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Thalavapalayam, Karur - 639 113.



A Project Report
on
NEWS TRACKER APPLICATION

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**18CSE040L - PROFESSIONAL READINESS FOR INNOVATION, EMPLOYABILITY AND
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TABLE OF CONTENTS

CHAPTER No.	TITLE	PAGE No.
1.	INTRODUCTION	6
	1.1 PROJECT OVERVIEW	6
	1.2 PURPOSE	6
2.	LITERATURE SURVEY	7
	2.1 EXISTING PROBLEM	7
	2.2 REFERENCES	8
	2.3 PROBLEM STATEMENT DEFINITION	8
3.	IDEATION & PROPOSED SOLUTION	9
	3.1 EMPATHY MAP CANVAS	9
	3.2 IDEATION & BRAINSTORMING	10
	3.3 PROPOSED SOLUTION	13
	3.4 PROBLEM SOLUTION FIT	14
4.	REQUIREMENT ANALYSIS	15
	4.1 FUNCTIONAL REQUIREMENT	15
	4.2 NON-FUNCTIONAL REQUIREMENT	16
5.	PROJECT DESIGN	17
	5.1 DATA FLOW DIAGRAM	17
	5.2 SOLUTION & TECHNICAL ARCHITECTURE	18
	5.3 USER STORIES	19

6.	PROJECT PLANNING & SCHEDULING	20
	6.1 SPRINT PLANNING & ESTIMATION	20
	6.2 SPRINT DELIVERY SCHEDULE	22
	6.3 REPORT FROM JIRA	23
7.	CODING & SOLUTIONING	25
	7.1 FEATURE 1	25
	7.2 FEATURE 2	26
8.	TESTING	28
	8.1 TEST CASES	28
	8.2 USER ACCEPTANCE TESTING	29
9.	RESULT	31
	9.1 PERFORMANCE METRICS	31
10.	ADVANTAGES & DISADVANTAGE	32
	10.1 ADVANTAGES	32
	10.2 DISADVANTAGES	32
11.	CONCLUSION	33
12.	FUTURE SCOPE	34
13.	APPENDIX	35

LIST OF FIGURES

FIGURE No.	TITLE	PAGE No.
3.1	Empathy Map	9
3.2	Ideation and Brainstorming	10
3.3	Brainstorm, Idea Listing and Grouping	11
3.4	Idea Prioritization	12
3.5	Problem Solution Fit	14
5.1	Describes the flow of the project deployment	17
5.2	Solution and technical architecture	18
6.1	Burndown chart	23
6.2	Burnup Chart	24
8.1	Signup Page	29
8.2	Sign in page	29
8.3	Dashboard 1	30
8.4	Dashboard 2	30
9.1	Performance Metrics	31

LIST OF TABLES

TABLE No.	TITLE	PAGE No.
2.1	Existing Problem	7
3.1	Proposed Solution	13
4.1	Functional Requirement	15
4.2	Nonfunctional requirement	16
5.1	User story	19
6.1	Sprint planning	20
6.2	Sprint Estimation	21
6.3	Project delivery	20
8.1	Test Cases	28

CHAPTER 1

INTRODUCTION

1.1 PROJECT OVERVIEW

Newspaper contains limited, non user/reader specific, location specific news. There are multiple news-sharing apps available which can be used by a single user and are often spammed with notifications. There is also a lot of unwanted news which gets shared. So it may take a lot of time for the user to find the news he/she likes. A news-sharing app wants to help users find relevant and important news easily every day and also provide explicitly news from that users locality/region which may of help to the user. In today's world we have a lot of work and there is no time to cope up everything in the schedule. So, it is not possible to read the newspaper. By using this application, the user can access the news they are interested and get a quick peek.

1.2 PURPOSE

There are multiple news-sharing apps used by a single user and are often spammed with notifications. There is also a lot of fake news which gets shared. A news-sharing app wants to help users find relevant and important news easily every day and also understand explicitly that the news is not fake but from proper sources. This news tracker application helps the user to get all information about commodities, sports, technology, education etc. The user can register using their personal details and interacts with the application and save their time. Creating an app that benefits with the smart news filtering functionality where it allows its users to segregate various news sections, comprising of business, sports, political, international, and more. The users can opt for filters like breaking news, most popular, and more. Creating a user-friendly news app that would not just have good number of features, but will also be able to get accessed by different types of users keeping the experience

CHAPTER 2

LITERATURE SURVEY

2.1 EXISTING PROBLEM

S.No.	TITLE	AUTHOR	YEAR	DRAWBACKS
1	Following the fed with a news tracke	Michael william mccracken	2012	The paper is not a technical paper but is essentially a statistical paper on how should one conclude whether the data have come in stronger, weaker or as expected.
2	Topic detection and tracking in news articles	Sagar patel, sanket suthar, sandip patel, neha patel	2015	By effectively organizing large-scale documents, a method for the evolution of news topics over time is proposed in this paper to realize the tracking and evolution of topicsin the news text set.
3	Exploring mobile news reading interactions for news app personalisation	Marios constantinides,john dowell , david johson, sylvain malacria	2015	We first surveyed users news reading preferences and behaviours; analysis revealed three primary types of reader.
4	An end-to-end weakly- supervised news aggregation framework	xijin tang, xiaohui huang	2022	The framework combines snorkel based weakly supervised classification and topic signal detection model to classify and aggregate unlabeled news texts and ultimately generate visualized result.

Table 2.1 - Existing Problem

2.2 REFERENCES

1. Michael William Mccracken, "Following the Fed with a News Tracker", January 2012.
2. Sagar Patel, Sandip Patel, Nehal Patel, Sanket Suthar, "Topic Detection and Tracking in News Articles", March 2015.
3. Marios Constantinides, John Dowell, David Johnson, Sylvain Malacria, "Exploring mobile news reading interactions for news app personalisation", August 2015.
4. Xiaohui Huang, Xijin Tang, "An End-to-end Weakly-supervised News Aggregation Framework", June 2022.

2.3 PROBLEM STATEMENT DEFINITION

Newspaper contains limited, non user/reader specific, Location specific news. There are multiple news-sharing apps available which can be used by a single user and are often spammed with notifications. There is also a lot of unwanted news which gets shared. So it may take a lot of time for the user to find the news he/she likes. A news-sharing app wants to help users find relevant and important news easily every day and also provide explicitly news from that users locality/region which may be of help to the user. In today's world we have a lot of work and there is no time to cope up everything in the schedule. So, it is not possible to read the newspaper. By using this application, the user can access the news they are interested in and get a quick peek for the day. Digital news continues to evolve, encouraged by various innovations in recent time, from groundbreaking new technologies like virtual reality and automated reporting to experiments on social platforms that have altered campaign coverage. Topic detection and tracking is a challenging topic in information retrieval technology that can be used in text mining. In topic detection we find the most important topics in a collection of news articles. Regarding current events, a system is required to detect and track topics within news articles. We would be choosing any one or two domains from politics, sports, science and discovery etc. Focusing on those domains, the goal is to implement a system that gives quite satisfying results about current events with all related stories using the optimal approach.

CHAPTER 3

IDEATION AND PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS

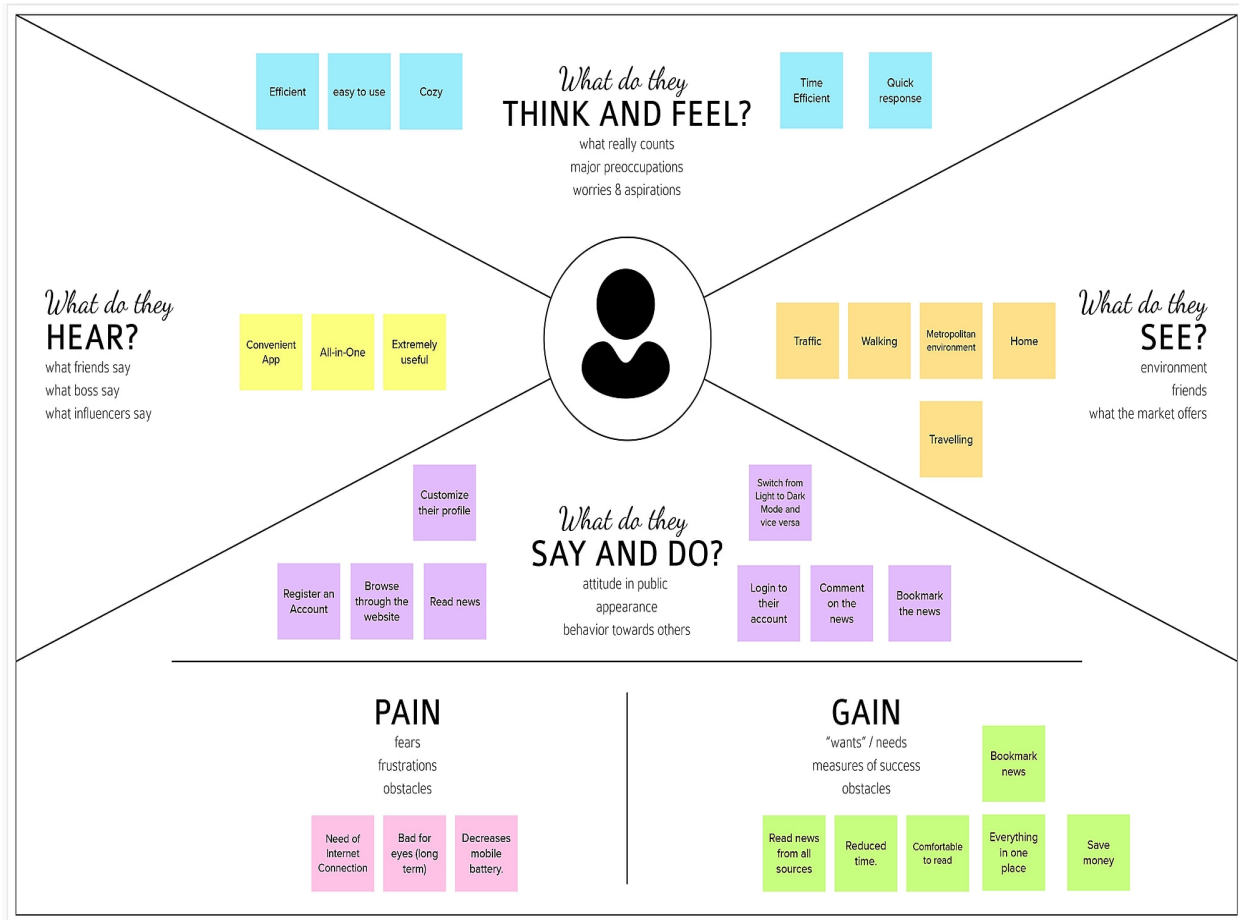


Figure 3.1 - Empathy Map

An empathy map is a widely-used visualization tool within the field. In relation to empathetic design, the primary purpose of an empathy map is to bridge the understanding of the end user.

3.2 IDEATION AND BRAINSTORMING

Step 1: Team Gathering, Collaboration and Select the Problem Statement

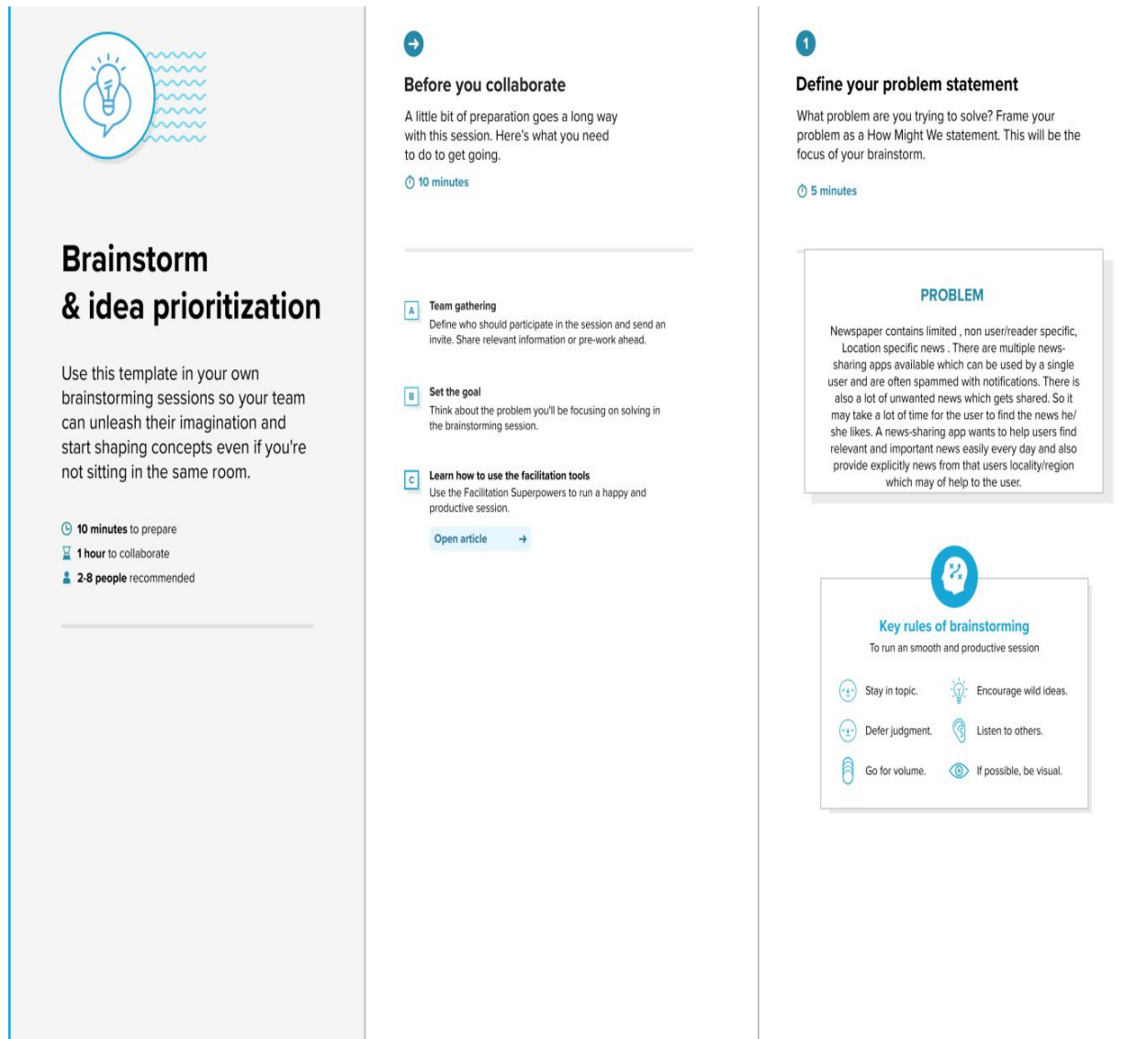


Figure 3.2 - Ideation and Brainstorming

A principal difference between ideation and brainstorming is that ideation is commonly more thought of as being an individual pursuit, while brainstorming is almost always a group activity.

Step 2: Brainstorm, Idea Listing and Grouping

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

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!

PAVITHRA
Much important news is shared these days through social media

PRAVEENA
An news app enables users to not only receive the information, but to interact with it, share it or discuss it in real time.

SWETHA
Members are also being drawn to the app through custom and controlled push notifications instead of those that are sporadic and general through social media platforms.

RESHEMA
news feed is a perfect way to keep your attendees connected with real-time agendas and links to session materials.

Share template feedback

Need some inspiration?
See a finished version of this template to kickstart your work.
Open example →

Figure 3.3 - Brainstorm, Idea Listing and Grouping

The idea listing and grouping is used to organize and analyse large numbers of ideas by categorising them. By organising and reorganising ideas, students gain a better appreciation of, and dialogue about, their ideas. As students create idea clusters, new contexts and connections among themes emerge.

Step 3: Idea Prioritization

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

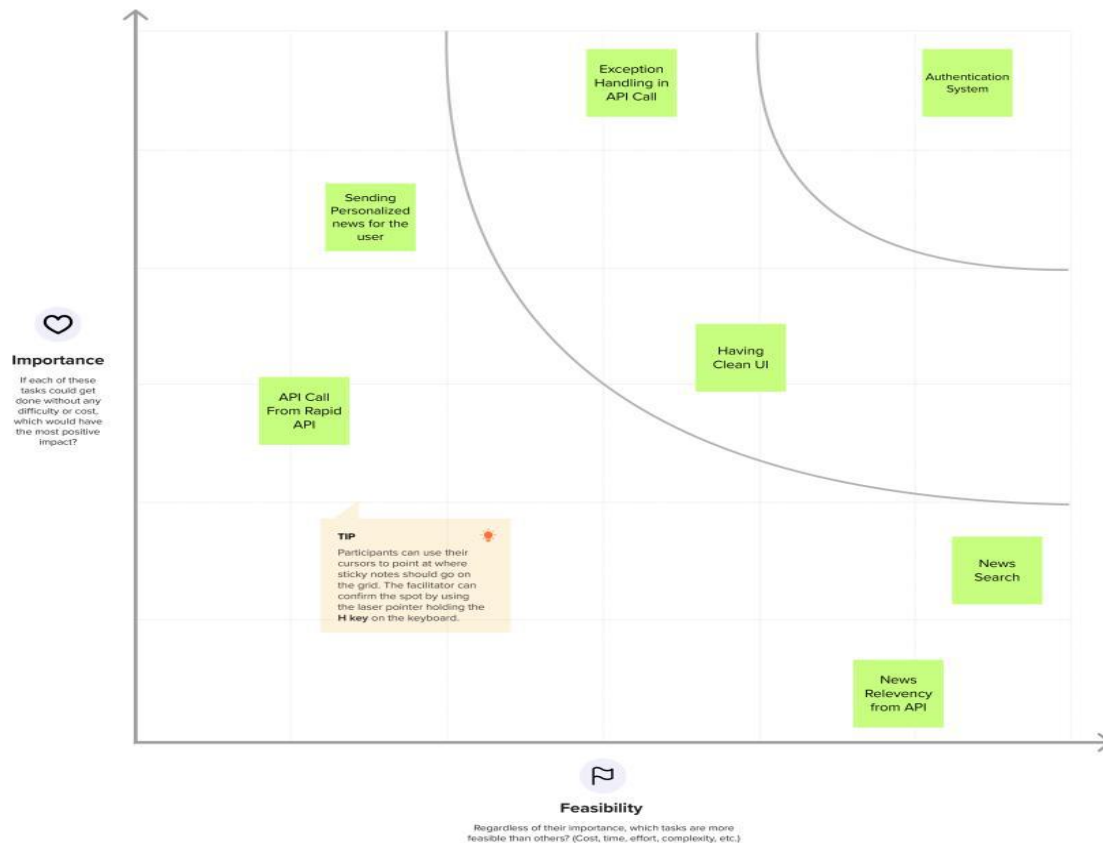


Figure 3.4 - Idea Prioritization

Idea prioritization is just a part of the idea management process. Having a structured idea management process and a systematic way of gathering, evaluating and prioritizing new ideas takes time. To make it work, the entire idea management process should be integrated to the everyday ways of working.

3.3 PROPOSED SOLUTION

S.No.	PARAMETER	DESCRIPTION
1.	Problem statement (problem to be solved)	Everyday, a lot of events happen world-wide and we rely on newspapers, television and news articles to get the reliable and trust-worthy information about these events. as a result, we created a platform that offers such news from reliable sources worldwide, in an organized and efficient manner.
2.	Idea / Solution Description	One platform for all local and worldwide news. trustworthy and reliable news, fast and efficient system. preventing spread of false information. data storage and backup, communication.
3.	Novelty / Uniqueness	A cloud computing-based news application that generates news and reports about the happenings around the world using computers and network. News based on most reliable and trustworthy resources around the world. developing the eco- friendly & sustainability based on centre.
4.	Social Impact / Customer satisfaction	Our platform eliminates the spread of false news and exposes the injustice and wrongdoings done by false groups. eliminating the fake news provides better understanding of the real-events happening in the world and the spread of knowledge.
5.	Business Model (revenue model)	Our business model will be monetized and generate income by showing advertisements and operating on monthly and yearly plan.
6.	Scalability of the Solution	Cloud scalability will help to increase the user-base by increasing the resource allocation and meeting the changing demands without sacrificing the efficiency or quality of our customer service and internal operations.

Table 3.1 - Proposed Solution

3.4 PROBLEM SOLUTION FIT

Define CS, fit into CC	<div>1. CUSTOMER SEGMENT(S)<div>CS</div></div> <div>Who is your customer? i.e. People with all age group</div>	<div>6. CUSTOMER CONSTRAINTS<div>CC</div></div> <div>What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, network connection, available devices.</div>	<div>5. AVAILABLE SOLUTIONS<div>AS</div></div> <div>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. They used the news app with all topic based</div>	Explore AS, differentiate
	<div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&P</div></div> <div>Which jobs-to-be-done (or problems) do you address for your customers? i.e. The interest change by time</div>	<div>9. PROBLEM ROOT CAUSE<div>RC</div></div> <div>What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. The customer lost the interest in the topic due to the situation.</div>	<div>7. BEHAVIOUR<div>BE</div></div> <div>What does your customer do to address the problem and get the done? i.e. They can be search the topic according to their interest.</div>	
	<div>3. TRIGGERS<div>TR</div></div> <div>What triggers customers to act? i.e. When they are interested in the trending news.</div>	<div>10. YOUR SOLUTION<div>SL</div></div> <div>News application development has come a long way in a very short time. News Apps were a lot like Infographics – interactive data visualizations, mixed with searchable databases, designed primarily to advance the narrative of the story. Now, many of those apps can be designed by reporters on deadline using open source tools, freeing up developers to think bigger thoughts.</div>	<div>8. CHANNELS of BEHAVIOUR<div>CH</div></div> <div>8.1 ONLINE This News Application software works through internet of a mobile application.</div>	
Identify strong TR & EM	<div>4. EMOTIONS: BEFORE / AFTER<div>EM</div></div> <div>How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design.</div>			Identify strong TR & EM

Figure 3.5 - Problem Solution Fit

The Problem Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem.

CHAPTER 4

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENTS

FR No.	FUNCTIONAL REQUIREMENTS (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 form 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

Table 4.1 - Functional Requirements

4.2 NON-FUNCTIONAL REQUIREMENTS

NFR No.	NON-FUNCTIONAL REQUIREMENTS	DESCRIPTION
NFR-1	USABILITY	Need to update their knowledge towards their interested news.
NFR-2	SECURITY	The information collected from user would be very safe and secure.
NFR-3	RELIABILITY	It will operate in a defined environment without failure.
NFR-4	PERFORMANCE	it is easy to use and the application is easy to access.
NFR-5	AVAILABILITY	The information whatever the user needed everything is available in this application.
NFR-6	SCALABILITY	It is a open free source and support to all platform where millions of people can use this application.

Table 4.2 - Non-Functional Requirements

CHAPTER 5

PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS

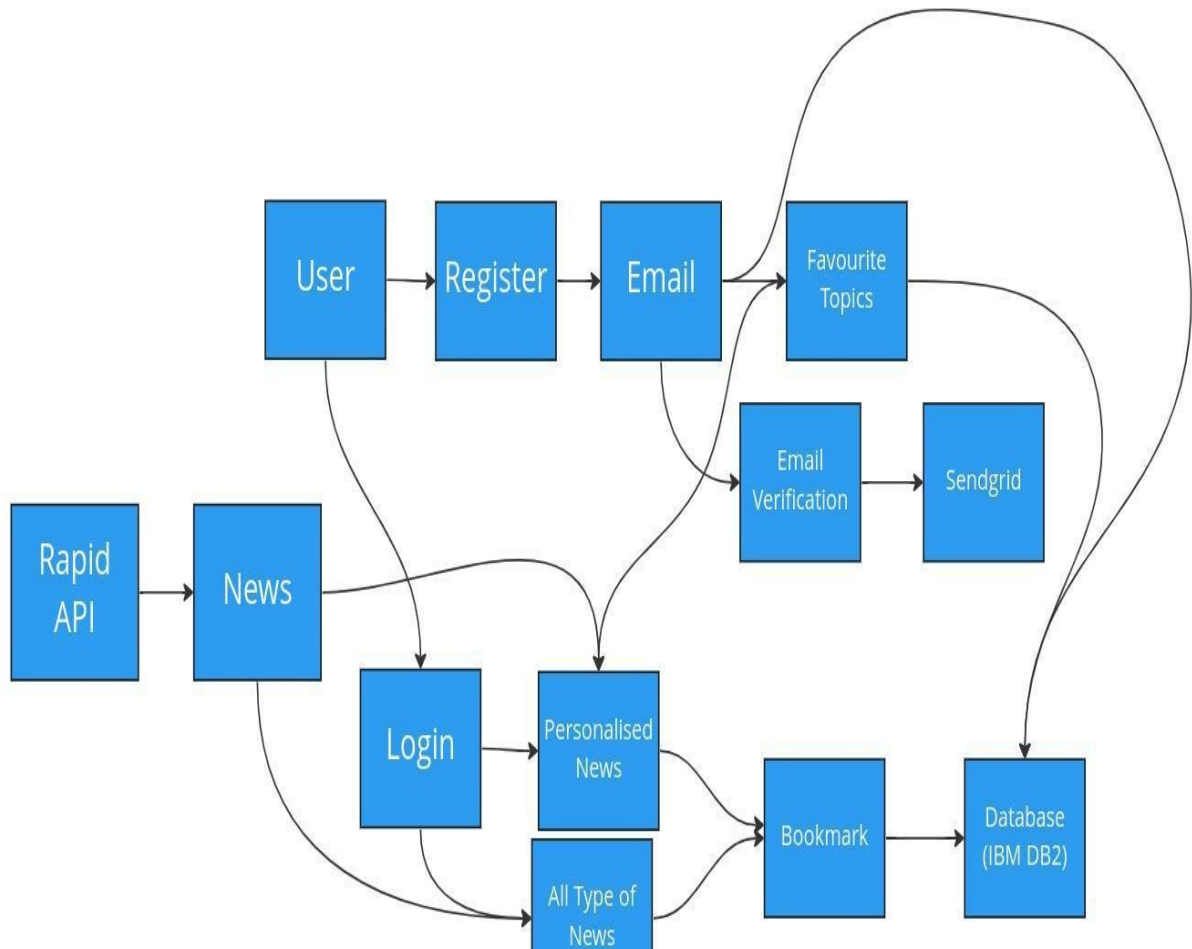


Figure 5.1 - Describes the flow of the project deployment

A data flow diagram shows the way information flows through a process or system. It includes data inputs and outputs, data stores, and the various subprocesses the data moves through.

5.2 SOLUTION AND TECHNICAL ARCHITECTURE

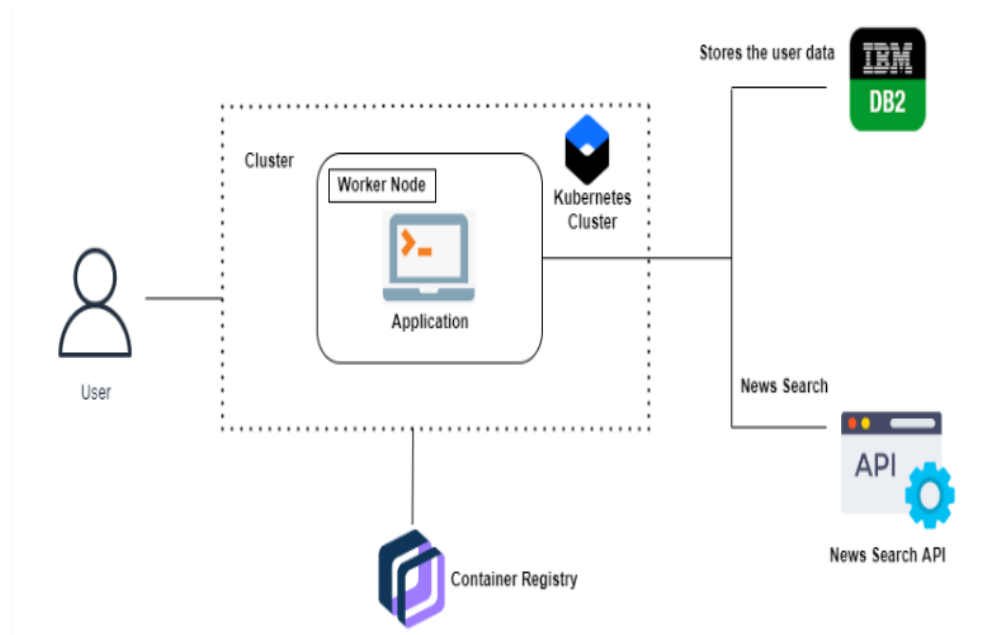


Figure 5.2 - Solution and technical architecture

- The user interacts with the application.
- Registers by giving the details.
- Integrate the application with news APIs and store the data in the database.
- The database will have all the details and the user can search the news by using a search bar.

5.3 USER STORY

User type	Functional requirement (epic)	User story no	User story / task	Acceptance criteria	Priority	Release
Step 1	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
Step 2	Email verification	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
Step 3	Favourite topics	USN-3	As a user, i can choose my favourite topics	I can see all my preferred news under for you category	Medium	Sprint-2
Step 4	Login	USN-4	As a user, i can login with the email and password into the app	I can access to all the news	High	Sprint-1
Step 5	Dashboard	USN-5	As a user, i can see all the news under specific tab	I can view all the news	Medium	Sprint-3
Step 6	Bookmark	USN-6	As a user, i can bookmark my favourite news topics as a user.	We can later view my bookmarked news	Low	Sprint-2
Step 7	Access	USN-7	As a user, i can access the site anywhere and everywhere	I can view the site by typing the url of the site	High	Sprint-4

Table 5.1 - User story

CHAPTER 6

PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION

Sprint	Functional requirement (epic)	User story no	User story / task	Story points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, i can register for the application by entering my email, password, and confirming my password.	10	High	Praveena S Swetha S
Sprint-1	Email verification	USN-2	As a user, i will receive confirmation email once i have registered for the application	10	High	Pavithra R Reshema R Praveena S Swetha S
Sprint-2	Favourite topics	USN-3	As a user, i can choose my favourite topics	7	Medium	Pavithra R Reshema R
Sprint-2	Login	USN-4	As a user, i can login with the email and password into the app	10	High	Swetha S
Sprint-3	Dashboard	USN-5	As a user, i can see all the news under specific tab	7	Medium	Praveena S
Sprint-3	Bookmark	USN-6	As a user, i can bookmark my favourite news topics as a user.	7	Medium	Praveena S Swetha S
Sprint-4	Access	USN-7	As a user, i can access the site anywhere and everywhere	10	High	Pavithra R Praveena S Reshema R Swetha S

Table 6.1 - Sprint planning

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	10	6 Days	24 Oct 2022	29 Oct 2022	8	29 Oct 2022
Sprint-2	10	6 Days	31 Oct 2022	05 Nov 2022	7	05 Nov 2022
Sprint-3	10	6 Days	07 Nov 2022	12 Nov 2022	8	12 Nov 2022
Sprint-4	10	6 Days	14 Nov 2022	19 Nov 2022	7	19 Nov 2022

Table 6.2 - Sprint Estimation

VELOCITY:

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

$$AV = \frac{\text{Sprint duration}}{\text{Velocity}} = 6/10 = 0.6$$

6.2 PROJECT DELIVERY SCHEDULE

TITLE	DESCRIPTION	DATE
Literature Survey & Information Gathering	Literature survey on the selected project & gathering information by referring the technical papers, research publications, journals etc.	1 SEPTEMBER 2022
Prepare Empathy Map	Prepare Empathy Map Canvas to capture the user Pains and Gains, prepare list of problem Statements that are to be solved by this project.	7 SEPTEMBER 2022 & 9 SEPTEMBER 2022
Ideation	List the ideas by organizing a brainstorming session and prioritize the top three ideas based on the feasibility and importance.	15 SEPTEMBER 2022
ProposedSolution	Prepare the proposed solution document, which includes novelty, feasibility of idea, revenue model, social impact, scalability of solution, etc.	22 SEPTEMBER 2022
Problem Solution Fit	Prepare problem - solution fit document.	30 SEPTEMBER 2022
SolutionArchitecture	Prepare solution architecture document.	30 SEPTEMBER 2022
CustomerJourney	Prepare the customer journey maps to understand the user interactions and experiences with the application (entry to exit).	6 OCTOBER2022
Functional Requirement	Prepare the functional requirement document.	11 OCTOBER 2022
Data FlowDiagrams	Draw the data flow diagrams and submit for review.	11 OCTOBER 2022
TechnologyArchitecture	Prepare the technology architecture diagram.	14 OCTOBER 2022
Prepare Milestone &Activity List	Prepare the milestones and activity list of the project.	21 OCTOBER 2022
Project Development - Delivery of Sprint-1, 2, 3 &4	Develop and submit the developed code by testing it.	IN PROGRESS...

Table 6.3 - Project delivery

6.3 REPORTS FROM JIRA

BURNDOWN CHART

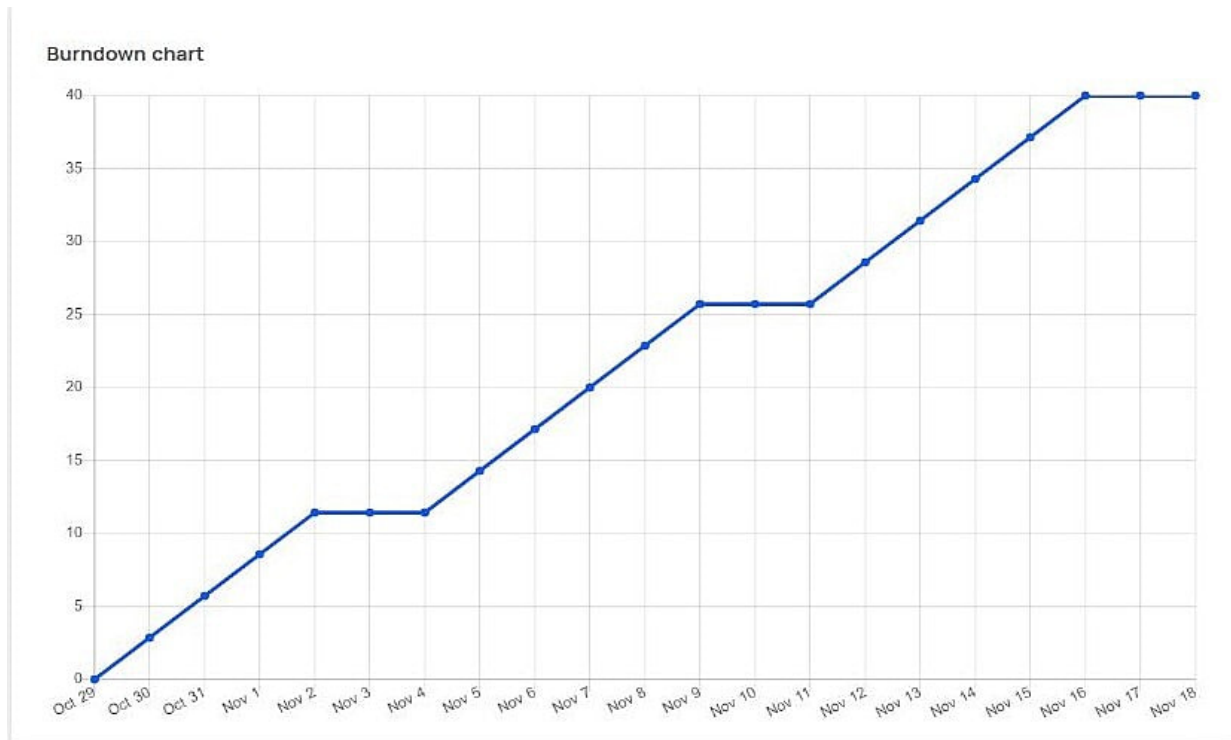


Figure 6.1 - Burndown chart

A burndown chart is a tool used by Agile teams to gather information about work completed on a project and work to be done in a given time period. Often, teams can use their burndown chart as a prediction tool that allows them to visualize when their project will be completed.

BURNUP CHART

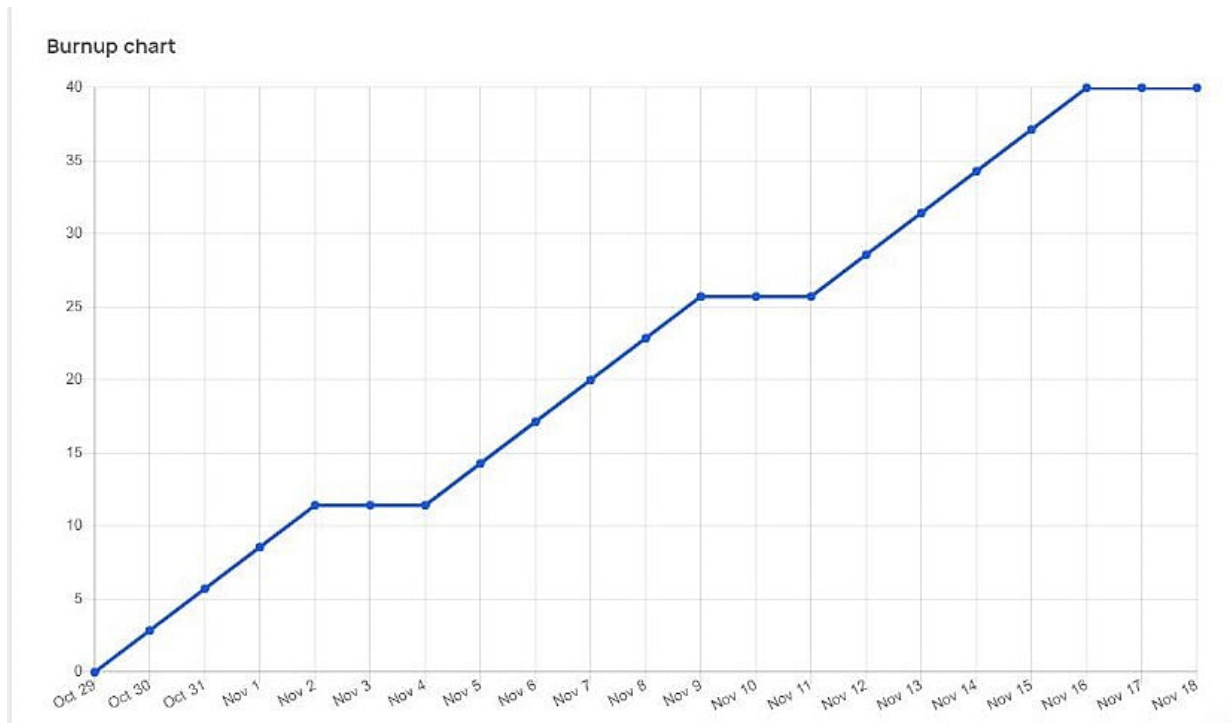


Figure 6.2 - Burnup Chart

A burn up chart is a visual diagram commonly used on Agile projects to help measure progress. Agile burn up charts allow project managers and teams to quickly see how their workload is progressing and whether project completion is on schedule.

CHAPTER 7

CODING & SOLUTIONING

7.1 FEATURE 1

Front-end web development, also known as client-side development is the practice of producing HTML, CSS and JavaScript for a website or Web Application so that a user can see and interact with them directly. The layer above the back end is the front end and it includes all software or hardware that is part of a user interface. Human or digital users interact directly with various aspects of the front end of a program, including user-entered data, buttons, programs, websites and other features. Global Support: Different type of newspaper will be available from all around the world in different languages with this user will be able to get news from all around the world. Short News: News will be displayed in short format with title, image and little description in list view. It will help user to access required news faster.

```
import json
import requests
def get_sources():
    json_sources = requests.get("https://newsapi.org/v1/sources").json()
    sources = []
    counter = 1
    for source in json_sources["sources"]:
        sources.append({
            "id": source['id'],
            "name": source['name'],
            "num": counter
        })
        counter += 1
    with open("sources.json", 'w') as out:
        json.dump(sources, out, indent=4)
    return sources
get_sources()
```

7.2 FEATURE 2

The framework is the basis upon which software programs are built. It serves as a foundation for software developers, allowing them to create a variety of applications for certain platforms. It is a set of functions and predefined classes used to connect with the system software and handle inputs and outputs. It simplifies the life of a developer while giving them the ability to use certain extensions and makes the online applications scalable and maintainable. Flask is a web application framework written in Python. A Web Application Framework or a simply a Web Framework represents a collection of libraries and modules that enable web application developers to write applications without worrying about low-level details such as protocol, thread management, among other examples. Flask is a web application framework written in Python. It was developed by Armin Ronacher, who led a team of international Python enthusiasts called Poocco.

```
import json
import requests
def get_news(source):
    url =
"https://newsapi.org/v1/articles?apiKey=1d786ef6f8b54b8b88748b8b639d6a19&source={}".format(source)
    news_data = requests.get(url).json()
    news = []
    for article in news_data["articles"]:
        news.append({
            "author": article["author"],
            'title': article["title"],
            'desc': article["description"],
            'url': article["url"],
            'img': article['urlToImage']
        })

    return news
# def news_return(source):
```

```

# # with open("sources.json") as sources:
# #     sources = json.load(sources)
# #     for source in sources:
# #         print("{} {}".format(source["num"], source["name"]))
# #
# #     source_num = int(input("Choose source: "))
#
# data = get_news("reuters")
#
# return data
class news_article(object):
    def __init__(self, author, title, desc, url, img):
        self.author = author
        self.title = title
        self.desc = desc
        self.url = url
        self.img = img
    def print_article(self):
        print(self.author)
        print(self.title)
        print(self.desc)
def main(source):
    news_data = get_news(source)
    articles = []
    for article in news_data:
        single_news_article = news_article(article["author"], article["title"], article["desc"],
        article["url"],
            article["img"])
        articles.append(single_news_article)

    return articles

```

CHAPTER 8

TESTING

8.1 TEST CASES

TEST CASE ID	15525	TEST CASE DESCRIPTION	NEWS TRACKER APPLICATION
---------------------	-------	------------------------------	--------------------------

S.No.	PREREQUISITES	TEST DATA
1	Access to Application.	Enter into the application by clicking it.
2	Register by giving required details.	Details must be in valid format.
3	Login in to application check for favorite topics.	Can be customized to user's expectation.
4	Favourite topics can be bookmarked.	Click the bookmark icon to bookmark news.

Table 8.1 - TEST CASES

8.2 USER ACCEPTANCE TESTING

NEWSTRACKER

HOME ADMIN LOGIN USER LOGIN

New User Registration

Name

Gender

Age

Email Id

Phone Number

Address

User Name

Password

poorna
prasanniya
soundarya
tamil
vasanth
aasd

Activate Windows

Figure 8.1 - Signup Page

The user needs to enter the valid details and they click join. After login we can enter through sign in page. The Details provided in the sign up page is stored.

NEWSTRACKER

News

NEWSTRACKER

127.0.0.1:5000

Login Here

Username

user name

Password

Password

Log In

Register Admin

Activate Windows

Figure 8.2 - Sign in page

The user needs to login in to the page by entering the credentials they entered during the sign up. The database validate the information provided and allows to go to next page.

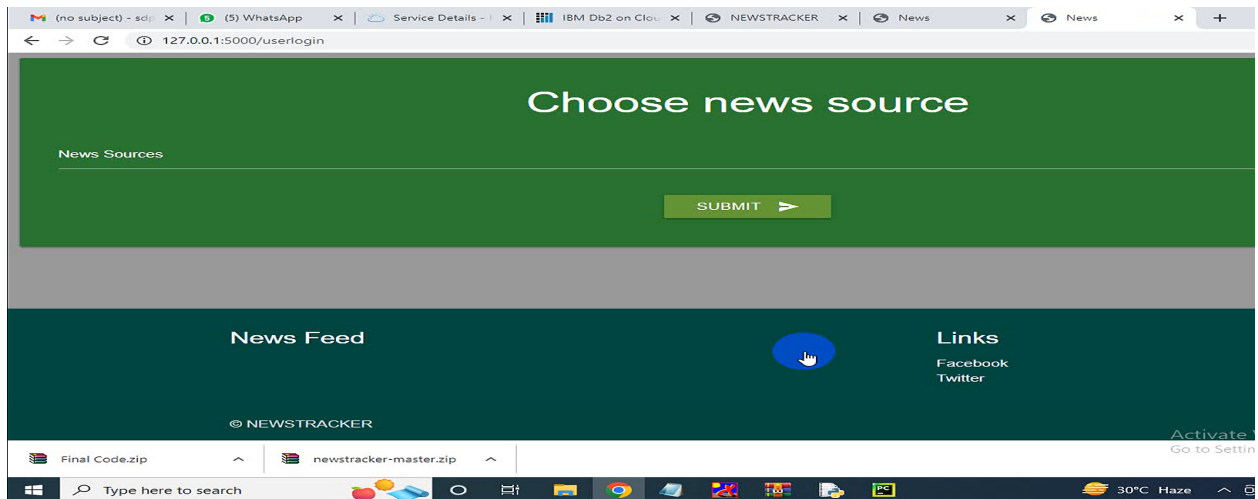


Figure 8.3 - Dashboard 1

After entering into their account they can search the news they want to view and they can customize and view the relevant news.

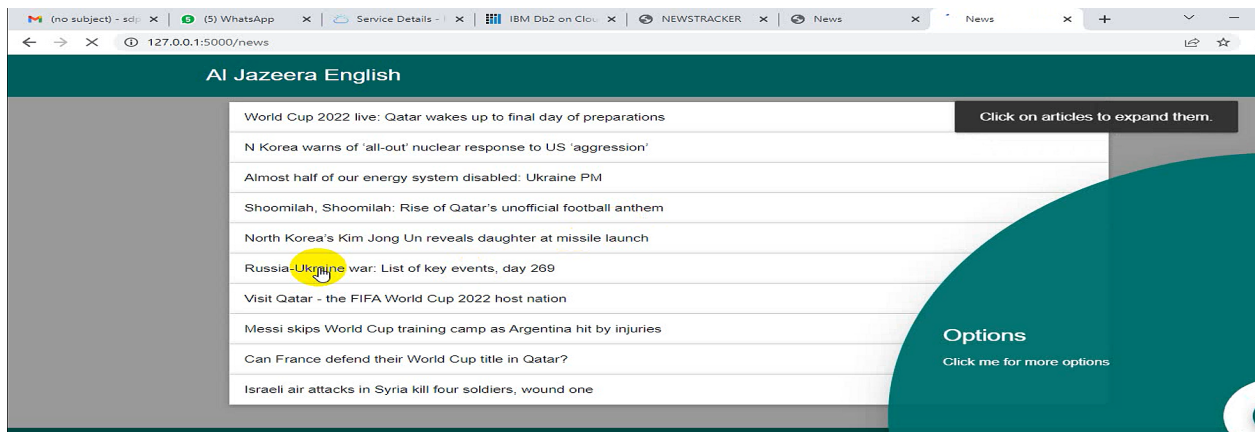


Figure 8.4 - Dashboard 2

The user can bookmark the favourite categories of news and they can see all the news related to their domain.

CHAPTER 9

RESULT

9.1 PERFORMANCE METRICS

Memory Usage low memory usage	Latency Low latency	
Application Instances	Availability	
User Satisfaction High user satisfaction	UI Performance Highly interactive	

Fig 9.1 Performance Metrics

The performance of the app is optimized according to the user friendly interface. The memory is optimized using cloud and cloud database. It increase the performance and user statisfaction.

CHAPTER 10

ADVANTAGES AND DISADVANTAGES

10.1 ADVANTAGES

Whenever the reader pleases, he/she can use your News App as a one-stop point to get all the information they need. Whenever content is updated on the News App, the reader will be rolled towards your App with update notifications. An online newspaper allows the reader to interact with the paper itself. Readers can now leave comments, watch videos, view photo slideshows and oftentimes contribute their own opinions and written pieces to the paper.

- Better User Experience.
- Higher Engagement.
- Push notifications.
- Revenue Opportunities.
- App Store Presence.
- Engagement Tools.
- Social Media Integration.
- Registration and Personal Profiles.
- Personal Feed.
- Options to Interact With Content.

10.2 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. You'll need Android and iOS applications and listings.
- Update and maintenance efforts are multiplied.
- There is extra Marketing pressure too.
- You need a separate URL.

CHAPTER 11

CONCLUSION

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 these facilities. In this fast and information oriented world we need to stay updated with every incidents and news too. This News app is an android mobile application where users 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 the best visualized way.

CHAPTER 12

FUTURE SCOPE

Location feature with automation can be implemented which means as user move from one city to other local news will change as per it. Offline Reading can be improve will more efficient way on full articles. Data quality check needed. If API can't reach to certain article source it gives null value which can cause problem in JSON parsing. For a news provider, the smartphone screen is the the most challenging environment ever seen. There, chances are that a legacy media or a pure-player will find itself in direct competition, not only with the usual players in its field, but also with Facebook, Snapchat, Instagram and scores of gaming applications. Distraction is just one icon away; any weakness in functional or graphic design

CHAPTER 13

APPENDIX

```
import news
from flask import Flask, render_template, request, jsonify, session
import datetime
import re
import ibm_db
import pandas
import ibm_db_dbi
from sqlalchemy import create_engine
engine = create_engine('sqlite://',echo = False)
dsn_hostname = "19af6446-6171-4641-8aba-
9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud"
sn_uid = "wdn20062"
dsn_pwd = "2eFT80lyOuJQE3zV"
dsn_driver = "{IBM DB2 ODBC DRIVER}"
dsn_database = "bludb"
dsn_port = "30699"
dsn_protocol = "TCPIP"
dsn_security = "SSL"
dsn = (
    "DRIVER={0};"
    "DATABASE={1};"
    "HOSTNAME={2};"
    "PORT={3};"
```

```

"PROTOCOL={4};"

"UID={5};"

"PWD={6};"

"SECURITY={7};").format(dsn_driver, dsn_database, dsn_hostname, dsn_port,
dsn_protocol, dsn_uid, dsn_pwd,dsn_security)

try: conn = ibm_db.connect(dsn, "", "")

print ("Connected to database: ", dsn_database, "as user: ", dsn_uid, "on host: ",
dsn_hostname)

except:

    print ("Unable to connect: ", ibm_db.conn_errormsg() )

app = Flask(__name__)
app.config.from_object(__name__)
app.config['SECRET_KEY'] = '7d441f27d441f27567d441f2b6176a'

@app.route("/")
def homepage():

    return render_template('UserLogin.html')

@app.route("/login")
def alogin():

    return render_template('AdminLogin.html')

@app.route("/NewUser")
def NewUser():

    return render_template('NewUser.html')

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

    if request.method == 'POST':

        name1 = request.form['name']

        gender1 = request.form['gender']

```

```

Age = request.form['age']

email = request.form['email']

address = request.form['address']

pnumber = request.form['phone']

uname = request.form['uname']

password = request.form['psw']

conn = ibm_db.connect(dsn, "", "")

insertQuery = "INSERT INTO regtb VALUES ('" + name1 + "','" + gender1 + "','" + Age +
 "','" + email + "','" + pnumber + "','" + address + "','" + uname + "','" + password + "')"

insert_table = ibm_db.exec_immediate (conn, insertQuery)

print(insert_table)

return render_template('userlogin.html')

@app.route("/AdminHome")
def AdminHome():
    conn = ibm_db.connect(dsn, "", "")
    pd_conn = ibm_db_dbi.Connection(conn)
    selectQuery = "SELECT * from regtb "
    dataframe = pandas.read_sql(selectQuery, pd_conn)
    dataframe.to_sql('Employee_Data',con=engine, if_exists='append')
    # run a sql query
    data = engine.execute("SELECT * FROM Employee_Data").fetchall()
    return render_template('AdminHome.html', data=data)

@app.route("/userlogin", methods=['GET', 'POST'])
def userlogin():
    error = None
    if request.method == 'POST':

```

```

username = request.form['uname']
password = request.form['password']
session['uname'] = request.form['uname']
conn = ibm_db.connect(dsn, "", "")
pd_conn = ibm_db_dbi.Connection(conn)

selectQuery = "SELECT * from regtb where uname=" + username + " and
password=" + password + ""

dataframe = pandas.read_sql(selectQuery, pd_conn)
if dataframe.empty:
    data1 = 'Username or Password is wrong'
    return render_template('goback.html', data=data1)
else:
    print("Login")

    selectQuery = "SELECT * from regtb where uname=" + username + " and
password=" + password + ""

    dataframe = pandas.read_sql(selectQuery, pd_conn)

    dataframe.to_sql('Employee_Data', con=engine, if_exists='append')

    # run a sql query
    print(engine.execute("SELECT * FROM Employee_Data").fetchall())

    return render_template('index.html', data=engine.execute("SELECT * FROM
Employee_Data").fetchall())

@app.route("/adminlogin", methods=['GET', 'POST'])
def adminlogin():
    error = None

    if request.method == 'POST':
        username = request.form['uname']
        password = request.form['password']

```

```

conn = ibm_db.connect(dsn, "", "")
pd_conn = ibm_db_dbi.Connection(conn)

selectQuery = "SELECT * from admintb where USERNAME='" + username + "' and
PASSWORD='" + password + "'"

dataframe = pandas.read_sql(selectQuery, pd_conn)
if dataframe.empty:
    data1 = 'Username or Password is wrong'
    return render_template('goback.html', data=data1)
else:
    print("Login")
    selectQuery = "SELECT * from regtb "
    dataframe = pandas.read_sql(selectQuery, pd_conn)
    dataframe.to_sql('Employee_Data', con=engine, if_exists='append')
    # run a sql query
    print(engine.execute("SELECT * FROM Employee_Data").fetchall())

    return render_template('AdminHome.html', data=engine.execute("SELECT * FROM
Employee_Data").fetchall())

@app.route('/news', methods=['POST'])
def submit_data():
    vals = request.form['news-source']

    id = vals.split('_')[0]
    name = vals.split('_')[1]
    articles = news.main(id)
    print(articles)

    return render_template('news.html', articles=articles, name=name)

if __name__ == '__main__':
    app.run(host="0.0.0.0")

```

html

```
{% extends 'layout.html' %} {% block body %}

<div class="row">

  <div class="center col s12">

    <div class="card green darken-3 hoverable">

      <div class="card-content white-text">

        <span class="center card-title"><h3>Choose news source</h3></span>

        <div class="row">

          <form action="/news" method="POST" class="col s12">

            <div class="row">

              <div class="input-field center">

                <select id="news-source" name="news-source" required="" class="initialized">

                  <option value="" disabled selected>News Sources</option>

                  <option value="abc-news-au_ABC News (AU)">ABC News (AU)</option>

                  <option value="al-jazeera-english_AI Jazeera English">AI Jazeera English</option>

                  <option value="ars-technica_Ars Technica">Ars Technica</option>

                  <option value="associated-press_Associated Press">Associated Press</option>

                  <option value="bbc-news_BBC News">BBC News</option>

                  <option value="bbc-sport_BBC Sport">BBC Sport</option>

                  <option value="bild_Bild">Bild</option>

                  <option value="bloomberg_Bloomberg">Bloomberg</option>

                  <option value="breitbart-news_Breitbart News">Breitbart News</option>

                  <option value="business-insider_Business Insider">Business Insider</option>

                  <option value="business-insider-uk_Business Insider (UK)">Business Insider (UK)

                </option>

                <option value="buzzfeed_Buzzfeed">Buzzfeed</option>
```


<option value="cnbc_CNBC">CNBC</option>
<option value="cnn_CNN">CNN</option>
 <option value="daily-mail_Daily Mail">Daily Mail</option>
<option value="der-tagesspiegel_Der Tagesspiegel">Der Tagesspiegel</option>
 <option value="die-zeit_Die Zeit">Die Zeit</option>
 <option value="engadget_Engadget">Engadget</option>
 <option value="entertainment-weekly_Entertainment Weekly">Entertainment Weekly</option>
 <option value="espn_ESPN">ESPN</option>
<option value="espn-cric-info_ESPN Cric Info">ESPN Cric Info</option>
 <option value="financial-times_Financial Times">Financial Times</option>
 <option value="focus_Focus">Focus</option>
 <option value="football-italia_Football Italia">Football Italia</option>
<option value="fortune_Fortune">Fortune</option>
 <option value="four-four-two_FourFourTwo">FourFourTwo</option>
 <option value="fox-sports_Fox Sports">Fox Sports</option>
 <option value="google-news_Google News">Google News</option>
 <option value="gruenderszene_Gruenderszene">Gruenderszene</option>
<option value="hacker-news_Hacker News">Hacker News</option>
 <option value="handelsblatt_Handelsblatt">Handelsblatt</option>
<option value="ign_IGN">IGN</option>
 <option value="independent_Independent">Independent</option>
 <option value="mashable_Mashable">Mashable</option>
 <option value="metro_Metro">Metro</option>
 <option value="mirror_Mirror">Mirror</option>
 <option value="mtv-news_MTV News">MTV News</option>
<option value="mtv-news-uk_MTV News (UK)">MTV News (UK)</option>

<option value="national-geographic_National Geographic">National Geographic</option>
 _New Scientist">New Scientist</option>
 <option value="newsweek_Newsweek">Newsweek</option>
 <option value="new-york-magazine_New York Magazine">New York Magazine</option>
 <option value="nfl-news_NFL News">NFL News</option>
 <option value="polygon_Polygon">Polygon</option>
 <option value="recode_Recode">Recode</option>
 <option value="reddit-r-all_Reddit /r/all">Reddit /r/all</option>
 <option value="reuters_Reuters">Reuters</option>
 <option value="techcrunch_TechCrunch">TechCrunch</option>
 <option value="techradar_TechRadar">TechRadar</option>
 <option value="the-economist_The Economist">The Economist</option>
 <option value="the-guardian-au_The Guardian (AU)">The Guardian (AU)</option>
 <option value="the-guardian-uk_The Guardian (UK)">The Guardian (UK)</option>
 <option value="the-hindu_The Hindu">The Hindu</option>
 <option value="the-huffington-post_The Huffington Post">The Huffington Post</option>
 <option value="the-lad-bible_The Lad Bible">The Lad Bible</option>
 <option value="the-new-york-times_The New York Times">The New York Times</option>
 <option value="the-next-web_The Next Web">The Next Web</option>
 <option value="the-sport-bible_The Sport Bible">The Sport Bible</option>
 <option value="the-telegraph_The Telegraph">The Telegraph</option>
 <option value="the-times-of-india_The Times of India">The Times of India</option>
 <option value="the-verge_The Verge">The Verge</option>
 <option value="the-wall-street-journal_The Wall Street Journal">The Wall Street Journal

```

</option>

  <option value="the-washington-post_The Washington Post">The Washington
  Post</option>

  <option value="time_Time">Time</option>

  <option value="usa-today_USA Today">USA Today</option>

  <option value="wired-de_Wired.de">Wired.de</op
<option value="wirtschafts-woche_Wirtschafts Woche">Wirtschafts Woche</option>
  </select>
</div>
</div>

  <button class="btn light-green darken-2 pulsewaves-effect waves-light waves-green"
  type="submit"

    name="action">Submit<i class="material-icons right">send</i></button>

</form>
</div>
</div>
{% endblock %}
{% block script %}
<script src="{{ url_for('static', filename='select.js')}}"></script>
{% endblock

```

Github and Project Video Demo Link

Github Link:

<https://github.com/IBM-EPBL/IBM-Project-21446-1659780401.git>

Project Video Demo Link:

https://drive.google.com/file/d/1jXb1nn9Pu_c82APlnGO_z4-rt5wf591w/view?usp=share_link55

