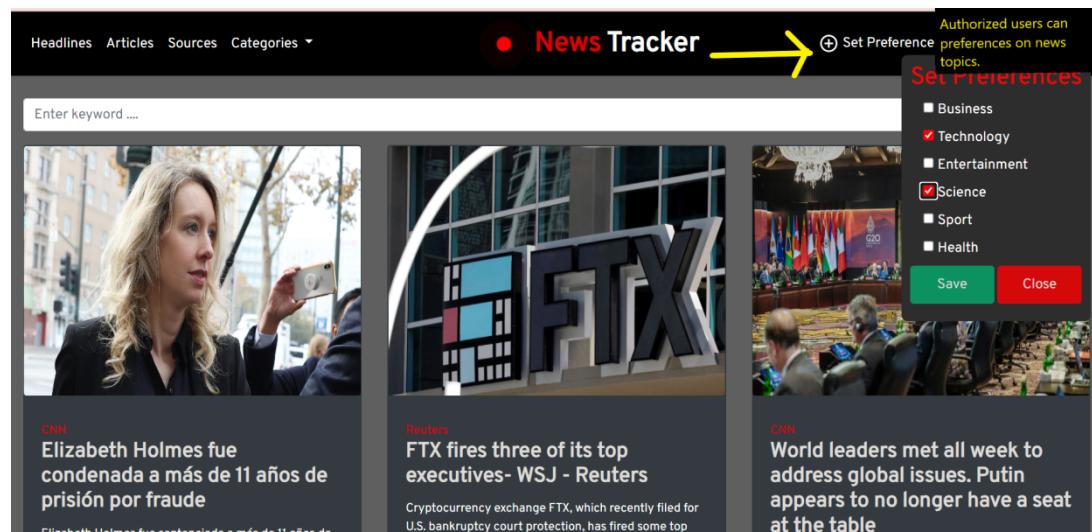
Aggregation of news from different sources at one place





7.2. Feature 2 – Personalization

Personalization of News feed based on User preferences



7.3. Database Schema

The screenshot shows the IBM Db2 on Cloud interface. The top navigation bar includes options like Load Data, Load History, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The left sidebar has icons for Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The main area is titled "Tables" and shows a list with one entry: "USERS" under "Schema SNV90076". On the right, a detailed view of the "USERS" table definition is shown. The table has five columns: ID (INTEGER, Nullable N, Length 0, Scale 0), EMAIL (VARCHAR, Nullable N, Length 255, Scale 0), USERNAME (VARCHAR, Nullable N, Length 255, Scale 0), PASSWORD (VARCHAR, Nullable N, Length 255, Scale 0), and PREFERENCES (VARCHAR, Nullable Y, Length 255, Scale 0). A note indicates "Approximate 7 rows (32.0 KB) Updated on 2022-11-19 17:57:20". Below the table definition, there is a "View data" button and a message "Total: 1, selected: 0".

8. TEST CASES

UAT Report

8.1. Test cases

TEST SCENARIOS	
LOGIN/REGISTER PAGE	<ul style="list-style-type: none"> 1 Check login functionality of existing users 2 Check register functionality of new users 3 Check register functionality of new users using Google.
HEADLINES (Home) PAGE	<ul style="list-style-type: none"> 1 Check users are able to view news elements in a grid 2 Check if authorized users are able to set preferences of news 3 Check if authorized user is able to log out 4 Check if authorized users are able to reset preferences 5 Check if users are able to navigate between pages using top navbar

8.2. User acceptance testing

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Test Data	Expected Result	Actual Result	Status
LoginPage_TC_001	Functional	Headlines(Home) Page	Verify user is able to see the Login/Register page when user clicked on Login/Register button on the top navbar		<ul style="list-style-type: none"> 1.Enter URL and click go 2.Click on Login/Register button 3.Verify login/Register page displayed or not 	website url	Login/Register page should display	Working as expected	Pass
LoginPage_TC_002	UI	Login/Register Page	Verify the UI elements in Login/Register page		<ul style="list-style-type: none"> 1.Enter URL and click go 2.Click on Login/Register button 3.Verify login/Register page with below UI elements: <ul style="list-style-type: none"> a.email text box b.password text box c.Login button d.New customer? Create account link 	website url	Application should show below UI elements: <ul style="list-style-type: none"> a.email text box b.password text box c.Login button d.New customer? Create account link 	Working as expected	Pass
LoginPage_TC_003	Functional	Login/SignUp Page	Verify user is able to log into application with Valid credentials		<ul style="list-style-type: none"> 1.Enter URL 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: mona7sekar@gmail.com password: mona123	User should navigate to Headlines page	Working as expected	Pass
LoginPage_TC_004	Functional	Login/SignUp Page	Verify user is able to log into application using Google		<ul style="list-style-type: none"> 1.Enter URL and click go 2.Click on My Account dropdown button 3.Click on the Google button.. 	website url	User should navigate to Headlines page	Working as expected	Pass

LoginPage_TC_005	Functional	Login page	Verify user is able to log into application with InValid credentials	1.Enter URL 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: mona7sekar@gmail.com password: Testing123	Application should show 'Incorrect email or password' validation message.	Working as expected	Pass
LoginPage_TC_006	Functional	SignUp page	Verify if redirected to Sign up page on clicking "New customer? Create account" link.	1.Enter URL and click go 2.Click on Login/Register button 3.Click on "New customer? Create account" link.	website url	Application should redirect to the signup page on clicking "New customer? Create account" link.	Working as expected	Pass
Headlines_TC_007	UI	Headlines page	Verify the UI elements in Headlines page	1.Enter URL and click go 2.Verify headlines page with below UI elements: (i).Top Nav Bar consisting of a.Headlines button b.Articles button c.Sources button d.Website name e.Login/Register button (ii) Search bar with search button (iii) News summaries with each containing a.Source name b.Headline c.Summary d.Author name e.Date published	website url	Application should show the below UI elements: (i).Top Nav Bar consisting of a.Headlines button b.Articles button c.Sources button d.Website name e.Login/Register button (ii) Search bar with search button (iii) News summaries with each containing a.Source name b.Headline c.Summary d.Author name e.Date published	Working as expected	Pass

Headlines_TC_008	Functional	Headlines page	Verify if buttons in the Top navbar of headlines page perform correct redirection to target pages	1.Enter URL and click go 2.Click on Headlines button Click on each of the buttons in Top Nav Bar consisting of a.Headlines button b.Articles button c.Sources button d.Website name e.Login/Register button	website url	Verify if clicking on, a.Headlines button gets redirected to the headlines page b.Articles button redirects to the headlines page c.Sources button redirects to the headlines page d.Website name redirects to the headlines/home page e.Login/Register button redirects to the Login/Register page.	Working as expected	Pass	
Headlines_TC_009	Functional	Home page (Headlines page)	Verify if clicking on categories dropdown button, shows a popup of list of news categories.	1.Enter URL and click go 2.Click on Headlines button	website url	Application should show the below categories in the popup on clicking categories dropdown button: a.Business b.Technology c.Entertainment d.Science e.Sport f.Health	Working as expected	Pass	
Headlines_TC_010	Functional	Home page (Headlines page)	Verify if Pop up containing a check list of news categories are displayed when the Preferences button on the top navbar is clicked.	User should be logged in	1.Enter URL and click go. 2.Click on categories button	website url	The application should show only news elements relevant to the categories of preference set by the user.	Working as expected	Pass

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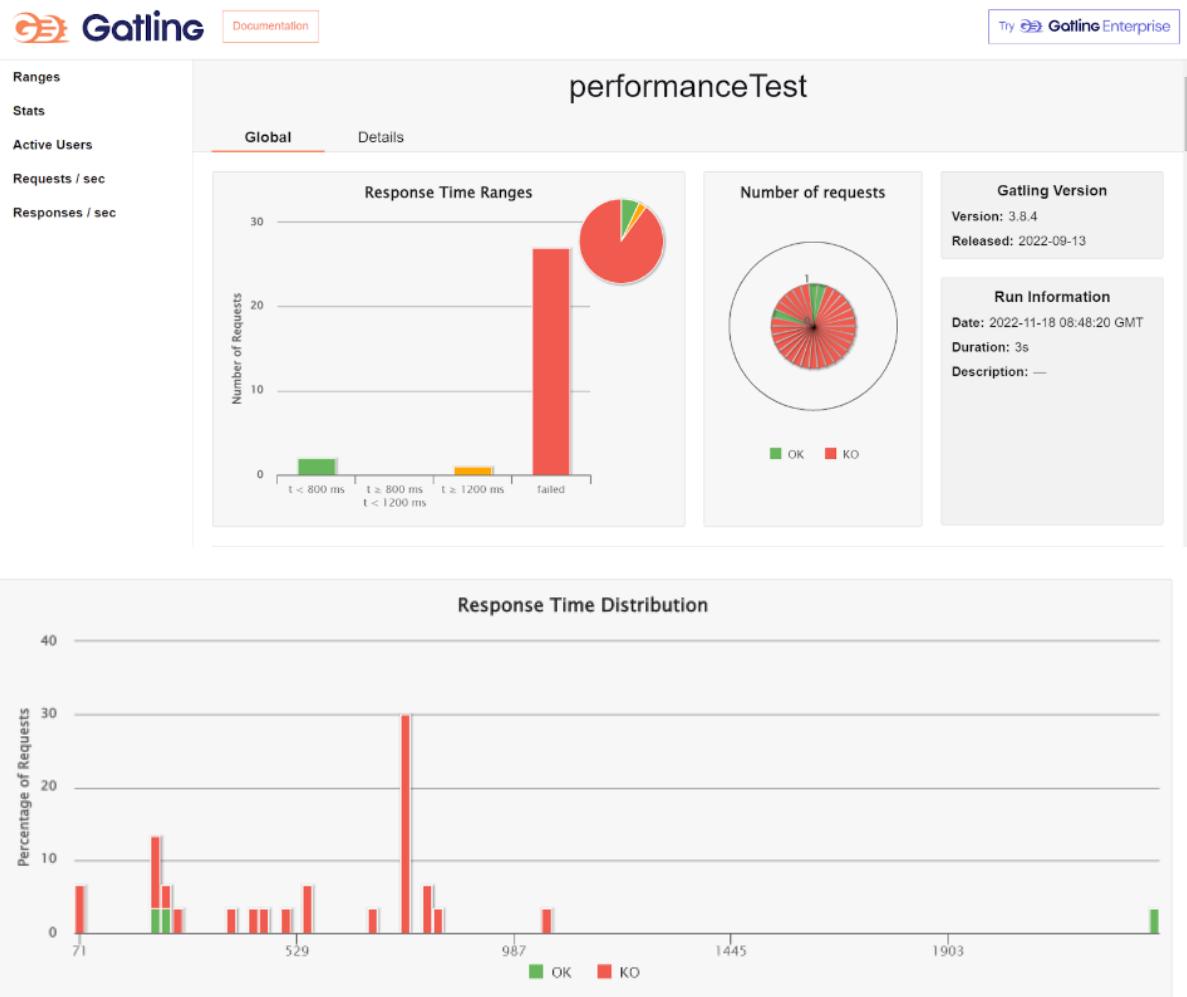
						website url			
Headlines_TC_011	Functional	Home page (Headlines page)	Verify if news on chosen category are displayed click an item from the popup list .		1.Enter URL and click go 2.Click on categories button		The application should show news elements relevant to the chosen category.	Working as expected	Pass
Headlines_TC_012	Functional	Headlines page	Verify if clicking on the news redirects to the actual news in the source website		1.Enter URL and click go 2.Click on Headlines button	website url	On clicking on each news element, the application should redirect to the actual news article in the source website	Working as expected	Pass
Articles_TC_013	Functional	Articles page	Verify if clicking on the article redirects to the actual article in the source website		1.Enter URL and click go 2.Click on Articles button	website url	On clicking on each article element, the application should redirect to the actual article in the source website	Working as expected	Pass

						website url			
Articles_TC_014	UI	Articles page	Verify the UI elements in Articles page		1.Enter URL and click go 2.Verify articles page with below UI elements: Article summaries with each containing a.Source name b.Headline c.Summary d.Author name e.Date published		Application should show the below UI elements: Article summaries with each containing a.Source name b.Headline c.Summary d.Author name e.Date published	Working as expected	Pass
Sources_TC_015	UI	Sources page	Verify the UI elements in the Sources page		1.Enter URL and click go 2.Verify source page with below UI elements: Sources from which the API fetches the news, with each containing, a.Source name b.Short description of the source	website url	Application should show source page with below UI elements: Sources from which the API fetches the news, with each containing, a.Source name b.Short description of the source	Working as expected	Pass
Sources_TC_016	Functional	Sources page	Verify if clicking on the news source element redirects to the Home page of the actual news source website		1.Enter URL and click go 2.Click on Articles button	website url	On clicking on each news source element, the application should redirect to the Home page of the actual news source website	Working as expected	Pass

Category_TC_017	Functional	Category page (of the chosen item from the popup)	Verify if clicking on a news element redirects to the actual news article in the source website		1.Enter URL and click go 2.Choose a category from the Categories dropdown	website url	On clicking on each article element, the application should redirect to the actual news article in the source website	Working as expected Pass
Headlines_TC_018	Functional	Home page (Headlines page)	Verify if user is able to log out when the log out button in the navbar is clicked.	User should be logged in	1.Enter URL and click go. 2.Click on log out button	website url	The user should be signed out	Working as expected Pass

9. RESULTS

9.1. Performance metrics



Stats										Expand all groups		Collapse all groups		
Requests ▾	Executions					Response Time (ms)								
	Total ↴	OK ↴	KO ↴	% KO ↴	Cnt/s ↴	Min ↴	50th pct ↴	75th pct ↴	95th pct ↴	99th pct ↴	Max ↴	Mean ↴	Std Dev ↴	
All Requests	30	3	27	90%	7.5	60	623	752	946	1972	2349	600	416	
request_0	1	1	0	0%	0.25	231	231	231	231	231	231	231	0	
request_0 Redirect 1	1	1	0	0%	0.25	2349	2349	2349	2349	2349	2349	2349	0	
43f41cq8_wellington-rain-t...	1	0	1	100%	0.25	1050	1050	1050	1050	1050	1050	1050	0	
4d5hmeso_vikrams-rocket...	1	0	1	100%	0.25	819	819	819	819	819	819	819	0	
au96aut_air-india-bloombe...	1	0	1	100%	0.25	813	813	813	813	813	813	813	0	
wonder_women_movie_rev...	1	0	1	100%	0.25	815	815	815	815	815	815	815	0	
thumbnail_it-astro-1-sixtee...	1	0	1	100%	0.25	757	757	757	757	757	757	757	0	
css?family=Overpass	1	0	1	100%	0.25	757	757	757	757	757	757	757	0	
request_1	1	0	1	100%	0.25	753	753	753	753	753	753	753	0	
bootstrap.min.css	1	0	1	100%	0.25	750	750	750	750	750	750	750	0	
all.min.css	1	0	1	100%	0.25	748	748	748	748	748	748	748	0	
popper.min.js	1	0	1	100%	0.25	749	749	749	749	749	749	749	0	
jquery.slim.min.js	1	0	1	100%	0.25	748	748	748	748	748	748	748	0	
Kabul-trade-via-Dubai.jpg	1	0	1	100%	0.25	750	750	750	750	750	750	750	0	
bootstrap.min.js	1	0	1	100%	0.25	749	749	749	749	749	749	749	0	

10. ADVANTAGES AND DISADVANTAGES

Advantages:

- Provides aggregation of news from different sources at a single point.
- Allows personalization by displayed news according to users' topics of interest. i.e., preferences.
- Provides short summaries of news
- Numerous news sources

Disadvantages:

- Since the news is fetched from an open-source API, accountability to the reliability of sources cannot be provided.
- Limited to sources present in the API.
- Service is completely dependent on the availability of the API service, news fails to load when API's server is down.
- Fine-filtering of news cannot be ensured since there is no complex algorithm used to perform that operation.

11. CONCLUSION

The News Tracker Application is a tool that makes it simple for users to locate essential and pertinent news from a variety of news sources each day and to receive succinct summaries for rapid reading.

12. FUTURE SCOPE

- The application can be improved by incorporating machine learning algorithms to identify user preferences based on their behavior and populate the news feed.
- Enabling users to share the news through various social media and also to voice their opinions through comments.

13. APPENDIX

[Source Code](#)

[GitHub & Project Demo Link](#)