

IBM-Project-53429-1661403669

NEWS TRACKER APPLICATION

Project Domain : Cloud

Application Development

Team ID: PNT2022TMID24521

TEAM MEMBERS

**ELAVARASAN E (113319205011) HARISH K
(113319205014) PAVAN KALYAN N U
(113319205029) PRAVEEN KISHORE P C
(113319205032)**

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CHAPTER 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 is not possible but reducing the time by changing the conventional method of reading news and knowing about the world can help. Just tell us what market news you are 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 Commodities, Currencies, Future Rates, Bonds, etc.

1.2 Purpose

Newspapers are one of the most popular and most needed commodities in our daily life. In today's busy world, reading newspapers has become one of the traditional ways of getting news. News is produced every minute and distributed via television, radio and the Internet, so the news updated the next morning is already out dated. So, newspaper and magazine publishers have a hard time keeping up with the speed.

Change is needed and publishers must embrace mobile.

CHAPTER 2

LITERATURE SURVEY

2.1 EXISTING PROBLEM

Colin Garvey[1] et.al presented focus on the negative news spreading awareness through out the news media in the country using Google Cloud Natural Language API Sentiment Analysis tool .The paper used all the news available from 1956 to 2018 to do the sentiment analysis using the tool mentioned above. In the process approximately 68.4% news are true whereas other news are fake.

Manish Agrawa[2] et.al presented focus on recommending news via a famous social media application Facebook. It uses content based recommendationsystem for the user who are in similar community, first it gives the normal daily newsletters to the user for similar search and based on that it starts the recommendation and also ask for the feedback for the news recommended and request the user to give the rating which is used for news filtration and after filtering it the news will recommend to the other user.

Vamsidhar Talasila[3] et.al presented this paper intend to frame a novel text-to- image synthesis approach, which includes two major phases namely Text to image encoding and GAN(Generative adversarial network). The fundamental plan of

GAN is basically a “minimax game mechanism” among 2 player. The main contribution of this paper is to introduces a new text-to-image synthesized approachusing the GAN-CMFA (Generative Adversarial Network-Cross-Modal Feature Alignment) model, where text and image features are considered and the image synthesis is done by GAN. The next one is text embed dings are converted to feature vectors using BI-LSTM (Bidirectional long short term memory).The image is created in the second step based on the encoding. As a result, the text feature group is fed into GAN, which outputs the final synthesized images.

Hong Chen[4]presented the paper where PicToon means a cartoon system which can generate a personalized cartoon face from an input image. PicToon is very easy to use and just requires little user interaction. First to capture an artisticstyle, the cartoon generation is done into two processes sketch generation and stroke rendering. Firstly an inhomogeneous non-parametric flexible facial template is employed to extract the vector-based facial sketch. Second, with the predesigned templates in Cartoon Editor Pictoon), the user can easily make the cartoon exaggerated or more expressive. Third, a real time lip-syncing algorithm is also developed by recovering a statistical audio-visual mapping between the

character’s voice and the corresponding lip configuration, then the sketch is madewhich is almost feels likes an artist painting.

2.2References

[1]Colin Garvey and Chandler Maska

Sentiment Analysis of the News Mediaon Artificial Intelligence Does NotSupport Claims of Negative Bias Against Artificial Intelligence,2018

2]Manish Agrawa, Maryam Karimza dehgan and Cheng Xiang Zha

An Online News Recommender System for Social Networks,2016

[3] Vamsidhar Talasila and M. R. Narasingarao

[4] Hong Chen, Lin Liang, Yan Li, Ying-Qing Xu, Heung-Yeung Shum PicToon: A Personalized Image-based Cartoon System, 2017

2.3 Problem Statement Definition

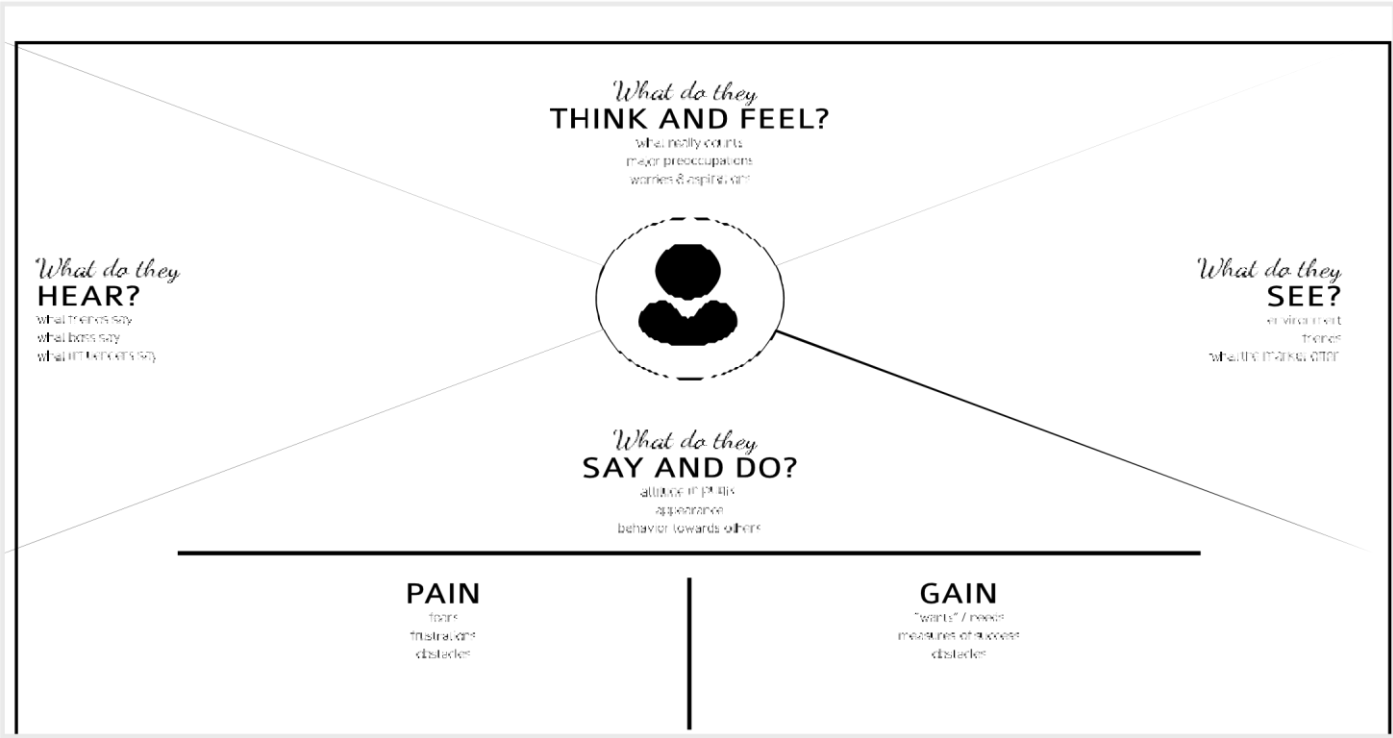
In today's world we have a lot of work and there is no time to cope up everything in the schedule. So, it is not possible to read the newspaper. By using this application, the user can access the news they are interested and get a quick peek for the day. There are multiple news-sharing apps used by a 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 delightful.

CHAPTER 3 IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas



3.2 Ideation & Brainstorming



Brainstorm & idea prioritization

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

[Share template feedback](#)

1

Define your problem statement

 5 minutes

PROBLEM

The Problem is about to spare lot of time in Reading the traditional News paper which is need to be concise and multiple news-sharing apps used by a single user and are often spammed with notifications.



Key rules of brainstorming

To run an smooth and productive session

-  Stay in topic.
-  Encourage wild ideas.
-  Defer judgment.
-  Listen to others.
-  Go for volume.
-  If possible, be visual.

2

Brainstorm

🕒 10 minutes

Lokesh S

History of the news

Downloadable Articles

AI generated image

Budget Estimation

Hari Haran E

Social media notification

Age based News

Multiple languages

Trending News

Jindat Baradia

Location based News

Debate based chat bot

In build messenger

Audio based News

Deepak H

Influential author

Sentimental analysis

Cached Context

Responsive website

3

Group ideas

⌚ 15 minutes

Artificial Intelligence

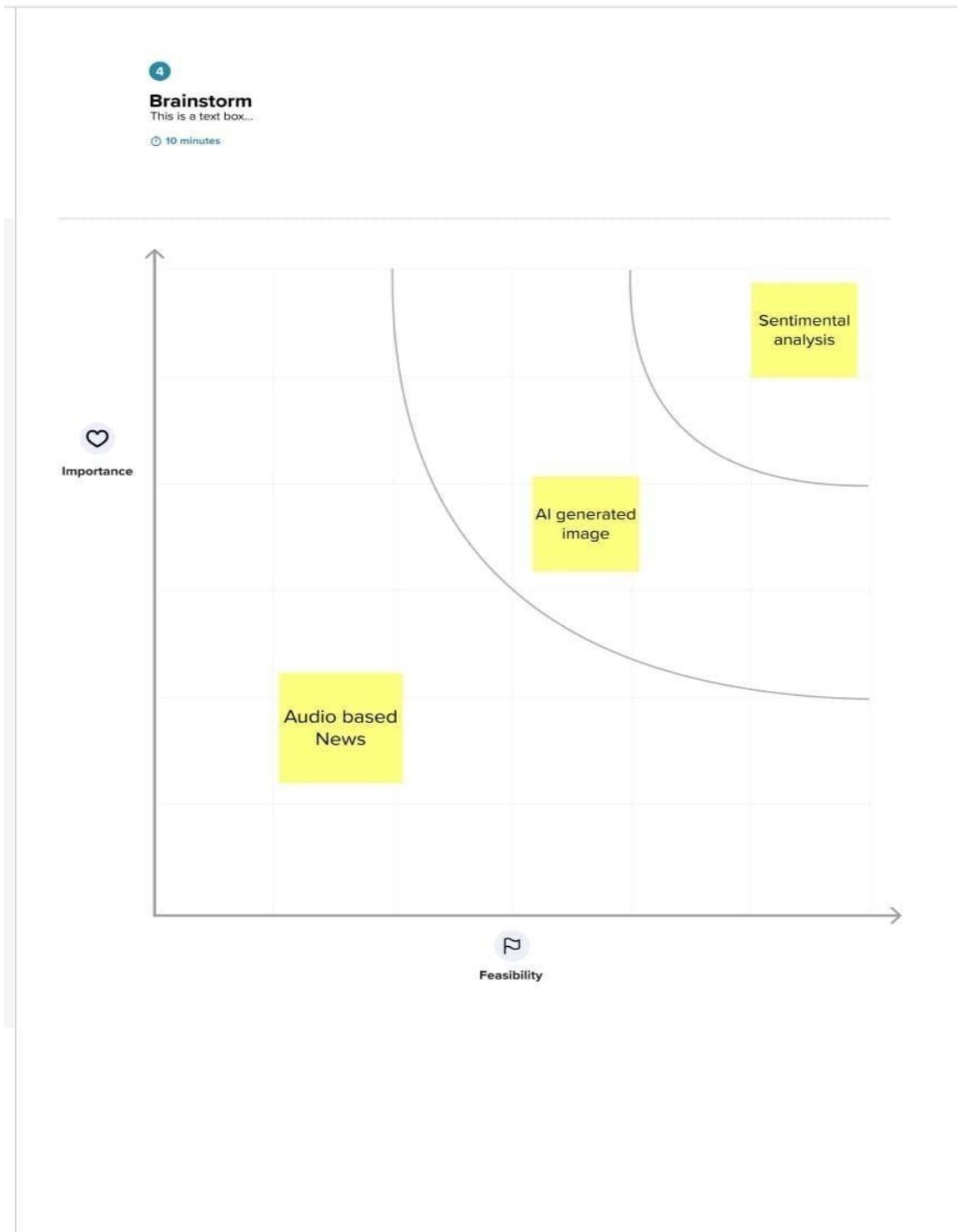
- Sentimental analysis
- AI generated image
- Debate based chat bot
- History of the news
- Audio based News

Basic Needs

- Budget Estimation
- In build messenger
- Responsive website
- Multiple languages
- Downloadable Articles
- Social media notification

News Context

- Influential author
- Location based News
- Cached Context
- Age based News
- Trending News



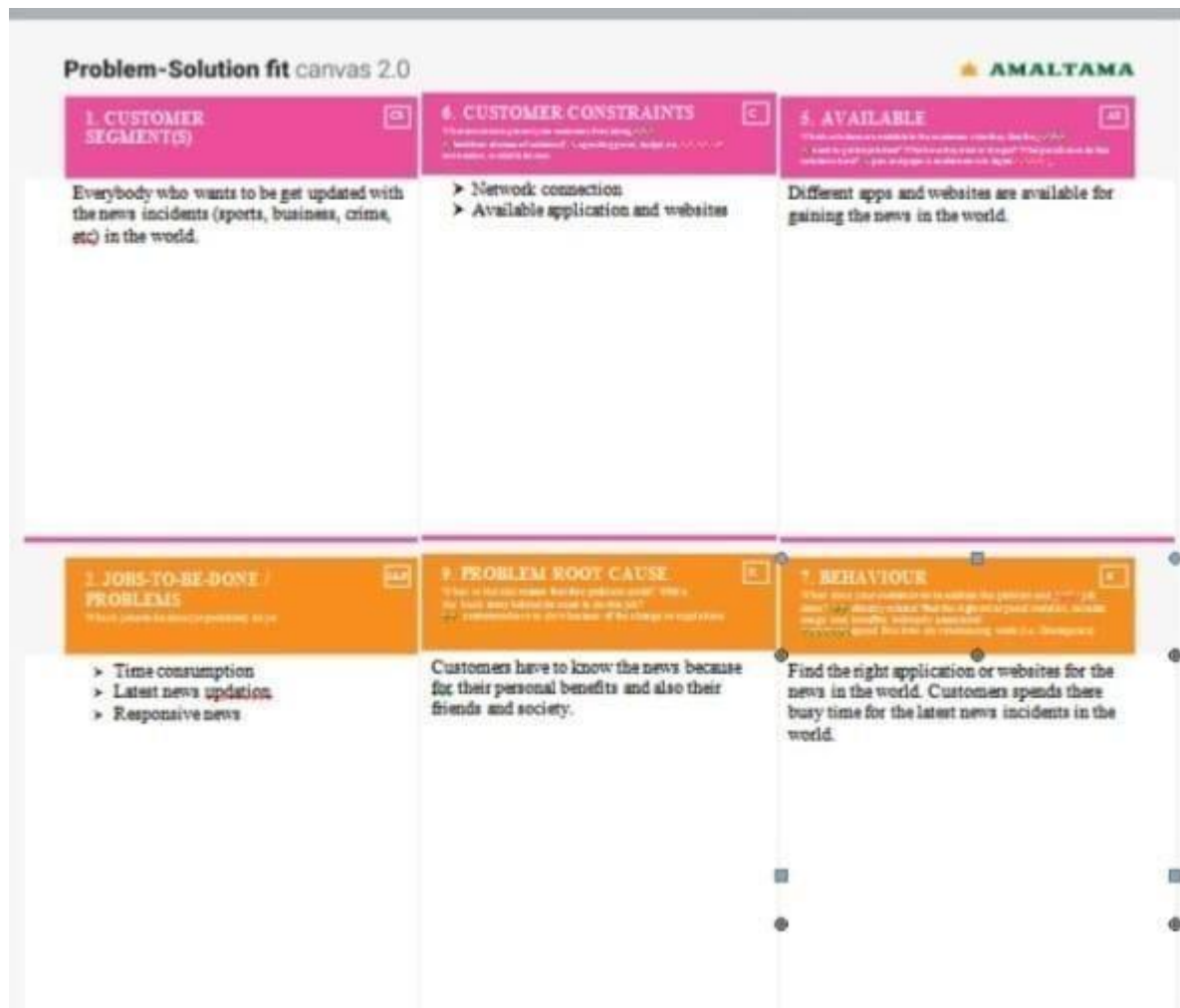
S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	In today's modern and busy world nobody as time has time to read or listen to news.

2.	Idea / Solution description	To develop an online news website in which the user can get any kind of news at any part of the world.
----	-----------------------------	--

3.3 Proposed Solution

3.	Novelty / Uniqueness	1. News recommending system 2. 60 words news
4.	Social Impact/ Customer Satisfaction	Easy to read and saves time because of less number of words.
5.	Business Model (Revenue Model)	1. Monetisation 2. Premium membership
6.	Scalability of the Solution	1. Audio based news system 2. Can be used as educational platform for premium members. For example the students preparing for TNPSC exam can get access to the related notes and news shared.

3.4 Problem Solution fit





CHAPTER 4

REQUIREMENT ANALYSIS

4.1 Functional requirement

Following are the functional requirements of the proposed solution.

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

4.2 Non-Functional requirements

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	End users can receive push updates for new content on a site by subscribing to the site's news feed

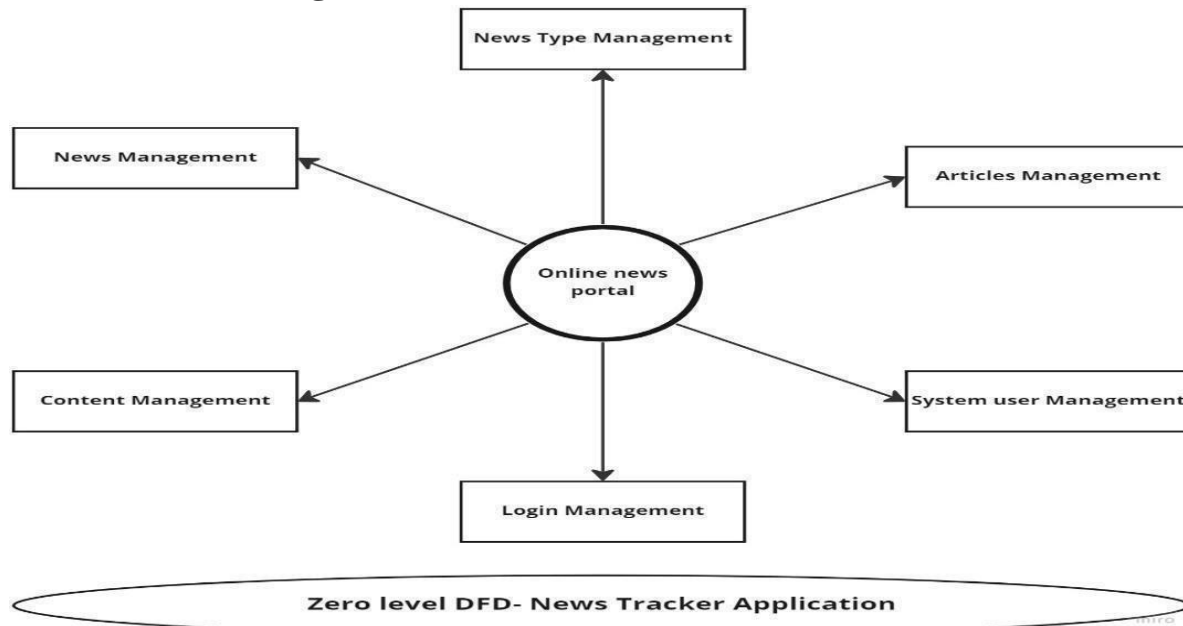
NFR-2	Security	How well are the system and its data protected against attacks
NFR-3	Performance	<p>Performance is the core non-functional requirements no system can do without it. It defines how fast a software system or a particular piece of it responds to certain users actions under a certain workload. Almost in every case, this metric explains how long a user must wait before the target operation happens to give the overall number of users at the moment.</p> <p>However it's not always like that. Performance requirements may describe in background</p>

		processes invisible to users, e.g. backup. But let's focus on user-centric performance.
NFR-4	Availability	Availability describes how likely the system is accessible to a user at a given point in time. While it can be expressed as an expected percentage of successful requests, you may also define it as a percentage of time the system is accessible for operation during some time period. For instance, the system may be available 98 percent of the time during a month. Availability is perhaps the most business-critical requirement, but to define it, you also must have estimations for reliability and maintainability.
NFR-5	Scalability	Scalability assesses the highest work load which the system will still meet the performance requirements. There are two ways to enable your system scale as the workloads get higher: horizontal and vertical scaling.

CHAPTER 5

PROJECT DESIGN

5.1 Data Flow Diagrams



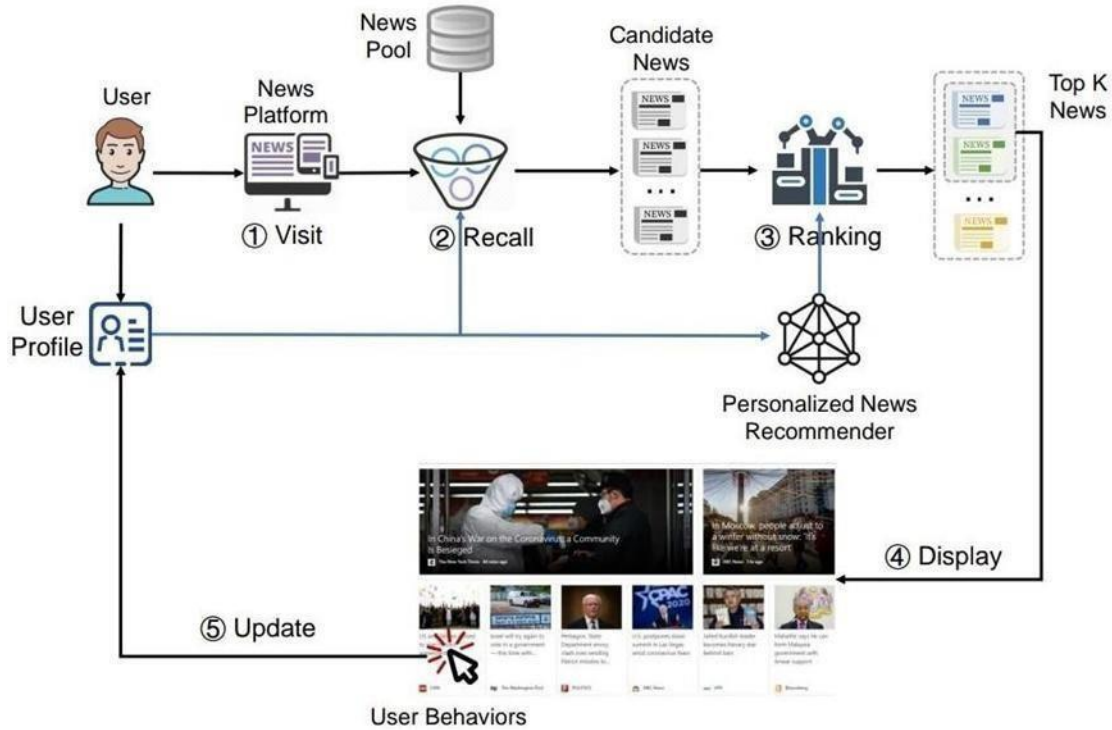
5.2 Solution & Technical Architecture

Solution Architecture:

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

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

Solution Architecture Diagram:



Technical Architecture:

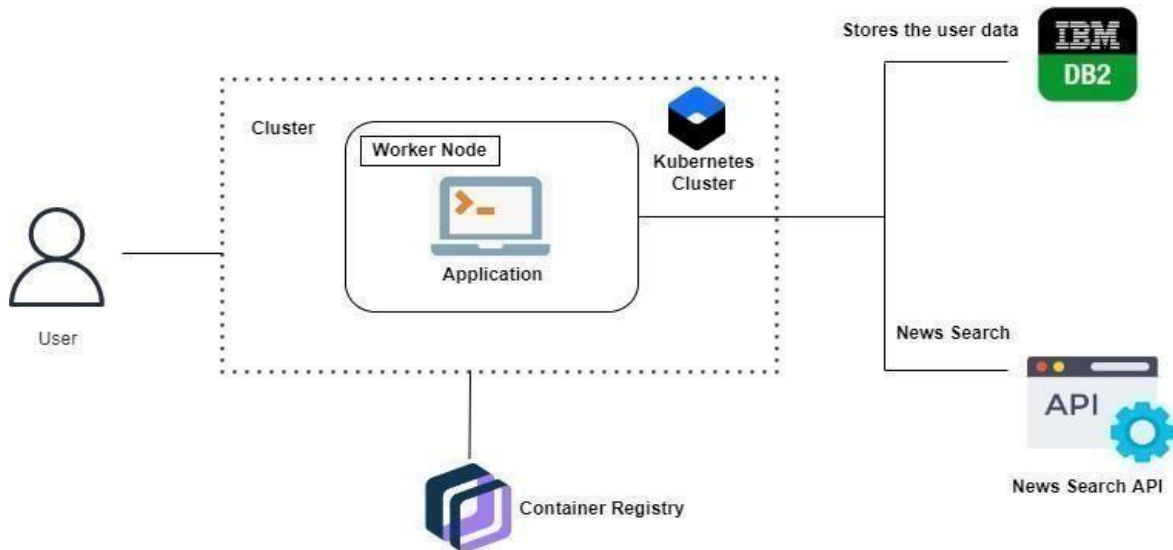


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user can interact with the application to know about the trending news	HTML, CSS, JavaScript / Angular Js / React Js etc.

2.	Application Logic-1	The application contains this resource gives you basic understanding of Flask.	Flask.
3.	Application Logic-2	The application contains the news sub-division like geographical news ,economic news and society news.	IBMWatson STT service
4.	Application Logic-3	The user can view the growthof the economy in industry Through graph.	IBMWatson Assistant
5.	Database	Updating of trending news are stored in the MySQL database.	MySQL, NoSQL, etc.
6.	Cloud Database	With the use of cloud , media coverage issue cannot be occurred.	IBMDB2.

Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask is flexible and doesn't require to use any particular projector code layout used in this application.	Python-Flask
2.	Security Implementations	This can be access only by the journalist . So ,It is a high Security.	Container registry, Kubernetes Cluster.
3.	Scalable Architecture	News Tracker is associate-economic access because helps to know about the daily activity of the world.	Container registry, Kubernetes Cluster.
4.	Availability	This application will be available to the all the user who are using this application.	Container registry, Kubernetes Cluster.
5.	Performance	The updation of trending news occurs without anyinterruption. So, it performance is good.	Container registry, Kubernetes Cluster.

5.3 User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, he/she 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 Facebook or Gmail account	I can register & access the dashboard with Facebook/Gmail login	Low	Sprint-2
	Login	USN-4	As a user, I can log into the application by entering email & password	I can view all types of information through this application	High	Sprint-1
	Dashboard	USN-1	As a user, I can log into the application and look into my dashboard	I can look into my Dashboard after my login	Low	Sprint-1
		USN-2	As a user, I can log into the application and update my personal data	I can view the personal data which can be updated by the user	Low	Sprint-2
		USN-3	As a user, I can log into the application and read news based on my filter contents	News contents are filtered based on the user needs	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story / Task	User Story Number	Acceptance criteria	Priority	Release
Customer(Web user)	Login	As a user, I can register for the application by entering my email, password, and confirming my password through web applications such as Chrome, Firefox, Brave, etc.	USN-1	I can access my account / dashboard	High	Sprint-1
CustomerCare Executive	Dashboard	As a user, I can Report to the customer service about the error or doubt of the application by calling to the customer service which is provided in the application help box	USN-1	I can report to the customer service if I am facing an issue or I didn't know anything about the application	High	Sprint-1
		As a user, I can Report to the customer service about the error or doubt of the application by emailing to the customer service which is provided in the application help box	USN-2	I can report to the customer service if I am facing an issue or I didn't know anything about the application	High	Sprint-1
Administrator	Application	Application administrator will rectify the error caused in the application as soon as possible and provide a patch update in order to have an error free website	USN-1	I can report to the customer service what the issue has been faced and they might rectify by releasing patch updates	High	Sprint-1

CHAPTER 6

PROJECT PLANNING & SCHEDULING

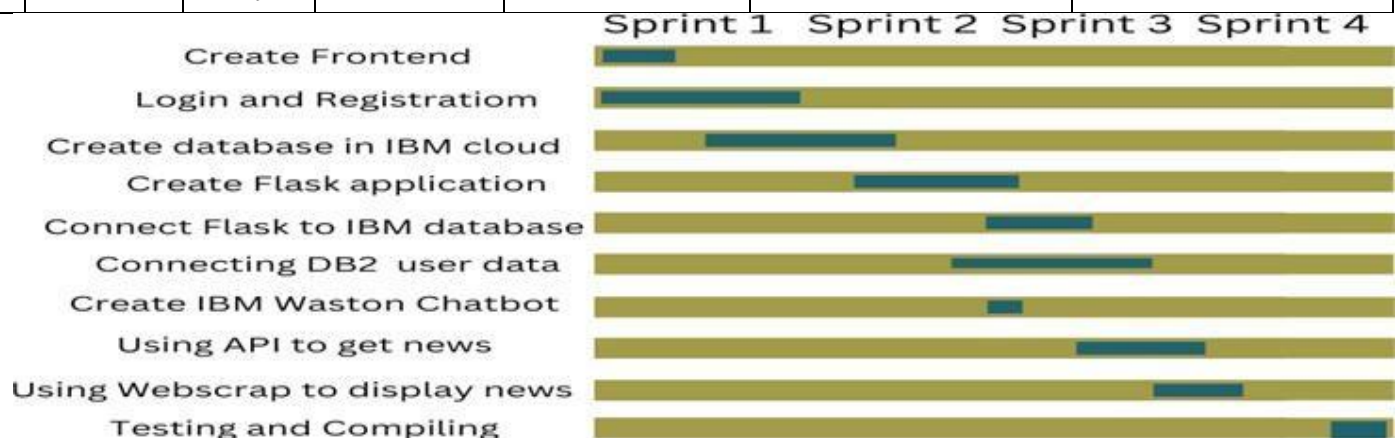
6.1 Sprint Planning & Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	User login and registration	USN-1	The user have to register and login into the website and go through the news available on the website	20	High	ELAVARASAN E HARISH K PAVAN KALYAN NU PRAVEEN KISHORE PC

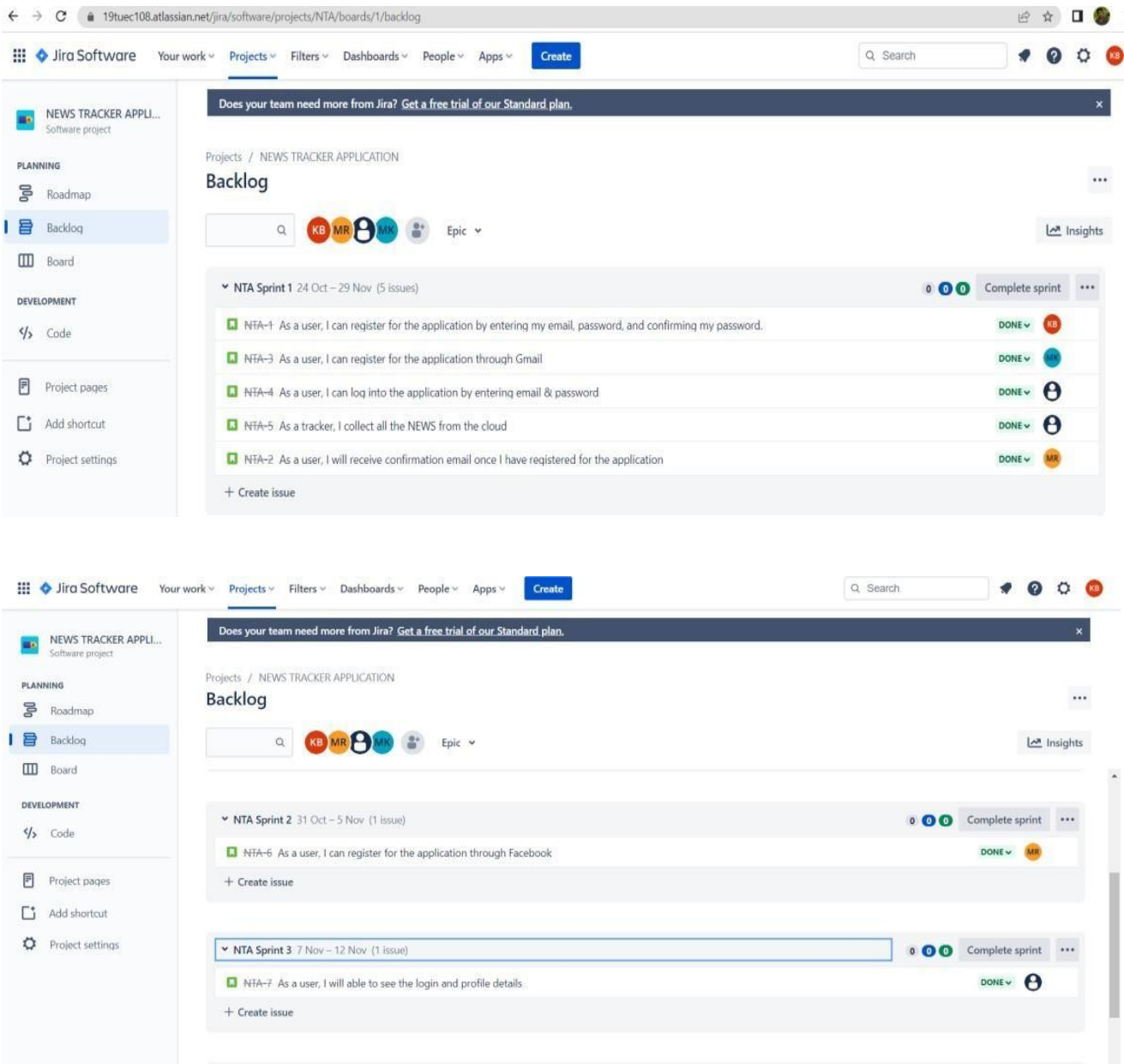
Sprint-2	Generating news	USN-2	The system will use many API available to get the news using the technique web scrapping and to connect the a API to the flask	20	High	ELAVARASAN E HARISH K PAVAN KALYAN NU PRAVEEN KISHORE PC
Sprint-3	Chat Bot and Testing	USN-3	The user can directly talk to Chat bot regarding the news. Get the recommendations based on information provided by the User and testing will take place after this.	20	High	ELAVARASAN E HARISH K PAVAN KALYAN NU PRAVEEN KISHORE PC
Sprint-4	Final delivery	USN-4	Container of applications using docker kubernetes and deployment the application. Create the documentation and final submit the application	20	High	ELAVARASAN E HARISH K PAVAN KALYAN NU PRAVEEN KISHORE PC

6.2 Sprint Delivery

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



6.3 ScheduleReports from JIRA



CHAPTER 7

CODING & SOLUTIONING

7.1 Feature

```

from flask import Flask, render_template, request, redirect, url_for,
session import ibm_db import re app = Flask(__name__) app.secret_key = 'a'

conn = ibm_db.connect(

"DATABASE=bludb;HOSTNAME=ba99a9e6-d59e-4883-
8fc0d6a8c9f7a08f.c1ogj3sd0tgu0lqde00.databases.appdomain.cloud;PORT=31321;USERNAME=nnr87238;PASSW
OR D=PUmIqXYukgkiGmGq;SECURITY=SSL;SSLSERVERCERTIFICATE=DigiCertGlobalRootCA.crt;", "", "")

```

```

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

def register():

    msg = " if request.method == 'POST':

        username = request.form['username']

        email = request.form['email'] password

        = request.form['password']

        sql = "SELECT * FROM users WHERE username =?"

        stmt = ibm_db.prepare(conn, sql)

        ibm_db.bind_param(stmt, 1,

        username) ibm_db.execute(stmt)

        account = ibm_db.fetch_assoc(stmt)

        print(account) if account:

            msg = 'Account already exists !' elif not

            re.match(r'^@]+@^[^@]+\.[^@]+', email):

                msg = 'Invalid email address !' elif not

                re.match(r'[A-Za-z0-9]+', username):

                    msg = 'name must contain only characters and numbers !'

            else:

                insert_sql = "INSERT INTO users VALUES (?, ?, ?)"

        prep_stmt = ibm_db.prepare(conn, insert_sql)

        ibm_db.bind_param(prepare_stmt, 1, username)

        ibm_db.bind_param(prepare_stmt, 2, email)

        ibm_db.bind_param(prepare_stmt, 3, password)

        ibm_db.execute(prepare_stmt) msg = 'You have successfully

        registered !' elif request.method == 'POST':

```

```

    msg = 'Please fill out the form !' return

render_template('register.html', msg=msg)


@app.route('/login', methods=['GET',
'POST']) def login(): global userid msg = " if
request.method == 'POST':

    username = request.form['username']

    password = request.form['password']

    sql = "SELECT * FROM users WHERE username =? AND password=?"

    stmt = ibm_db.prepare(conn, sql)

    ibm_db.bind_param(stmt, 1,
username) ibm_db.bind_param(stmt,
2, password) ibm_db.execute(stmt)

    account = ibm_db.fetch_assoc(stmt)

    print(account)

    if account:

        session['loggedin'] = True session['id'] =
account['USERNAME'] userid =
account['USERNAME'] session['username'] =
account['USERNAME'] msg = 'Logged in successfully
!' return render_template('dashboard.html', msg=msg)

    else:

```

```

        msg = 'Incorrect username / password !' return

render_template('login.html', msg=msg) if _name_

== '_main_':

    app.run(host='0.0.0.0')

<!DOCTYPE html>

<html lang="en">

    <head>

        <meta charset="UTF-8" />

        <meta name="viewport" content="width=device-width, initial-scale=1.0" />

        <script

            src="https://kit.fontawesome.com/64d58efce2.js"

            crossorigin="anonymous"

        ></script>

        <link rel="stylesheet" href="style.css" />

        <title>Sign in & Sign up Form</title>

    </head>

    <body>

        <div class="container">

            <div class="forms-container">

                <div class="signin-signup">

                    <form action="#" class="sign-in-form">

                        <h2 class="title">Sign in</h2>

                        <div class="input-field">

                            <i class="fas fa-user"></i>

                            <input type="text" placeholder="Username" />

```

```
</div>
```

```
<div class="input-field">
```

```
  <i class="fas fa-lock"></i>
```

```
  <input type="password" placeholder="Password" />
```

```
</div>
```

```
<input type="submit" value="Login" class="btn solid" />
```

```
<p class="social-text">Or Sign in with social platforms</p>
```

```
<div class="social-media">
```

```
  <a href="#" class="social-icon">
```

```
    <i class="fab fa-facebook-f"></i>
```

```
  </a>
```

```
  <a href="#" class="social-icon">
```

```
    <i class="fab fa-twitter"></i>
```

```
  </a>
```

```
  <a href="#" class="social-icon">
```

```
    <i class="fab fa-google"></i>
```

```
  </a>
```

```
  <a href="#" class="social-icon">
```

```
    <i class="fab fa-linkedin-in"></i>
```

```
  </a>
```

```
</div>
```

```
</form>
```

```
<form action="#" class="sign-up-form">
```

```
  <h2 class="title">Sign up</h2>
```

```
  <div class="input-field">
```

```
    <i class="fas fa-user"></i>
```

```

    <input type="text" placeholder="Username" />

</div>

<div class="input-field">

    <i class="fas fa-envelope"></i>

    <input type="email" placeholder="Email" />

</div>

<div class="input-field">

    <i class="fas fa-lock"></i>

    <input type="password" placeholder="Password" />

</div>

<input type="submit" class="btn" value="Sign up" /> <p class="social-text">Or Sign up with social
platforms</p>

<div class="social-media">

    <a href="#" class="social-icon">

        <i class="fab fa-facebook-f"></i>

    </a>

    <a href="#" class="social-icon">

        <i class="fab fa-twitter"></i>

    </a>

    <a href="#" class="social-icon">

        <i class="fab fa-google"></i>

    </a>

    <a href="#" class="social-icon">

        <i class="fab fa-linkedin-in"></i>

    </a>

</div>

```

```
</form>
```

```
</div>
```

```
</div>
```

```
<div class="panels-container">
```

```
<div class="panel left-panel">
```

```
<div class="content">
```

```
<h3>New here ?</h3>
```

```
<p>
```

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Debitis,
ex ratione. Aliquid!

```
</p>
```

```
<button class="btn transparent" id="sign-up-btn">
```

Sign up

```
</button>
```

```
</div>
```

```

```

```
</div>
```

```
<div class="panel right-panel">
```

```
<div class="content">
```

```
<h3>One of us ?</h3>
```

```
<p>
```

Lorem ipsum dolor sit amet consectetur adipisicing elit. Nostrum
laboriosam ad deleniti.

```
</p>
```

```
<button class="btn transparent" id="sign-in-btn">
```

Sign in

```
</button>
```

```
</div>
```

```

```

```
</div>
```

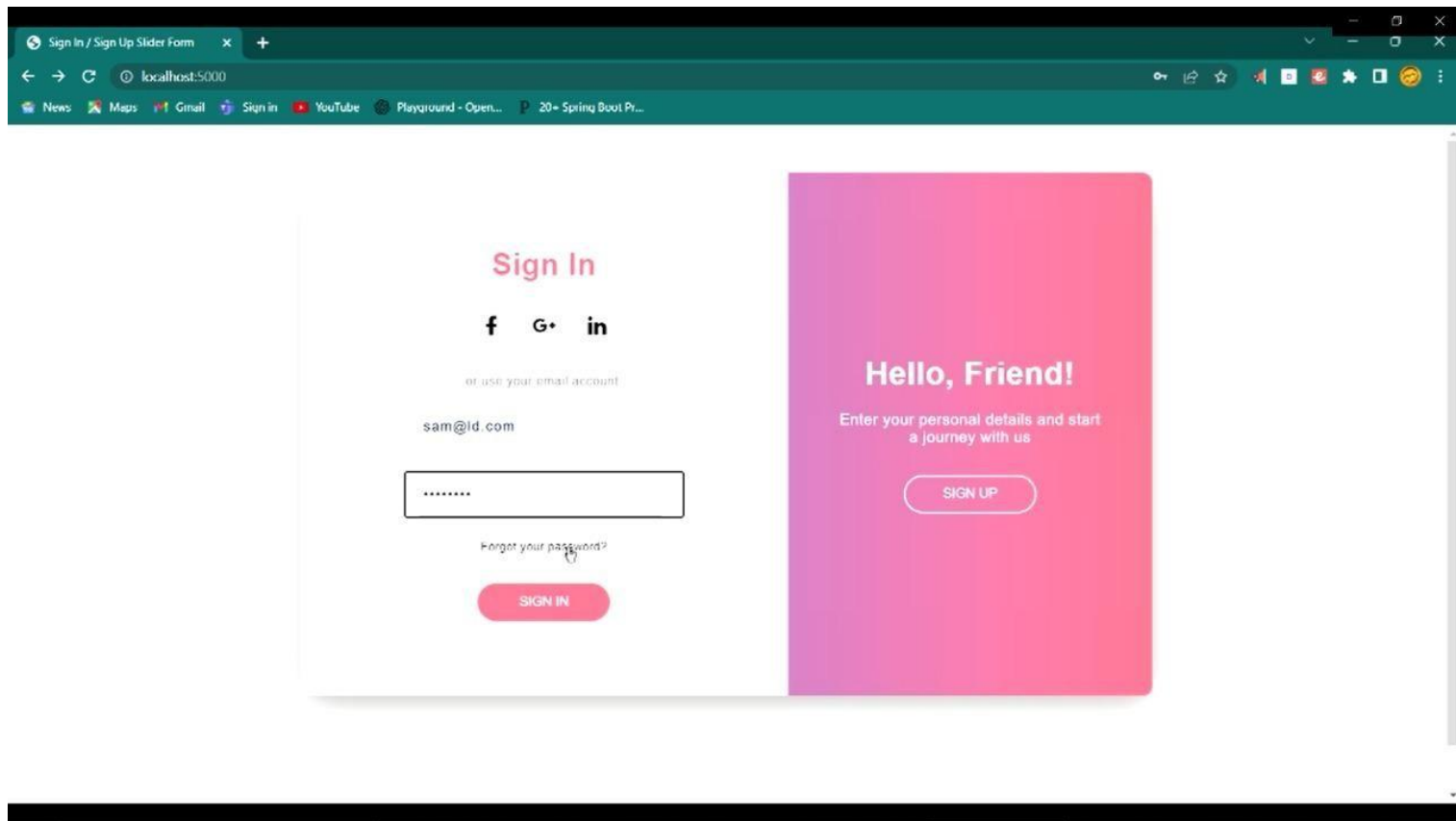
```
</div>
```

```
</div>
```

```
<script src="app.js"></script>
```

```
</body>
```

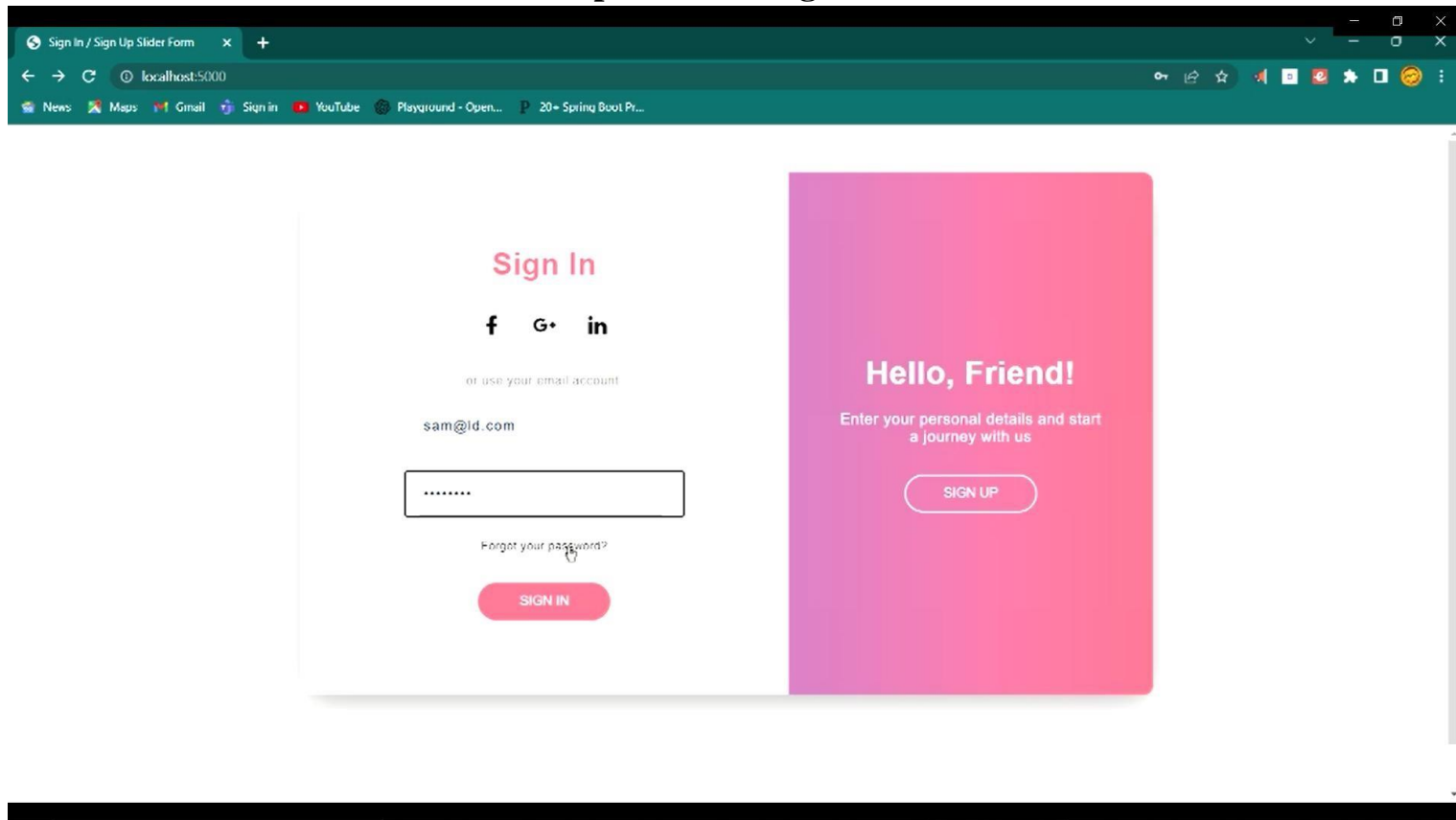
```
</html>
```

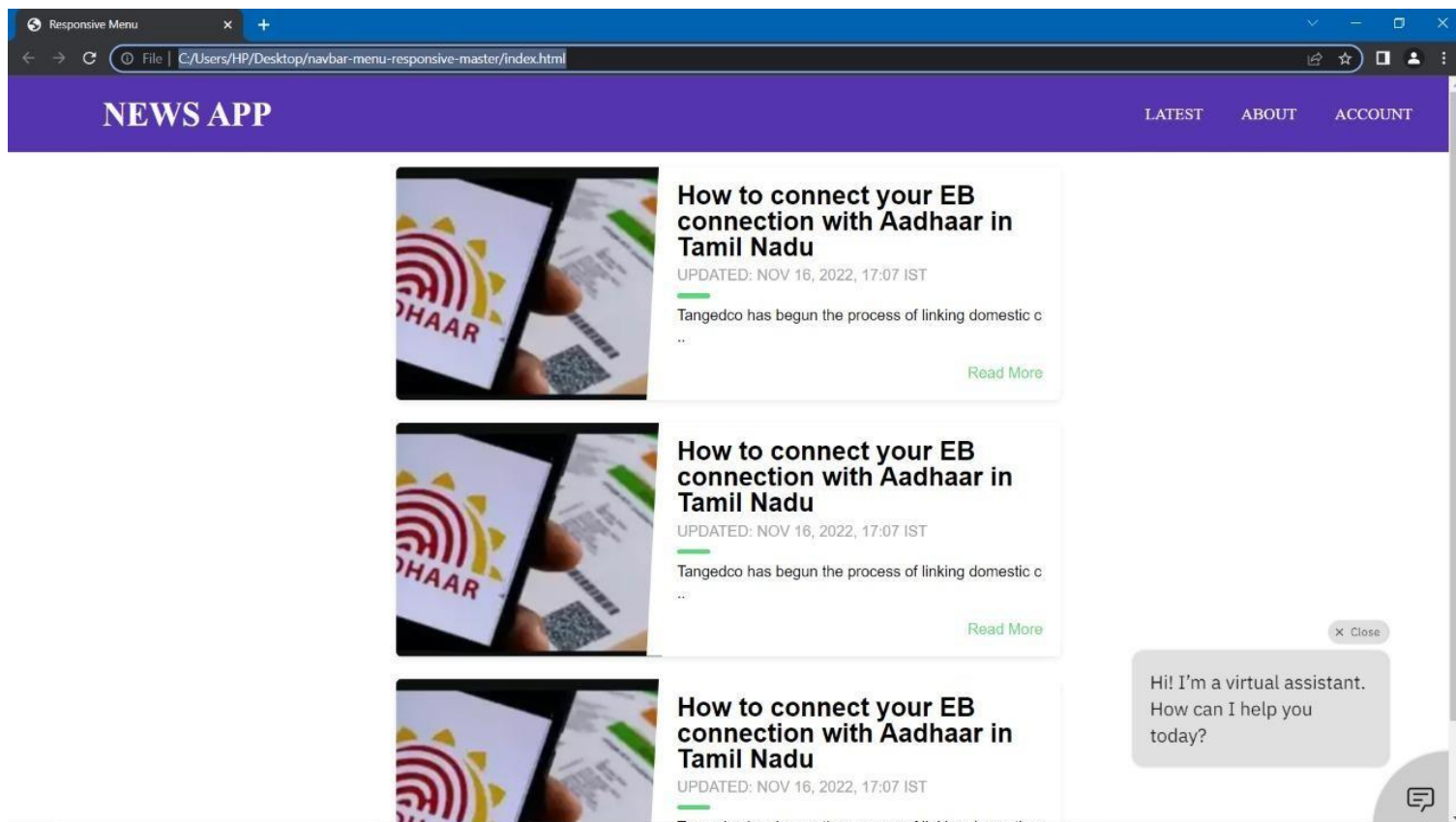


CHAPTER 8

TESTING

8.1 Test Cases & User Acceptance Testing

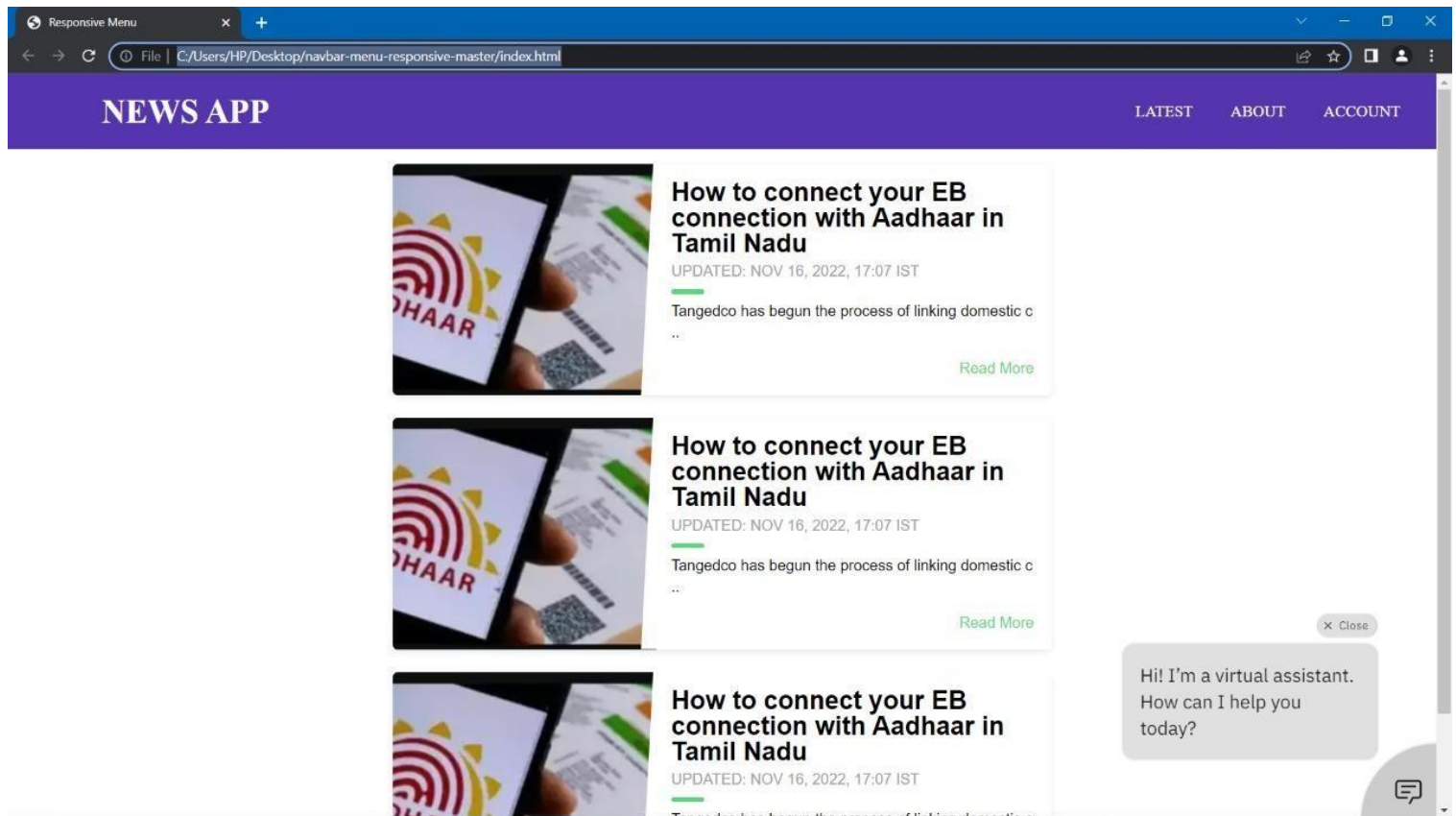




CHAPTER 9

RESULTS

9.1 Performance Metrics



CHAPTER 10 ADVANTAGES & DISADVANTAGES

ADVANTAGES OF NEWS TRACKER APPLICATION

1. 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.
2. Sometimes online editions will even leave out content from the print newspaper's regular edition.
3. The wide range of access points also contributes to the success of the online newspaper. Viewers can get their news straight off their smartphone or tablet computer.
4. News is at their fingertips in an instant.

DISADVANTAGES OF NEWS TRACKER APPLICATION

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

5. Older audiences may not access digital platforms
6. Costly to maintain
7. Errors stay online FOREVER

CHAPTER 11

CONCLUSION

This is fast evolving world with modernization taking a toll on the world, people nowadays prefer to spend time more on the gadgets rather than reading newspaper.

News site is an web application which makes news paper reading much interesting and easier.

The easily usable API and other softwares makes this application very user friendly and most of all save time.

CHAPTER 12

FUTURE SCOPE

Implement automated location functionality. This means that as a user moves from one city to another, the local news will change. Offline browsing can be improved to complete articles more efficiently. This version of app is in the seeding stage and there is a lot of room for future enhancements.

APPENDIX

Source Code

Index.html

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>Responsive Menu</title>
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" type="text/css" href="style.css">
  <script src="https://kit.fontawesome.com/a076d05399.js"></script>
</head>
<body>
  <nav>
    <input type="checkbox" id="check">
    <label for="check" class="checkbtn">
      <i class="fas fa-bars"></i>
    </label>
    <label class="logo" href="index.html">NEWS APP</label>
    <ul>
      <li><a href="#">LATEST</a></li>
      <li><a href="#">ABOUT</a></li>
      <li><a href="#">ACCOUNT</a></li>
    </ul>
  </nav>
  <div class="blog-card">
    <div class="meta">
      <div class="photo" style="background-image: url(https://static.toiimg.com/thumb/msid-95557833,imgsize797716,width-400,resizemode-4/95557833.jpg)"></div>
      <ul class="details">
        <li class="author"><a href="#">News tracker</a></li>
        <li class="date">Aug. 24, 2015</li>
      </ul>
    </div>
    <div class="description">
      <h1>How to connect your EB connection with Aadhaar in Tamil Nadu</h1>
      <h2>Updated: Nov 16, 2022, 17:07 IST</h2>
      <p>Tangedco has begun the process of linking domestic c ..</p>
      <p class="read-more">
        <a href="https://timesofindia.indiatimes.com/city/chennai/tangedco-begins-linking-power-consumers-serviceconnection-with-aadhaar/articleshow/95557777.cms">Read More</a> </p>
    </div>
  </div>
  <div class="blog-card">
    <div class="meta">
      <div class="photo" style="background-image: url(https://static.toiimg.com/thumb/msid-95557833,imgsize797716,width-400,resizemode-4/95557833.jpg)"></div>
```

```

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  <li class="author"><a href="#">News tracker</a></li>
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serviceconnection-with-aadhaar/articleshow/95557777.cms">Read More</a> </p>
    </div>
  </div>
<script> window.watsonAssistantChatOptions = { integrationID: "62d18cd1-058a-450e-957e-
03e827a2314a", // The ID of this integration. region: "au-syd", // The region your integration is
hosted in. serviceInstanceID: "78964af2-6638-44d6-b6f9-0e89fd9527e1", // The ID of your service
instance.
  onLoad: function(instance) { instance.render(); }
};
setTimeout(function(){
  const t=document.createElement('script');
  t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
  "/WatsonAssistantChatEntry.js"; document.head.appendChild(t); });
</script>
</body>

```

```
</html>
```

Style.css

```
* {
padding: 0; margin: 0;
text-decoration: none;
list-style: none; box-
sizing: border-box;
}

body { font-family:
montserrat;
}

nav { background:
#5434af; height:
80px; width: 100%;
}

label.logo
{ color: white;
font-size: 35px;
line-height: 80px;
padding: 0 100px;
font-weight: bold;
}

nav ul {
float: right; margin-
right: 20px;
}

nav ul li {
display: inline-block;
line-height: 80px;
margin: 0 5px;
}

nav ul li a
{ color: white; font-size:
17px; padding: 7px 13px;
border-radius: 3px; text-
transform: uppercase;
}

a.active, a:hover
{ background:
#1d075f;
transition:
.5s;
}

.checkbtn { font-
size: 30px;
```



```
color: white;
```



```

float: right; line-
height: 80px; margin-
right: 40px; cursor:
pointer; display: none;
}
#check {
display:
none;
}
.blog-card { display: flex; flex-direction:
column; margin: 1rem auto; box-shadow: 0 3px
7px -1px rgba(0, 0, 0, 0.1); margin-bottom:
1.6%; background: #fff; line-height: 1.4; font-
family: sans-serif; border-radius: 5px;
overflow: hidden; z-index: 0;
}
.blog-card a
{ color: inherit;
}
.blog-card a:hover
{color: #5ad67d;
}
.blog-card:hover .photo { transform:
scale(1.3) rotate(3deg);
}
.blog-card .meta {
position:
relative;z-index:
0;
height: 200px;
}
.blog-card .photo { position:
absolute;top: 0; right: 0;
bottom: 0; left: 0;
background-size: cover;
background-position:
center; transition:
transform 0.2s;
}
.blog-card .details,

```

```
.blog-card .details ul  
{margin: auto;
```



```
padding: 0; list-
style: none;
}
.blog-card .details {position:
absolute; top: 0; bottom: 0;
left: -100%; margin: auto;
transition: left 0.2s;
background: rgba(0, 0, 0,
0.6); color: #fff; padding:
10px; width: 100%; font-size:
0.9rem;
}
.blog-card .details a {
  -webkit-text-decoration: dotted
    underline; text-decoration:
    dotted underline;
}
.blog-card .details ul li
{display: inline-block;
}
.blog-card .details .author:before
{font-family:      FontAwesome;
margin-right: 10px; content: "
";
}
.blog-card .details .date:before
{font-family:      FontAwesome;
margin-right: 10px; content: "
";
}
.blog-card .details .tags
  ul:before {font-family:
    FontAwesome; content: "□";
margin-right: 10px;
}
.blog-card .details .tags li
{margin-right: 2px;
}
.blog-card .details .tags li:first-child
{margin-left: -4px;
}
.blog-card .description
{padding: 1rem;
background: #fff;
position: relative; z-
index: 1;
```



```

}
.blog-card .description h1,
.blog-card .description h2 { font-
  family: Poppins, sans-serif;
}
.blog-card .description
  h1 {line-height: 1;
margin: 0; font-size:
  1.7rem;
}
.blog-card .description h2
  {font-size: 1rem; font-
weight: 300; text-
transform: uppercase;
color: #a2a2a2; margin-
top: 5px;
}
.blog-card .description .read-more
  {text-align: right;
}
.blog-card .description .read-more a
  {color: #5ad67d;
display: inline-block;
position: relative;
}
.blog-card .description .read-more a:after
  {content: "□"; font-family:
  FontAwesome; margin-left: -10px;
opacity: 0; vertical-align: middle;
transition: margin 0.3s, opacity 0.3s;
}
.blog-card .description .read-more
a:hover:after
  {margin-left: 5px;
opacity: 1;
}
.blog-card p {
position:
relative;margin:
  1rem 0 0;
}
.blog-card p:first-of-type
  {margin-top: 1.25rem;
}
.blog-card p:first-of-type:before

```



```
{content: "";  
position: absolute;  
height: 5px;
```



```
background: #5ad67d;
```

```

width: 35px; top: -
0.75rem; border-
radius: 3px;
}
.blog-card:hover .details
{left: 0%;
}
@media (min-width: 640px) {
.blog-card { flex-
direction: row; max-
width: 700px;
}
.blog-card .meta {flex-
basis: 40%; height:
auto;
}
.blog-card .description
{flex-basis: 60%;
}
.blog-card .description:before
{transform: skewX(-3deg);
content: ""; background:
#fff; width: 30px; position:
absolute; left: -10px; top:
0; bottom: 0; z-index: -1;
}
.blog-card.alt { flex-
direction: row-reverse; }
.blog-card.alt
.description:before
{left: inherit;
right: -10px;
transform: skew(3deg);
}
.blog-card.alt .details
{padding-left: 25px;
}
}

```

app.py

```
from flask import Flask, render_template, session, request, redirect, make_response
import ibm_db
```

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```
from ibm_db2_connect import db2
import news import json app =
Flask( name ) app.secret_key =
"secret_key"
```

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

    if session.get('logged_in'):

        return render_template('home.html')
    return render_template('index.html')
```

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

    form_user =
    request.form['username']
    session['logged_in']=form_user
    return redirect('/')
```

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

    conn = db2.get_conn()
    data=request.get_json();
```

```
form_user      =      data['email']
```

```
form_password          =
```

```
data['password']
```

```
sql = 'SELECT username from user WHERE mail=? and password=?'
```

```
stmt = ibm_db.prepare(conn, sql) ibm_db.bind_param(stmt, 1,
```

```
form_user)
```

```

ibm_db.bind_param(stmt, 2,
form_password)
ibm_db.execute(stmt)

account          =
ibm_db.fetch_assoc(s
tmt)if account:

    response =
make_response('success',200)
else:

    response =
make_response('failure',200)
response.mimetype =
"text/plain"

return response

@app.route('/register',metho
ds=['POST'])def register():

    try:

        conn =
        db2.get_conn()
        data=request.get_js
on(); form_user =
        data['username']
        form_password =
        data['password']
        form_mail =
        data['mail']
        form_phone =
        data['phone'] sql = 'insert
        into user values(?,?,?,?)'
        stmt          =

```

```

        ibm_db.prepare(conn,
        sql)
        ibm_db.bind_param(stmt,
        1,          form_user)
        ibm_db.bind_param(stmt,
        2,          form_password)
        ibm_db.bind_param(stmt,
        3,          form_mail)
        ibm_db.bind_param(stmt,
        4,          form_phone)
        ibm_db.execute(stmt)

        response =
make_response('success',200)
except Exception as e:

        response =
make_response('failure',200)
print(e) return response

@app.route('/checkForExistingUser',methods=['POST'])
def checkForExistingUser():
    conn =
db2.get_conn
()
data=request.
get_json();
email=data['e
mail'];
print(email)

sql = 'SELECT mail from user
WHERE mail=?'stmt =

```



```

ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, email)
ibm_db.execute(stmt)

```

```

account =
ibm_db.fetch_assoc(stmt)
print(account) if account:

```

```

    response =
make_response('true',200)
else:

```

```

    response =
make_response('false',200)
response.mimetype =
"text/plain"

```

```

return response

```

```

@app.route('/search',metho
ds=['POST'])def getNews():

```

```

    getRequests=request.g
et_json()
articles=news.getNew
s(getRequests)#
print(json.dumps(artic
les))

```

```

    response =
make_response(json.dumps(articles),200)
response.mimetype="text" return response @app.rout
e('/logout') def logout():

```

```

    session.clear()
    return render_template('index.html')

```

```

if __name__ == '__main__':
    app.run(debug=True,
            port=5002)

```

DEMO.py

```

DATABASE="<your database>"

```

```

ur db>"

```

```

HOSTNAME="<your hostname>"

```

```

our hostname>"

```

```

PORT="<your port>" SECURITY="SSL"

```

```

port>" SECURITY="SSL"

```

```

SSLServerCertificate="<your certificate>"

```

```

ur certificate>"

```

```

UID="<your UID>"

```

```

PWD="<your PASSWORD>"

```

```

API_KEY="<your API key>"

```

IBMCLLOUD.py

```

connectionString="DATABASE={0};HOSTNAME={1};PORT={2};SECURITY={3};SSL
S

```

```

erverCertificat

```

```

e={4};UID={5};PWD={6} ".format(c.DATABASE,c.HOSTNAME,c.PORT,c.SECURITY,c.

```

```

S SLServerCert

```

```

cate,c.UID,c.PWD)

```

```

ifi

```

```

conn = ibm_db.connect(connectionString,"")

```

```

def get_conn():

```

```

    return db2.conn

```

news.py

```

import requests

```

```
from config import API_KEY
def getNews(query:dict):

    query_string="q="+query.get('q')

    main_url="https://newsapi.org/v2/top-headlines?"

    final_url="{0}{1}&apiKey={2}".format(main_url,query_string,API_KEY)
    article=requests.get(final_url)
    return article.json()
```

GitHub & Project Demo Link

<https://github.com/IBM-EPBL/IBM-Project-20542-1659753411.git>

<https://www.youtube.com/watch?v=bEBSAPkDFBo>