IBM – NALAIYA THIRAN PROJECT

NEWS TRACKER APPLICATION

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1 INTRODUCTION

1.1Project Overview

News is information about current events. This may be provided through many different media like word of mouth, printing, postal systems, broadcasting, electronic communication, or through the testimony of observers and witnesses to events. News is sometimes called “hard news” to differentiate it from soft media. The genre of news as we know it today is closely associated with the newspaper and in the online news feed and tracker application. Some newspaper with high journalism quality, and large circulation are viewed as newspaper of record.

Through the online news journal, A News Feed (newsfeed) is list of newly published content on a website. End user can receive push updates for new content on a site by subscribing to the site’s for news feed. Feeds are designed to be machine – readable so they can they can transfer information from one computer to another without human interface. As web feed are designed to be machine – readable rather than human –readable they can also be used to automatically transfer information from one website to another without any human intervention.

1.2 Purpose

As our lives are very busy these days, we often feel we need more than 24 hours. Days to come up with everything we have in our schedule. Well, that’s

not possible but reducing the time by changing the conventional method of reading news can help. Just tell us what market news you're interested in and get a quick peek for the day. Only read what you feel is relevant and save your time. This app help you to query for all information about indices, commodities, currencies, future rates, bonds etc., as an official website.

In this project, we need to integrate the application with news APIs and store the data in the database and the database will have all the details and the user can search the news by using a search bar.

2 LITERATURE SURVEY

1. **Exploring mobile news reading interactions from news app personalization:** Marious constantine's, John Dowell, David Johnson, Sylvain Malacria started Mobile app ecosystems are transforming patterns of news consumption, Until quite recently, reading the news was a niche use for smartphones mostly for when users were 'on the go'; now however, two in every three users of mobile devices in the Us regularly access news and as many as of in five read in-depth news articles daily a similar picture is found in the US. This growth in mobile news access continues the migration of news consumers to the Internet.

2. **Topic Detection and tracking in News Articles:** Sargar Patel, Sanket Suthar, Sandip Patel, Neha Patel observed the detecting and tracking topics from news articles. Topic detection and tracking are used in text mining process. From data which are unstructured in text mining we extracts previously unknown and useful information. The main purpose of the paper is to identify and follow tasks occurred in different news sources.

3. **Following the Fed with a News Tracker:** Michael Willam McCracken suggested paper is not a technical paper but is essentially a statisitical paper on how should one conclude whether the data have come in stronger, weaker or as expected. This is based on the CitiGroup U.S Economic Surprise Index.

2.1 EXISITING PROBLEM

In existing system only simple web application and their rating has been implemented in existing system, All the social media sites have some sort of news feed system, like those in Facebook, Twitter, Instagram, Quora, and Medium. News feed is a list of posts with text, image, or video generated by other entities in the system tailored for you to read. It's constantly updating while other entities creating new posts.

In existing model is content based filtering scheme has been employed in existing model **News feed (newsfeed)** is list of newly published content on a website. End users can receive push updates for new content on a site by subscribing to the site's news feed.

In News feed Only we can feed and read the news which are available in the site and when it updated.

While using the news feeder, we can’t tracker or find the previous news which we are read in the website.

2.2 REFERENCE

1.Ofcom, News consumption in the UK, Public report (2014).

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3. Reuters Institute, Tracking the future of news, Public Report (2014)

4. Billsus, D. & Pazzani, M. A hybrid user model for news story classification. Springer Vienna (1999), 99-108

5. Woerndl, W., Manhardt, A., & Prinz, V. A framework for mobile user activity logging. In MUSE 2010

6. Carreira, R., Crato, J. M., Gonçalves, D., & Jorge, J. A. Evaluating adaptive user profiles
for news classification. In ACM IUI 2004.

7. Gauch, S., Speretta, M., Chandramouli, A., & Micarelli, A. User profiles for personalized
information access. In The adaptive web. Springer Berlin Heidelberg (2007).

8. Grzeschik, K., Kruppa, Y., Marti, D., & Donner, P. Reading in 2110-reading behavior
and reading devices: a case study. The Electronic Library (2011).

9. Jameson, A. Adaptive interfaces and agents. Human-Computer Interaction: Design
Issues, Solutions, and Applications, (2009)

2.3 PROBLEM STATEMENT DEFINITION

Mr. Bharathi is a busy worker in an IT Sector company who needs to refer to news without any restrictions and interruptions while traveling because he was not comfortable carrying newspapers daily to her office and to read news when he was in free time. Mr.Bharathi needs to read news in such a way that he doesn't have to worry about ever buying physical newspapers or carrying with her everywhere he wants. He needs something which should fit in the palm of her hands, which he could carry everywhere, access from everywhere, something digital, easy to use, and easy to handle such as an Application based on the internet which could be accessed from any device that is connected to the Internet. Such as smartphones and computers.

1. Graphics and photos do not always appear. News feeders has been designed to strip down articles from all the frills to ensure optimal readability – fine in theory, a bit cumbersome in practice.Content can easily be copied. Content drives the Internet.

2. Content can easily be copied. Content drives the Internet.

3. Tracking subscribers and the previous read news is difficult.

3.IDEATION & PROPOSED SOLUTION

We have come up with a new innovative solution through which you can directly do your online news tracker based on your choice without any search. It can be done by using the API.

In this project you will be working on two modules :

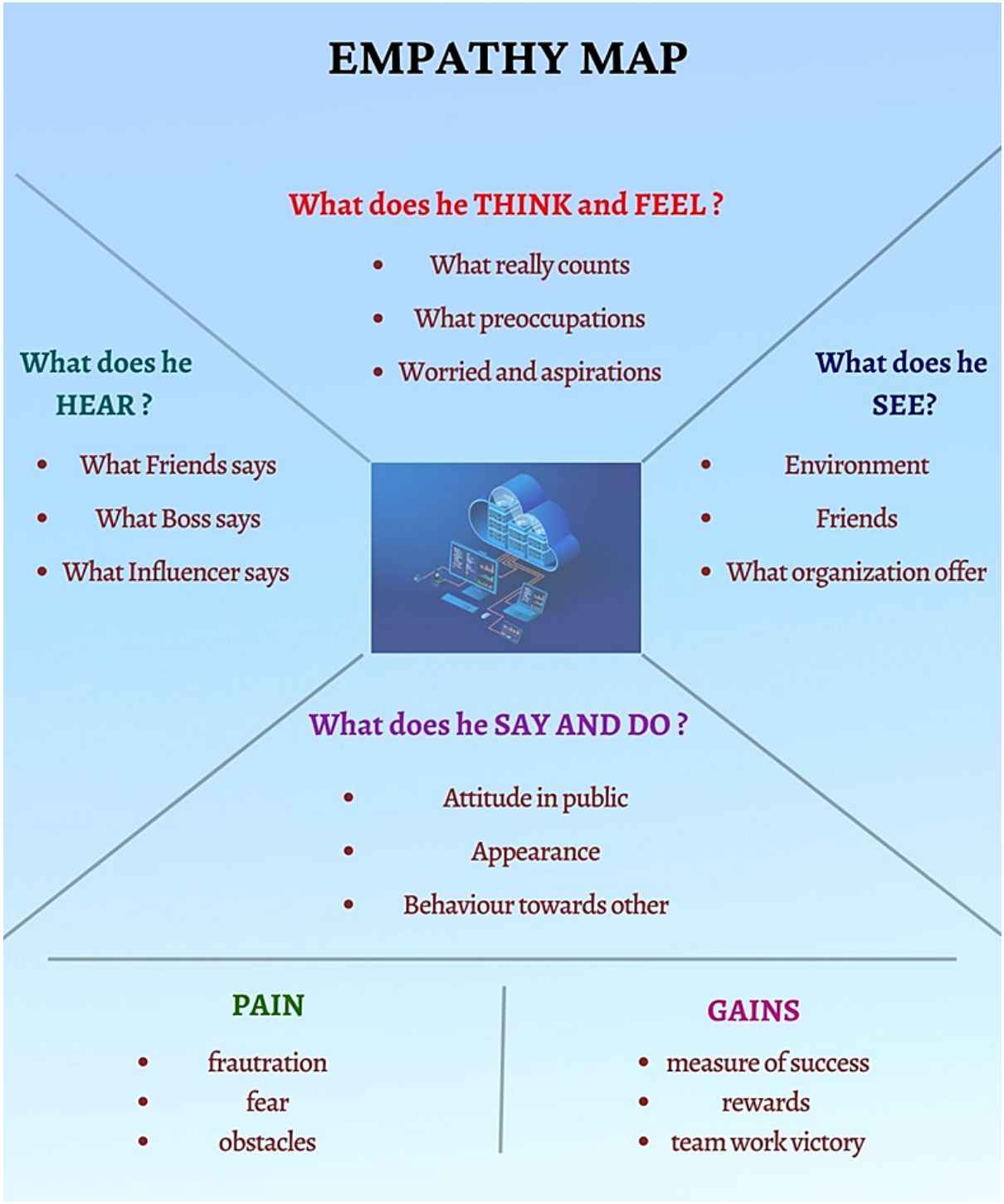
1. Admin and
2. User

ADMIN: The role of the admin is to check out the database about the news and have a track of all the things that the users are searching or reading.

USER : The user will login into the website and go through the categories available on the website. Instead of navigating to several screens for reading in online, the user can directly search the several categories regarding the products. Get the relevant news based on information provided by the user.

3.1 EMPATHY MAP CANVAS:

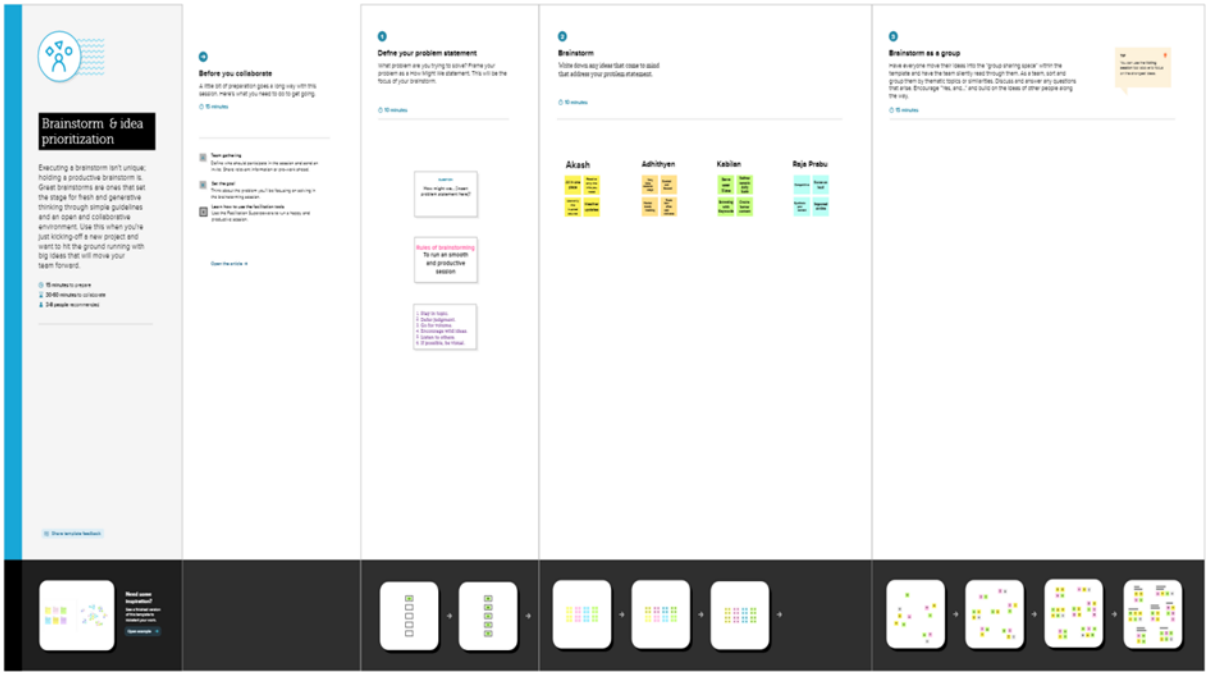
An empathy map is a simple, easy-to-digest visual that captures knowledge about a user’s behaviours and attitudes. It is a useful tool to helps teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise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



3.2 IDEATION & BRAINSTROMING:

A group problem-solving technique that involves the spontaneous contribution

of ideas from all members of the group. The mulling over of ideas by one or more individuals in an attempt to devise or find a solution to a problem.



3.3 PROPOSED SOLUTION:

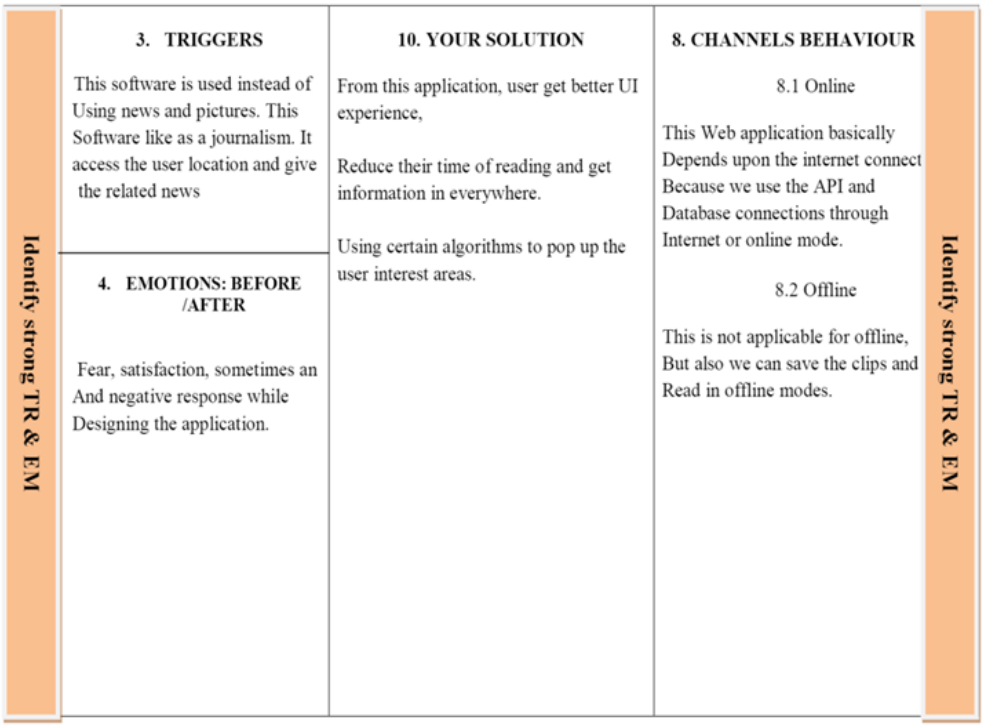
NEWS TRACKER APPLICATION

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	News organizations whose mobile apps only provide users with their articles or videos are missing a big opportunity. An application, by definition, should be applied to perform a task, to solve a problem. Most news Doesn’t do that. Rather than just feed readers recent stories you wrote *about* their problems; apps can provide Tools and data that enable users to actually, *solve* their problems. When you solve problems, you get more loyal users and a chance to make more money.
2.	Idea / Solution description	Start with an audience-first focus. Instead of thinking about what your organization produces (news articles) and how to fit that into an app, start from scratch and consider your audience. Who are they, and what problems do they face? Use your imagination, do some role playing with colleagues, and actually talk to some real people

3.	Novelty / Uniqueness	Building mobile tools with data isn't as easy as importing an XML feed of your latest headlines. But if you're going to spend thousands of dollars developing a mobile app anyway, you might as well spend a little more to build a real application that helps solve problems and makes Advertisers take notice.
4.	Social Impact / Customer Satisfaction	These apps are all about solving problems and enabling the user to take an action — go to this bar, shop at that boutique, and rent this apartment. These are the apps that build loyal audiences because they help people get things done instead of just presenting another thing, they Feel obligated to do (keep up with news stories). That is valuable not only for users, but for Advertisers as well.
5.	Business Model (Revenue Model)	Building mobile tools with data isn't as easy as Importing an XML feed of your latest headlines. But if you're going to spend thousands of dollars developing a mobile app anyway, you might as well spend a little more to build a real application that helps solve problems and makes Advertisers take notice.
6.	Scalability of the Solution	News tracker application can handle data across Machines and data that will not fit into memory. It supports clusters and can handle machine Failures, rebuilding machines easily.

3.4 PROBLEM SOLUTION FIT:

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) In research, scientific purposes, Commercial purpose and sociality purpose.	6. CUTOMER CONSTRANTS As much as service providers need to cater to the needs of their customers, it is just as important for them to satisfy their customers	5. AVAILABLE SOLUTIONS Customer can receive the information through internet and their updates. User interest news are list out top of the list.	Explore AS, differentiate
Focus on J&P, tap into BE, understand RC	2. JOBS-TO-BE-DONE/ PROBLEMS From there the user can easily read the news in a single click and it is gives as audio format. The user can receive messages based on their location	9. PROBLEM ROOT CAUSE Lot of time is wasting in reading news and some people does not know how to read in such causes they refuse the newspapers.	7. BEHAVIOUR User experience, content perform, Perfect user interface, popularity sharing the news, conversion are optimization, checkout process website accessibility.	Focus on J&P, tap into BE, understand RC



4. REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENTS:

Following are the functional requirements of the proposed solution.

FR.no	**Functional Requirements**	**Sub Requirement (Story/sub-task)**
1.	User Registration	Registration through Form
2.	User Confirmation	Confirmation via Email
3.	User Login	Login via Email ID & Password
4.	Home Page	Shows the NEWS Headlines
5.	Tracker Page	Shows the NEWS elaborately when the NEWS Headlines of the Homepage

4.2 NON-FUNCTIONAL REQUIREMENTS:

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

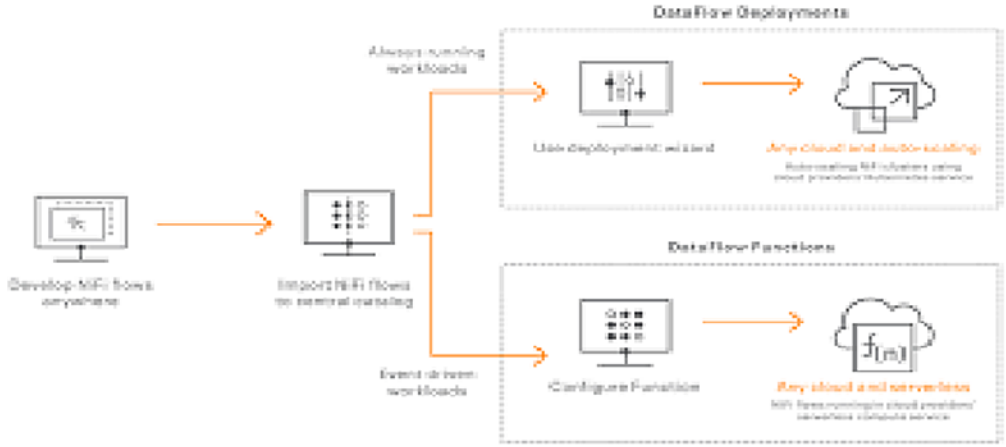
FR.no	**Non-Functional Requirements**	**Description**

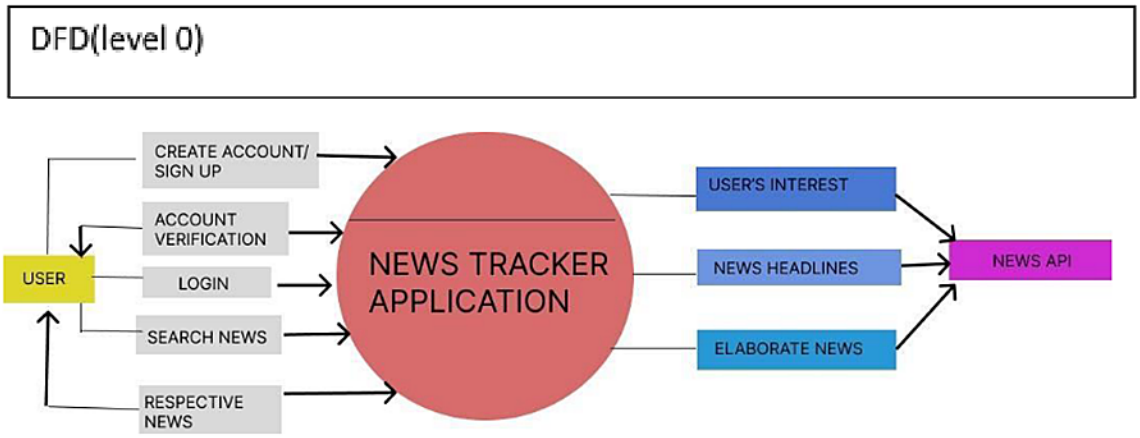
1.	Usability	Our Website is used to Read News and gain Knowledge according to user interest.
2.	Security	User can only login with their own Email id and password without their Email and password no one can use the Application.
3.	Reliability	Our site delivers the reliable content only from NEWS API.
4.	Performance	It is a high performable App with friendly User interface and shares lot of info any issue.
5.	Availability	Our site is supported with all search Engine so it will avail for user at any time.
6.	Scalability	This site is built with high data storage done easily.

5. PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS:

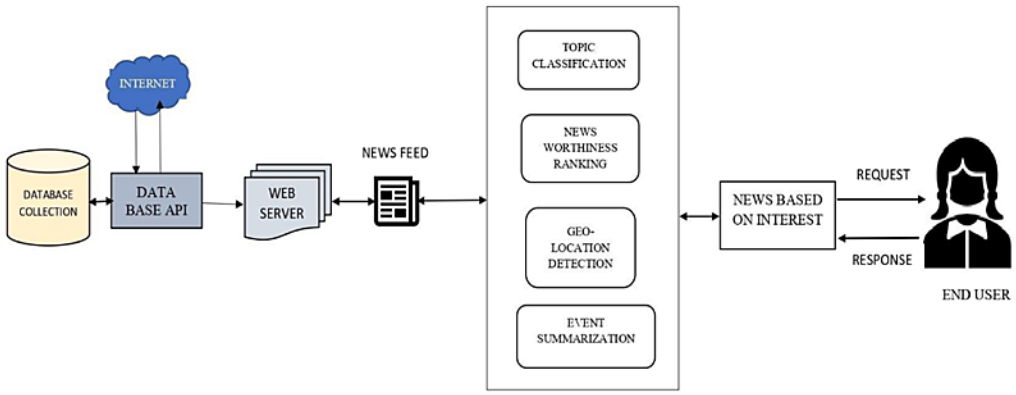
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

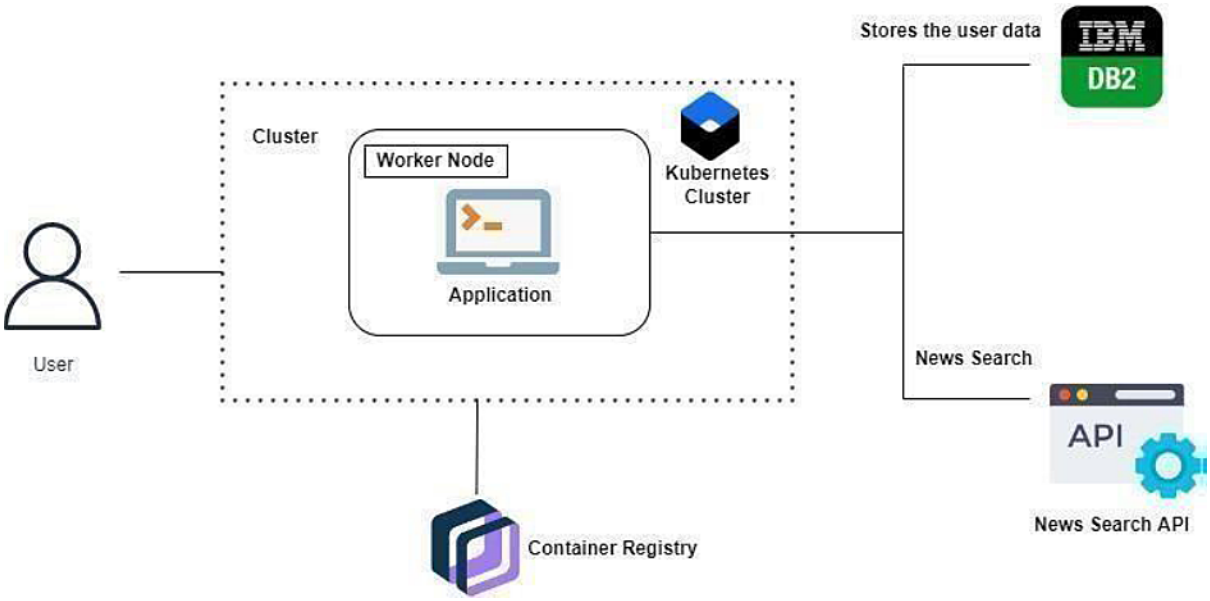




5.2 SOLUTION & TECHNICAL ARCHITECTURE:

We have developed a new innovative solution through which you can directly do your online news tracker based on your choice without any search. It can be done by using the APIs.





5.3 USER STORIES:

Use the below template to create product backlog and story schedule

Functional Requirement	User Story Number	User/Task	Story Point	Priority	Release
Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	10	High	Sprint-1
Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application.	10	High	Sprint-1
Login	USN-3	As a user, I can log into the application by entering email & password.	10	High	Sprint-2
Dashboard	USN-4	As a user, I can explore news feed through subscription by personalized choice of news.	10	Medium	Sprint-2
Personalized	USN-5	As a user, preferred choice of news with age limits.	10	High	Sprint-3
Notification	USN-6	As a user, if I exceed the breaking news, I should get notification.	10	Medium	Sprint-3
Support	USN-7	As a customer care executive, I can solve the log in issues and other issues of the application.	10	Low	Sprint-4
Maintenance	USN-8	As an administrator, I can manage the data and upgrade the app.	10	Low	Sprint-4

6. PROJECT PLANNING & SCHEDULE

6.1 SPRINT PLANNING & ESTIMATION:

Milestone	Title	Description
Ideation Phase	Literature Survey & Information Gathering	Literature survey on the selected project & gathering information by referring the, technical papers, research publications etc.
	Prepare Empathy Map	Prepare Empathy Map Canvas to capture the user Pains & gains, Prepare list of problem statement.
	Ideation	List the by organizing the brainstorming session and prioritize the top 3 ideas based on the feasibility & importance.
Project Design Phase I	Proposed Solution	Prepare the proposed solution document, which includes the novelty, feasibility of idea, business model, and social impact. Scalability of solution etc.
	Problem Solution Fit	Prepare problem-

		solution fit document.
	Solution Architecture	Prepare solution architecture document.

Project Design Phase II	Customer Journey	Prepare the customer journey maps to understand the user interactions & experiences with the application (entry to exit)
	Functional Requirement	Prepare the functional requirement document
	Date Flow Diagram	Draw the data flow diagrams and submit for review.
	Technology Architecture	Prepare the technology architecture diagram.
Project Planning Phase	Prepare Milestone & Activity List	Prepare the milestones & activity list of the project.
Project Development Phase	Project Development-Delivery of Sprint-1,2,3	Develop & Submit the developed code by

	& 4	testing it.

6.2 SPRINT DELIVERY SCHEDULE:

Sprint	Functional Requirement	User story Number	User/Task	Story Point	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	Akash, Adhithyen

Sprint-1	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application.	10	High	Kablian, RajaPrabu
Sprint-2	Login	USN-3	As a user, I can log into the application by entering email & password.	10	High	Akash, RajaPrabu
Sprint-2	Dashboard	USN-4	As a user, I can explore news feed through subscription by personalized choice of news.	10	Medium	Akash, Kablian
Sprint-3	Personalized	USN-5	As a user, preferred choice of news with age limits.	10	High	Adhithyen, Kabilan
Sprint-3	Notification	USN-6	As a user, if I exceed the breaking news, I should get notification.	10	Medium	Adhithyen, RajaPrabu
Sprint-4	Support	USN-7	As a customer care executive, I can solve the log in issues and other issues of the application.	10	Low	Akash, Adhithyen
Sprint-4	Maintenance	USN-8	As an administrator, I can manage the data and upgrade the app.	10	Low	Akash, Adhithyen

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	4 days	01 Nov 2022	04 Nov 2022	20	04 Nov 2022

Sprint -2	20	4 days	05 Nov 2022	08 Nov 2022	20	08 Nov 2022
Sprint -3	20	4 days	09 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint -4	20	5 days	13 Nov 2022	17 Nov 2022	20	17 Nov 2022

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)

Sprint 1(AV) =5
Sprint 2(AV) =5
Sprint 3(AV) =5
Sprint 4(AV) =5

6.3 REPORTS FROM JIRA

7. CODING & SOLUTIONING

7.1 FEATURE-1:

INDEX.HTML

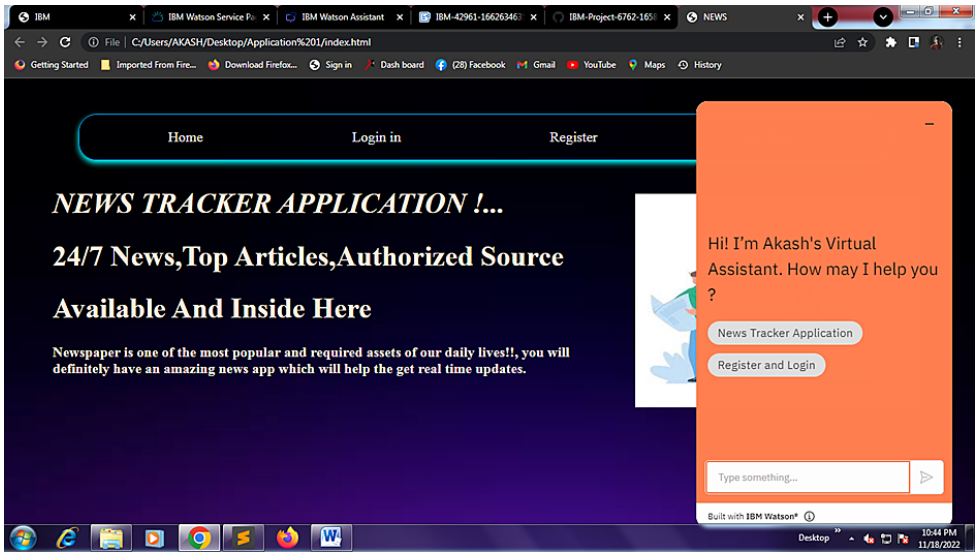
```
<html>
<head>
        <link rel="stylesheet" type="text/css" href="style.css">
<title>NEWS</title>
</head>
<body>
<nav>
<a href="home.html">Home</a>
<a href="sign in.html">Login in</a>
<a href="register.html">Register</a>
<a href="feedback.html">Feedback</a>
</nav>
<img src="images (1).jpeg">
<h1><i> NEWS TRACKER APPLICATION !...</i></h1>
 <h1>24/7 News,Top Articles,Authorized Source</h1>
 <h1>Available And Inside Here</h1>
    <h4>Newspaper is one of the most popular and required assets of our daily lives!!,
          you will definitely have an amazing news app which will help the get real time updates.
        </h4>
</body>
</htmL>
```

STYLE.CSS

```
body{
    text-align: left;
    font-size: 20px;
    margin: 5%;
    background: white;
```

```
    margin-top: 50px;
    background-color: #131315;
    background-repeat: no-repeat;
    background-size: cover;
    color: antiquewhite;
    background-image: url(black.jpeg);
  }
nav{
    margin: 3%;
    width: 1100px;
    display:  flex;
    flex-direction: row;
    border-radius: 25px;
    list-style: none;
    padding: 20px;
    border: 0.1px solid #099FFF;
    box-shadow: 0 4px 8px 0 #00FFFF, 0 6px 20px 0 rgba(0,0,0,0.19);
    text-align: right;
    position: right;
}
a{
    margin: auto;
    color: whitesmoke;
    font-size: 20px;
    cursor: pointer;
    text-decoration: none;
}
img{
```

```
    float: right;
    width: 400px;
    height: 300px;
    margin: 10px;
}
@media screen and (max-width: 600px){
    nav, a{
            float: none;
    display: block;
    text-align: left;
    width: 100%;
    margin: 0;
    padding: 14px;
    }
}
```



REGISTER.HTML:

```
<!DOCTYPE html>
<html>
```

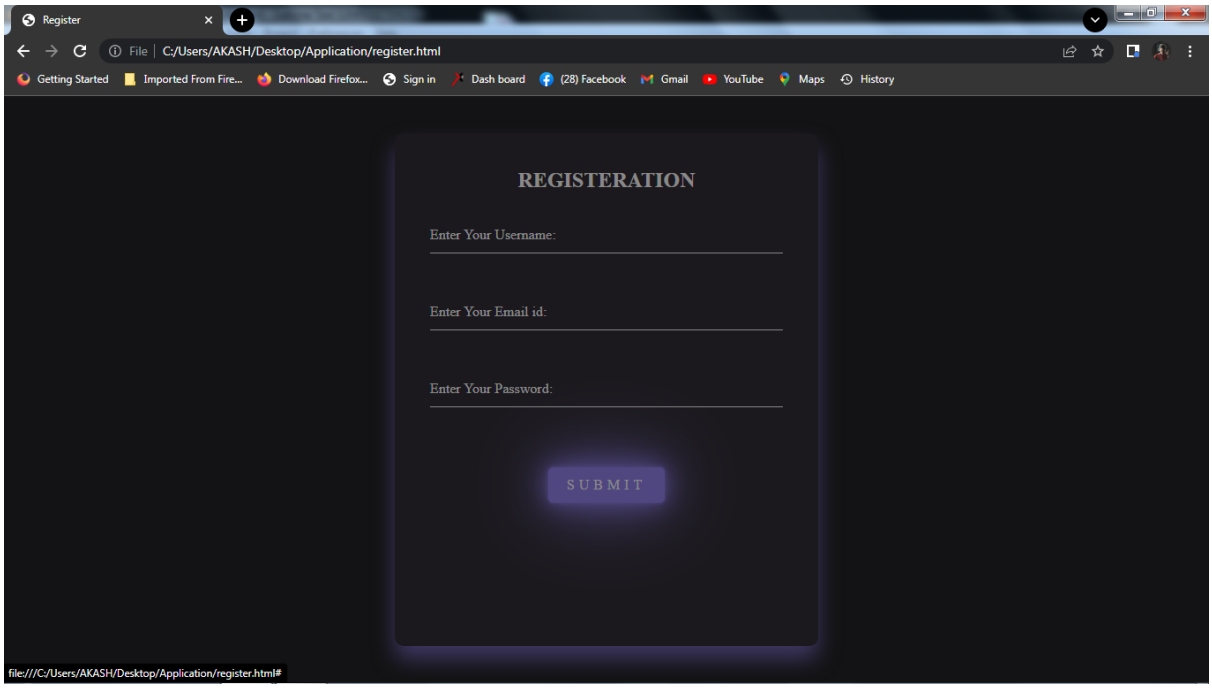
```
<head>
	<meta charset="utf-8">
	<meta name="viewport" content="width=device-width, initial-scale=1">
	<title>Register</title>
</head>
<body>
	<div class="login-box">
		<h2>REGISTERATION</h2>
		<form>
<div class="user-box">
				<input type="text" name="" required="">
				<label>Enter Your Username:</label>
			</div>
<div class="user-box">
				<input type="text" name="" required="">
				<label>Enter Your Email id:</label>
			</div>
<div class="user-box">
				<input type="password" name="" required="">
				<label>Enter Your Password:</label>
<div class="button-form">
				<a id="sumbit" href="#">Submit</a>
			</div>
		</div>
	</form>
```

```
</div>
</body>
</html>
<style>
        body{
                background:#131315;
                background-repeat: no-repeat;
   background-size: cover;
   opacity: 0.5;
}
.login-box{
                height: 500px;
                position: absolute;
                top: 50%;
                left: 50%;
                width: 400px;
                padding: 40px;
                transform: translate(-50%, -50%);
                background: #242026;
                box-shadow: 0 15px 25px rgba(143, 124, 236, 0.7);
                border-radius: 10px;
}
.login-box h2{
                margin: 0 0 30px;
                padding: 0;
```

```
            color: #fff;
            text-align: center;
        }
.login-box .user-box input{
            position: relative;
            width: 100%;
            padding: 10px 0;
            font-size: 16px;
            color: #fff;
            margin-bottom: 30px;
            border: none;
            border-bottom: 1px solid #fff;
            outline: none;
            background: transparent;
        }
.login-box .user-box label{
            position:relative;
            left:0;
            top: -60px;
            padding: 10px 0;
            font-size: 16px;
            color:white;
            pointer-events: none;
            transition: .5s;
}
```

```
.login-box .user-box input:focus~label,
.login-box .user-box input:valid~label {
        top: -85px;
        left: 0;
        color: #BF7CEC;
        font-size: 12px;
}
 #sumbit{
        padding: 10px 20px;
        color: #CBBDDB;
        font-size: 16px;
        text-decoration: none;
        text-transform: uppercase;
        overflow: hidden;
        transition: .5s;
        letter-spacing: 5px;
        border: 1px solid #8F7CEC;
        margin: auto;
}
 #sumbit:hover {
        background: #8F7CEC;
        color: #fff;
        border-radius: 5px;
        box-shadow: 0 0 5px #8F7CEC, 0 0 25px #8F7CEC, 0 0 50px #8F7CEC, 0 0 100px #8F7CEC;
```

```
 }
.button-form{
        display: flex;
flex-direction: row;
        margin-top: 20px;
}
</style>
```



7.2 FEATURE-2:

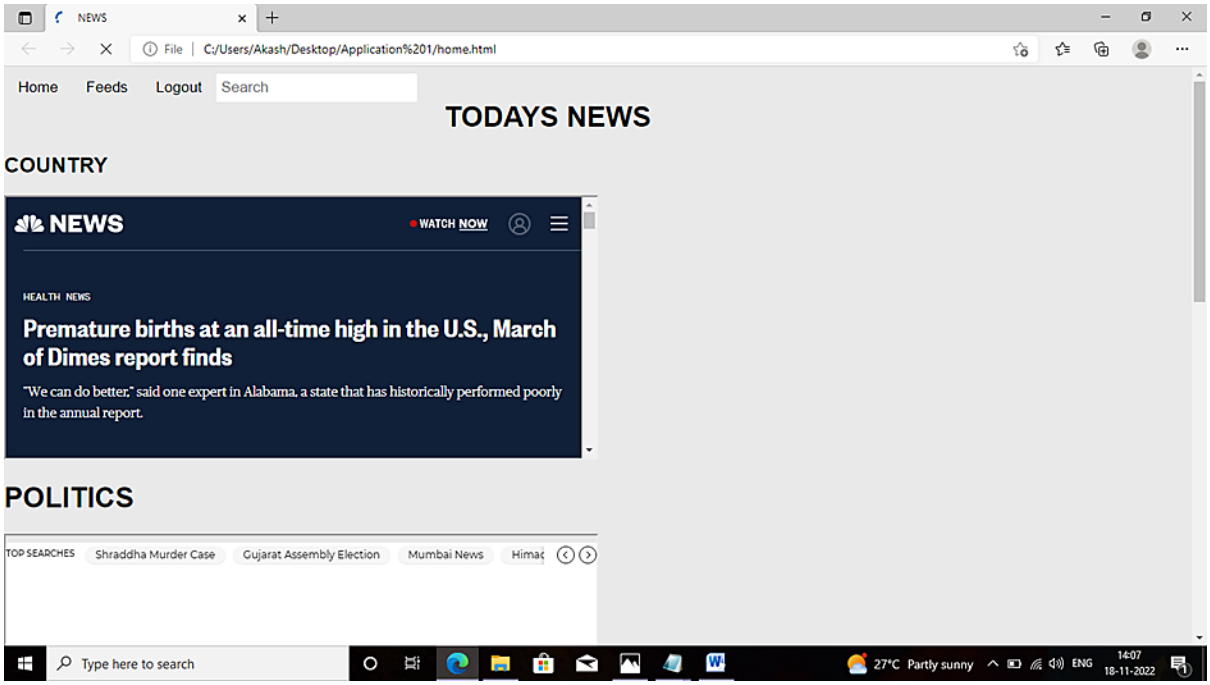
HOME.HTML:

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>NEWS</title>
</head>
<body>
        <div class="topnav">
                <a href="index.html">Home</a>
                <a href="Current Feeds">Feeds</a>
   <a href="Logout.html">Logout</a>
   <input type="text" placeholder="Search"
        </div> <br></body>
<body>
<div class="top">
<h1>TODAYS NEWS</h1>
<h2>COUNTRY</h2>
<iframe src="https://www.nbcnews.com/health/health-news/premature-births-time-high-us-march-dimes-report-finds-rcna57451"  style="height:300px;width:50%" ></iframe>
</div>
<style >
.top h1
{
  margin-left: 500px;
}
</style>
<div class="top1">
<h1>POLITICS</h1>
```

```
<iframe src="https://timesofindia.indiatimes.com/city/chennai/kashi-tamil-sangamam-will-revive-cultural-ties-tn-governor/articleshow/95584818.cms"
style="height:300px;width:50%" ></iframe>

<br><br></div>

<h1>SHARE MARKET</h1>

<iframe src="https://www.ft.com/content/74c408e3-fb07-42d6-bd74-3354eb748afb"
style="height:300px;width:50%" ></iframe>

<br><br>

<h1>SPORTS</h1>

<iframe src="https://indianexpress.com/section/sports/" style="height:300px;width:50%"
></iframe>

</body>

</html>

<style>

        * {box-sizing: border-box;}

body {

  margin: 0;

  font-family: Arial, Helvetica, sans-serif;

  background-color: #8FBC8B;

}

.topnav {

  overflow: hidden;

  background-color: #e9e9e9;

}

.topnav a {

  float: left;

  display: block;

  color: black;

  text-align: center;

  padding: 14px 16px;
```

```
  text-decoration: none;
  font-size: 17px;
}
.topnav a:hover {
  background-color: #ddd;
  color: black;
}
.topnav a.active {
  background-color: #2196F3;
  color: white;
}
.topnav input[type=text] {
  float: left;
  padding: 6px;
  margin-top: 8px;
  margin-right: 18px;
  border: none;
  font-size: 17px;
}
@media screen and (max-width: 600px) {
  .topnav a, .topnav input[type=text] {
    float: none;
    display: block;
    text-align: left;
    width: 100%;
    margin: 0;
    padding: 14px;
  }
```

```
  .topnav input[type=text] {
    border: 1px solid #ccc;
  }
}
          }
  </style>
```



LOGIN.HTML:

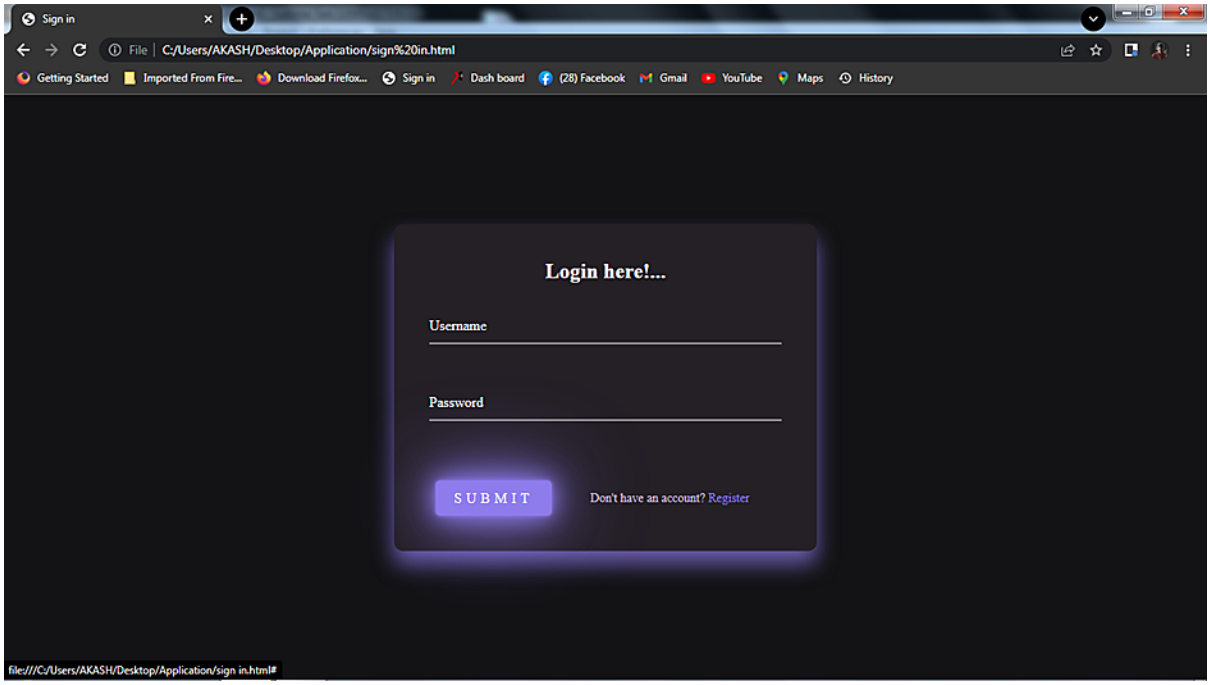
```
<!DOCTYPE html>
<html>
```

```
<head>
	<title>Login</title>
</head>
<body>
	<div class="login-box">
		<h2>Login here!...</h2>
		<form>
			<div class="user-box">
				<input type="text" name="" required="">
				<label>Username</label>
			</div>
			<div class="user-box">
				<input type="password" name="" required="">
				<label>Password</label>
			</div>
<div class="button-form">
				<a id="sumbit" href="#">Submit</a>
				<div id="register">Don't have an account?
					<a href="register.html">Register</a>
				</div>
			</div>
		</form>
	</div>
</body>
</html>
<style>
	.{
		box-sizing: border-box;
	}
```

```
body{
        background:#131315;
        font-family: var(--font-style);
    }
.login-box{
        position: absolute;
        top: 50%;
        left: 50%;
        width: 400px;
        padding: 40px;
        transform: translate(-50%, -50%);
        background: #242026;
        box-shadow: 0 15px 25px rgba(143, 124, 236, 0.7);
        border-radius: 10px;
    }
.login-box h2{
        margin: 0 0 30px;
        padding: 0;
        color: #fff;
        text-align: center;
    }
.login-box .user-box input{
        position: relative;
        width: 100%;
        padding: 10px 0;
        font-size: 16px;
        color: #fff;
        margin-bottom: 30px;
        border: none;
```

```
                border-bottom: 1px solid #fff;
                outline: none;
                background: transparent;
        }
.login-box .user-box label{
                position:relative;
                left:0;
                top: -60px;
                padding: 10px 0;
                font-size: 16px;
                color:white;
                pointer-events: none;
                transition: .5s;
}
.login-box .user-box input:focus~label,
.login-box .user-box input:valid~label {
        top: -85px;
        left: 0;
        color: #BF7CEC;
        font-size: 12px;
}
 #sumbit{
        padding: 10px 20px;
        color: #CBBDDB;
        font-size: 16px;
        text-decoration: none;
        text-transform: uppercase;
        overflow: hidden;
        transition: .5s;
```

```
        letter-spacing: 5px;
        border: 1px solid #8F7CEC;
        margin: auto;
}
 #sumbit:hover {
        background: #8F7CEC;
        color: #fff;
        border-radius: 5px;
        box-shadow: 0 0 5px #8F7CEC, 0 0 25px #8F7CEC, 0 0 50px #8F7CEC, 0 0 100px
#8F7CEC;
 }
.button-form{
        display: flex;
        flex-direction: row;
        margin-top: 20px;
}
#register{
        font-size: 14px;
        text-decoration: none;
        color: #CBBDDB;
        margin: auto;
        width: 60%;
        text-align: center;
}
#register a{
        margin: auto;
        color: #8F7CEC;
        text-decoration: none;
}
</style>
```



7.3 STEPS TO CREATE IBM DB2 AND CONNECTION WITH PYTHON

STEP 1: Import the ibm_db Python library:

!pip install --force-reinstall ibm_db==3.1.0 ibm_db_sa==0.3.7 import ibm_db

STEP 2: Identify the database connection credentials:

dsn_hostname = "2d46b6b4-cbf6-40eb-bbce 6251e6ba0300.bs2io90l08kqb1od8lcg.databases.appdomain.cloud"

dsn_uid = "vjd29721" dsn_pwd = "6TTgx8MRBzT45o3q" dsn_driver = "{IBM DB2 ODBC DRIVER}" dsn_database = "BLUDB"

e.g. "BLUDB" dsn_port = "32328" # e.g. "32733" dsn_protocol = "TCPIP" # i.e. "TCPIP" dsn_security = "SSL" #i.e. "SSL"

STEP 3: Create the DB2 database connection:

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) print(dsn) Now establish the connection to the database 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()) server = ibm_db.server_info(conn)

print ("DBMS_NAME: ",

server.DBMS_NAME) print ("DBMS_VER: ",

server.DBMS_VER) print ("DB_NAME: "

, server.DB_NAME)

client = ibm_db.client_info(conn)

print ("DRIVER_NAME: ", client.DRIVER_NAME) print

("DRIVER_VER: ", client.DRIVER_VER) print (

"DATA_SOURCE_NAME: ", client.DATA_SOURCE_NAME) print

("DRIVER_ODBC_VER: ", client.DRIVER_ODBC_VER) print

("ODBC_VER: ", client.ODBC_VER) print ("ODBC_SQL_CONFORMANCE: ", client.ODBC_SQL_CONFORMANCE) print ("APPL_CODEPAGE: ",

client.APPL_CODEPAGE) print

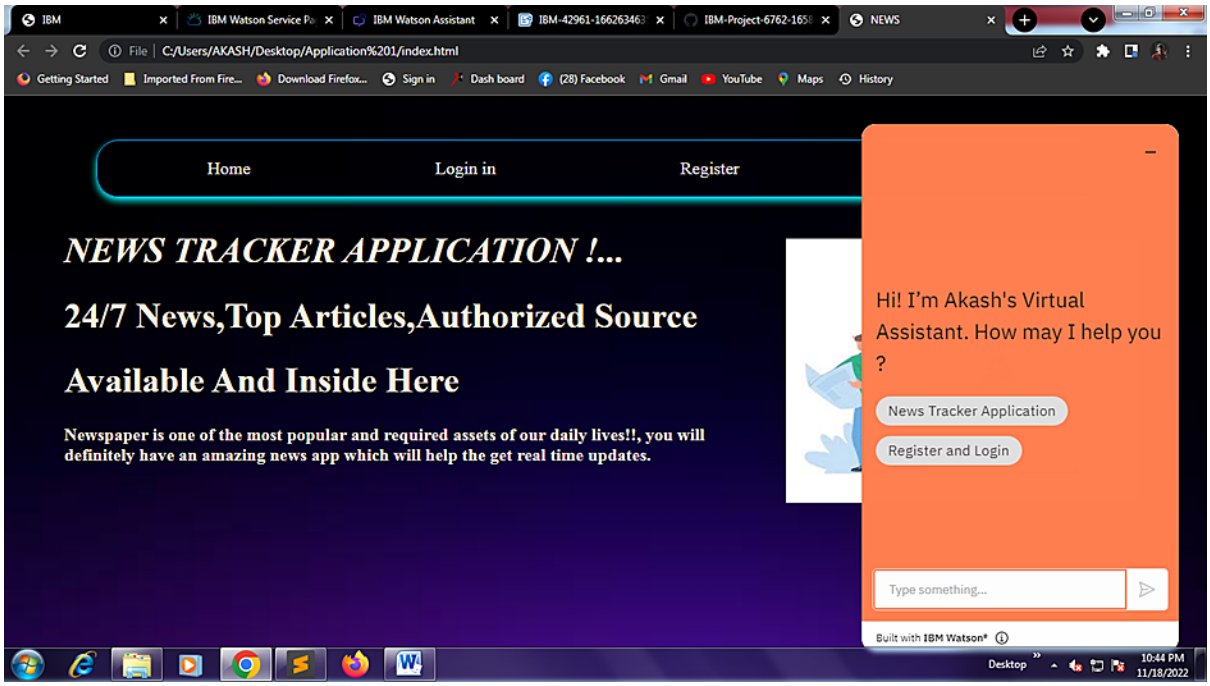
("CONN_CODEPAGE: ", client.CONN_CODEPAGE)

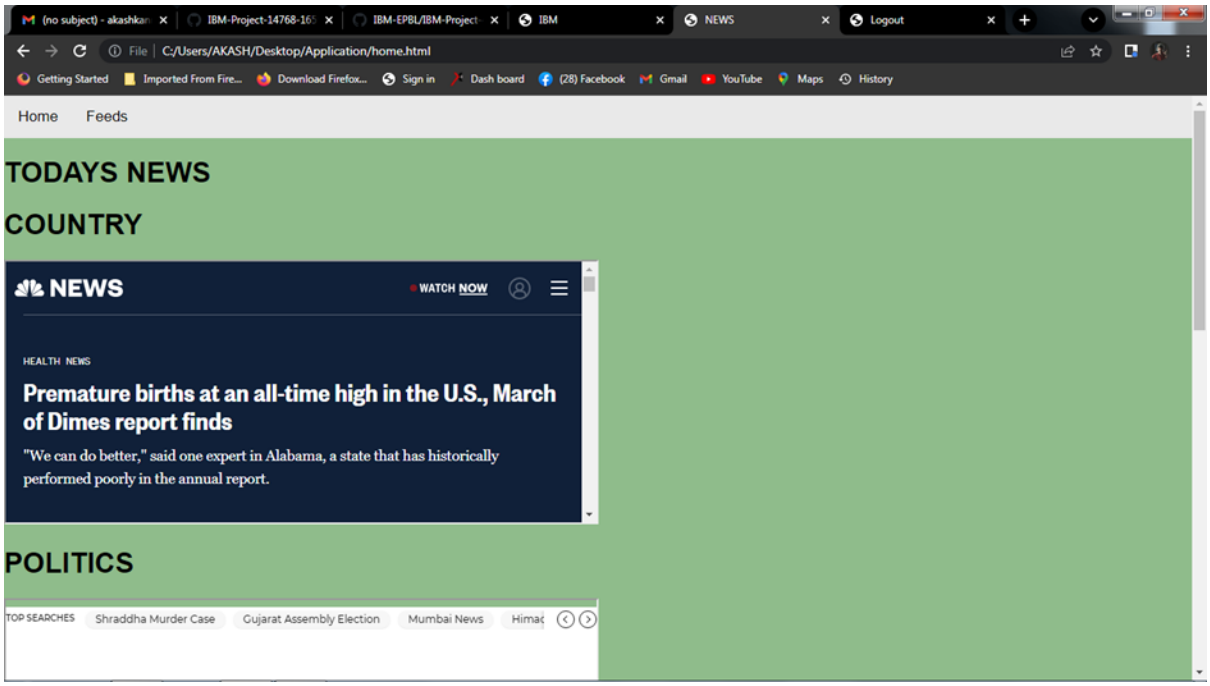
STEP 4: Close the Connection:

ibm_db.close(conn

8. TESTING

8.1 TEST CASES:


Home
Login in
Register
NEWS TRACKER APPLICATION !...
24/7 News,Top Articles,Authorized Source Available And Inside Here
Newspaper is one of the most popular and required assets of our daily lives!!, you will definitely have an amazing news app which will help the get real time updates.
Hi! I'm Akash's Virtual Assistant. How may I help you ?
News Tracker Application
Register and Login
Type something...
Built with IBM Watson

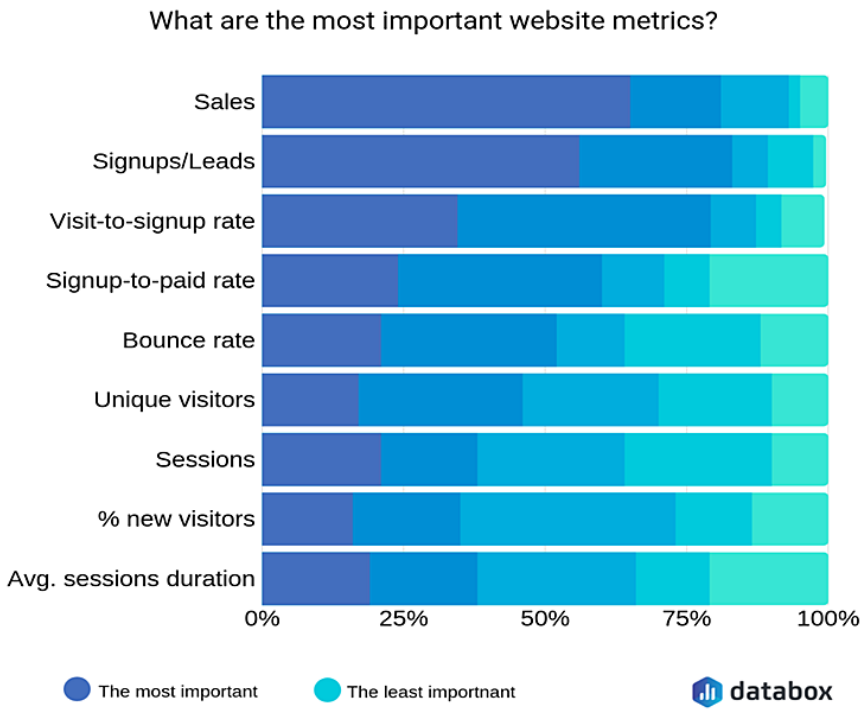

Home
Feeds
TODAYS NEWS
COUNTRY
NEWS
WATCH NOW
HEALTH NEWS
Premature births at an all-time high in the U.S., March of Dimes report finds
"We can do better," said one expert in Alabama, a state that has historically performed poorly in the annual report.
POLITICS
TOP SEARCHES
Shraddha Murder Case
Gujarat Assembly Election
Mumbai News

9. RESULTS

9.1 PERFORMANCE METRICS:

The performance of a recommendation algorithm is evaluated by using some specific metrics that indicate the accuracy of the system. There are three main website metrics that digital marketers should put emphasis on when analysing a website's performance. These are bounce rate, average time on page and unique visitors.

The more traffic your website gets, the better it is. Online businesses evaluate the performance of their website through tools. It is important to analyse and keep track of your website's performance so that you improve it, as needed.



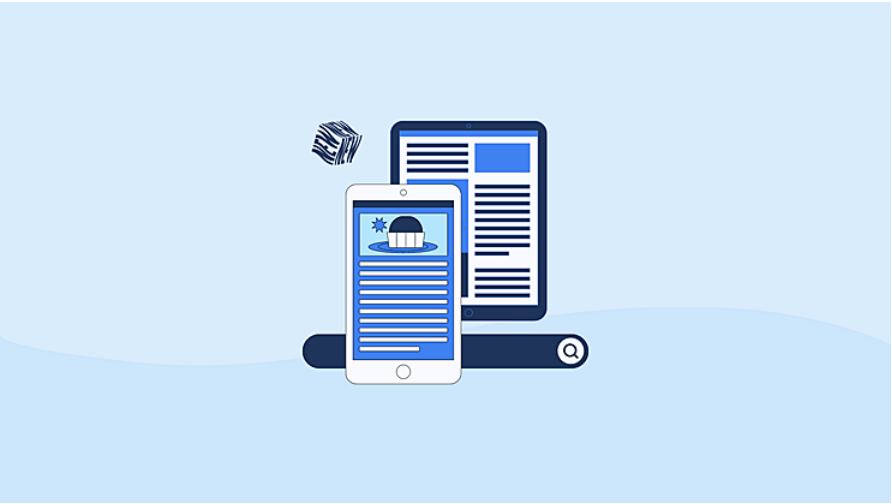
10. ADVANTAGES & DISADVANTAGES

ADVANTAGES:

1. Easier to Access: News Tracker Application is faster and easier to access.
2. Cost-Efficient.
3. Boon for marketers.
4. Much more immediate and up to date.
5. 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.

DISADVANTAGES:

1. Graphics and photos do not always appear. A news feeder has been designed to strip down articles from all the frills to ensure optimal readability – fine in theory, a bit cumbersome in practice.
2. Content can easily be copied. Content drives the Internet.
3. Tracking subscribers and the previous read news is difficult.



11. CONCLUSION

The News Tracker Application has the features of storing the news which we are previously read. This makes the storage of the news and we can take the news and we can refer on it. It increases the usage of web news feeds to read and store their news which will available in database. Future of the news feed and trackers will be in the more useful to students and young generation. We would be applying system for sports domain, if time permits would check our approach on politics, entertainment, science and discovery, etc.

12. FUTURE SCOPE

In the future, to implement this recommendation system to be extended in library news collections will be focused on local needs and interests; they will rely more on database aggregators; and focus more on access rather than ownership. Libraries will become an important source for access to news only available behind pay walls or no longer available on the Internet.

Developments shaping digital journalism seem to speeding up at the start of the 21st century. Social media enable radical new ways to gather and verify sources and information. Hardware and software power innovative storytelling formats, combining platforms and channels, adding interactivity to the news experience.

13. APPENDIX

SOURCE CODE:

INDEX.HTML

```
<html>

<head>

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

<title>NEWS</title>

<script>

  window.watsonAssistantChatOptions = {

    integrationID: "d8fb5ff9-88ef-4bba-b5fb-3ba3021c90d9", // The ID of this integration.

    region: "eu-gb", // The region your integration is hosted in.

    serviceInstanceID: "d249a956-0a3a-4d11-aaa2-740243cbb187", // 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>

</head>

<body>
```

```
<nav>
<a href="home.html">Home</a>
<a href="sign in.html">Login in</a>
<a href="register.html">Register</a>
<a href="feedback.html">Feedback</a>
</nav>
<img src="images (1).jpeg">
<h1><i> NEWS TRACKER APPLICATION !...</i></h1>
 <h1>24/7 News,Top Articles,Authorized Source</h1>
 <h1>Available And Inside Here</h1>
    <h4>Newspaper is one of the most popular and required assets of our daily lives!!,
            you will definitely have an amazing news app which will help the get real time updates.
          </h4>
</body>
</htmL>
```

STYLE.CSS

```
body{
    text-align: left;
    font-size: 20px;
    margin: 5%;
    background: white;
    margin-top: 50px;
    background-color: #131315;
```

```
    background-repeat: no-repeat;
    background-size: cover;
    color: antiquewhite;
    background-image: url(black.jpeg);
  }
nav{
    margin: 3%;
    width: 1100px;
    display:  flex;
    flex-direction: row;
    border-radius: 25px;
    list-style: none;
    padding: 20px;
    border: 0.1px solid #099FFF;
    box-shadow: 0 4px 8px 0 #00FFFF, 0 6px 20px 0 rgba(0,0,0,0.19);
    text-align: right;
    position: right;
}
a{
    margin: auto;
    color: whitesmoke;
    font-size: 20px;
    cursor: pointer;
    text-decoration: none;
}
```

```
img{
    float: right;
    width: 400px;
    height: 300px;
    margin: 10px;
}
@media screen and (max-width: 600px){
    nav, a{
            float: none;
    display: block;
    text-align: left;
    width: 100%;
    margin: 0;
    padding: 14px;
    }
}
```

APP.PY:

```
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-4883-8fc0-d6a8c9f7a08f.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=31321;USERNAME=nnr87238;PASSWORD=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(prep_stmt, 1, username)
            ibm_db.bind_param(prep_stmt, 2, email)
            ibm_db.bind_param(prep_stmt, 3, password)
            ibm_db.execute(prep_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')
```

REGISTER.HTML:

```
<!DOCTYPE html>

<html>

<head>

        <meta charset="utf-8">

        <meta name="viewport" content="width=device-width, initial-scale=1">

        <title>Register</title>

</head>

<body>

        <div class="login-box">

                <h2>REGISTERATION</h2>

                <form>

<div class="user-box">

                                <input type="text" name="" required="">

                                <label>Enter Your Username:</label>

                        </div>

<div class="user-box">

                                <input type="text" name="" required="">

                                <label>Enter Your Email id:</label>

                        </div>

<div class="user-box">
```

```
                                <input type="password" name="" required="">
                                <label>Enter Your Password:</label>
<div class="button-form">
                                <a id="sumbit" href="#">Submit</a>
                        </div>
                </div>
        </form>
</div>
</body>
</html>
<style>
        body{
                background:#131315;
                background-repeat: no-repeat;
   background-size: cover;
   opacity: 0.5;
}
.login-box{
                height: 500px;
                position: absolute;
                top: 50%;
                left: 50%;
                width: 400px;
                padding: 40px;
                transform: translate(-50%, -50%);
```

```
                background: #242026;
                box-shadow: 0 15px 25px rgba(143, 124, 236, 0.7);
                border-radius: 10px;
}
.login-box h2{
                margin: 0 0 30px;
                padding: 0;
                color: #fff;
                text-align: center;
        }
.login-box .user-box input{
                position: relative;
                width: 100%;
                padding: 10px 0;
                font-size: 16px;
                color: #fff;
                margin-bottom: 30px;
                border: none;
                border-bottom: 1px solid #fff;
                outline: none;
                background: transparent;
        }
.login-box .user-box label{
                position:relative;
                left:0;
```

```
                top: -60px;
                padding: 10px 0;
                font-size: 16px;
                color:white;
                pointer-events: none;
                transition: .5s;
}
.login-box .user-box input:focus~label,
.login-box .user-box input:valid~label {
        top: -85px;
        left: 0;
        color: #BF7CEC;
        font-size: 12px;
}
 #sumbit{
        padding: 10px 20px;
        color: #CBBDDB;
        font-size: 16px;
        text-decoration: none;
        text-transform: uppercase;
        overflow: hidden;
        transition: .5s;
        letter-spacing: 5px;
        border: 1px solid #8F7CEC;
        margin: auto;
```

```
}
 #sumbit:hover {
        background: #8F7CEC;
        color: #fff;
        border-radius: 5px;
        box-shadow: 0 0 5px #8F7CEC, 0 0 25px #8F7CEC, 0 0 50px #8F7CEC, 0 0 100px #8F7CEC;
 }
.button-form{
        display: flex;
flex-direction: row;
        margin-top: 20px;
}
</style>
```

HOME.HTML:

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>NEWS</title>
</head>
<body>
        <div class="topnav">
                <a href="index.html">Home</a>
```

```
                    <a href="Current Feeds">Feeds</a>
    <a href="Logout.html">Logout</a>
    <input type="text" placeholder="Search"
          </div> <br></body>
<body>
<div class="top">
<h1>TODAYS NEWS</h1>
<h2>COUNTRY</h2>
<iframe src="https://www.nbcnews.com/health/health-news/premature-births-time-high-us-march-dimes-report-finds-rcna57451"  style="height:300px;width:50%" ></iframe>
</div>
<style >
.top h1
{
  margin-left: 500px;
}
</style>
<div class="top1">
<h1>POLITICS</h1>
<iframe src="https://timesofindia.indiatimes.com/city/chennai/kashi-tamil-sangamam-will-revive-cultural-ties-tn-governor/articleshow/95584818.cms"
style="height:300px;width:50%" ></iframe>
<br><br></div>
<h1>SHARE MARKET</h1>
<iframe src="https://www.ft.com/content/74c408e3-fb07-42d6-bd74-3354eb748afb"
style="height:300px;width:50%" ></iframe>
<br><br>
```

```
<h1>SPORTS</h1>

<iframe src="https://indianexpress.com/section/sports/" style="height:300px;width:50%"
></iframe>

</body>

</html>

<style>

        * {box-sizing: border-box;}

body {

  margin: 0;

  font-family: Arial, Helvetica, sans-serif;

  background-color: #8FBC8B;

}

.topnav {

  overflow: hidden;

  background-color: #e9e9e9;

}

.topnav a {

  float: left;

  display: block;

  color: black;

  text-align: center;

  padding: 14px 16px;

  text-decoration: none;

  font-size: 17px;

}
```

```
.topnav a:hover {
  background-color: #ddd;
  color: black;
}
.topnav a.active {
  background-color: #2196F3;
  color: white;
}
.topnav input[type=text] {
  float: left;
  padding: 6px;
  margin-top: 8px;
  margin-right: 18px;
  border: none;
  font-size: 17px;
}
@media screen and (max-width: 600px) {
  .topnav a, .topnav input[type=text] {
    float: none;
    display: block;
    text-align: left;
    width: 100%;
    margin: 0;
    padding: 14px;
  }
```

```
  .topnav input[type=text] {
    border: 1px solid #ccc;
  }
}
          }
  </style>
```

LOGIN.HTML:

```
<!DOCTYPE html>
<html>
<head>
        <title>Sign in</title>
</head>
<body>
        <div class="login-box">
                <h2>Login here!...</h2>
                <form>
                        <div class="user-box">
                                <input type="text" name="" required="">
                                <label>Username</label>
                        </div>
                        <div class="user-box">
                                <input type="password" name="" required="">
                                <label>Password</label>
                        </div>
<div class="button-form">
                                <a id="sumbit" href="#">Submit</a>
```

```
                        <div id="register">Don't have an account?
                            <a href="register.html">Register</a>
                        </div>
                    </div>
                </form>
            </div>
</body>
</html>
<style>
        .{
            box-sizing: border-box;
        }
body{
            background:#131315;
            font-family: var(--font-style);
        }
.login-box{
            position: absolute;
            top: 50%;
            left: 50%;
            width: 400px;
            padding: 40px;
            transform: translate(-50%, -50%);
            background: #242026;
            box-shadow: 0 15px 25px rgba(143, 124, 236, 0.7);
            border-radius: 10px;
        }
```

```
.login-box h2{
                margin: 0 0 30px;
                padding: 0;
                color: #fff;
                text-align: center;
        }
.login-box .user-box input{
                position: relative;
                width: 100%;
                padding: 10px 0;
                font-size: 16px;
                color: #fff;
                margin-bottom: 30px;
                border: none;
                border-bottom: 1px solid #fff;
                outline: none;
                background: transparent;
        }
.login-box .user-box label{
                position:relative;
                left:0;
                top: -60px;
                padding: 10px 0;
                font-size: 16px;
                color:white;
                pointer-events: none;
                transition: .5s;
```

```
}
.login-box .user-box input:focus~label,
.login-box .user-box input:valid~label {
        top: -85px;
        left: 0;
        color: #BF7CEC;
        font-size: 12px;
}
 #sumbit{
        padding: 10px 20px;
        color: #CBBDDB;
        font-size: 16px;
        text-decoration: none;
        text-transform: uppercase;
        overflow: hidden;
        transition: .5s;
        letter-spacing: 5px;
        border: 1px solid #8F7CEC;
        margin: auto;
}
 #sumbit:hover {
        background: #8F7CEC;
        color: #fff;
        border-radius: 5px;
        box-shadow: 0 0 5px #8F7CEC, 0 0 25px #8F7CEC, 0 0 50px #8F7CEC, 0 0 100px
#8F7CEC;
 }
```

```
.button-form{
        display: flex;
        flex-direction: row;
        margin-top: 20px;
}
#register{
        font-size: 14px;
        text-decoration: none;
        color: #CBBDDB;
        margin: auto;
        width: 60%;
        text-align: center;
}
#register a{
margin: auto;
        color: #8F7CEC;
        text-decoration: none;
}
</style>
```

LOGOUT.HTML:

```
<!DOCTYPE html>
<html>
<head>
        <title>Logout</title>
</head>
<body>
<h2> Logout Successfully !...</h2><br>
```

```
<h3> Login for the information.</h3>
<div class="top">
<a id="sumbit" href="sign in.html">Login</a>
</body>
</html>

<style>
	body{
		background: white;
		text-align: center;
		text-decoration: none;
	}
.top a{
	font-color: white;
	text-transform: uppercase;
	text-decoration: none;
	padding: 10px 20px;
}
```

```
#sumbit:hover {
        background: #8F7CEC;
        color: #fff;
        border-radius: 5px;
            box-shadow: 0 0 5px #8F7CEC, 0 0 25px #8F7CEC, 0 0 50px #8F7CEC, 0 0 100px #8F7CEC;
}
</style>
```

GITHUB & PROJECT DEMO LINK

GITHUB LINK: **https://github.com/IBM-EPBL/IBM-Project-42961-1660711662**

DEMO LINK: **https://www.youtube.com/embed/XmUjF4lXeZU**