

NEWS TRACKER APPLICATION USING CLOUD

TEAM ID – PNT2022TMID12507

1. INTRODUCTION

1.1. Problem Statement

In today's hectic world, reading newspaper has become one of the traditional ways of reading the news. With the news being created every minute and relayed through TV, radio and internet, the updated news is already old by the next morning. At this digital age, people are captivated by smartphones or other mobile devices. They want all necessitous information to be found at their fingertips.

1.2. Proposed Solution

News Tracker is an application designed to enhance and optimize the way that a user interacts with news stories. This is achieved primarily using a search engine that connects to News API which allows the user to narrow-down the content of their results.

1.3. Technologies

1.3.1. API

API (Application Programming Interface) is an intermediate between the interface and different applications. News API is used to gather news from different resources at a single place. In response it sends description, image URL, article URL etc.

1.3.2. Flask

Flask is a lightweight Python web framework that provides useful tools and features for creating web applications in the Python Language. It gives developers flexibility and is an accessible framework for new developers because you can build a web application quickly using only a single Python file.

1.3.3. IBM Db2

Db2 is a family of database management system (DBMS) products from IBM that serve several different operating system (OS) platforms. Used by organizations of all sizes, Db2 provides a data platform for both transactional and analytical operations, as well as continuous availability of data to keep transactional workflows and analytics operating efficiently.

1.4. Components and Technologies

S. No.	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

1.5. Application Characteristics

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used

2. LITERATURE SURVEY

A News Application Based on the Computer Language Application Framework

This paper highlights that as of now, no news application is basically focused towards college students, which makes it challenging for undergrads with enormous interest in news to get the most recent real-time data. The "look around" application is focused on making a model that passes the real name verification of college students in the front end and stores it the backend database, which give exact data about college

students, and affirm the identity of the news parties and observers through validating information. For the application, the Author used Dubbo, layer UI and respond JS to make and work on the framework. This advancement needs to deliver local application and web application separately, and the languages needed for implementing both are HTML and Java.

Web Application Content News Aggregator on Communication Devices Based on Android

In this paper, the author did research on application of web content News Aggregator communication devices based on Android to retrieve information or news from a site that is formatted XML and in accordance with the wishes of the user. Communication devices are intermediaries in the delivery of information to the communicant. Programmers are increasingly competing to develop the technology to provide the news as a field for their business. The method used for the news service is a syndicated technology, known as Really Simple Syndication. Really Simple Syndication is a technique used to collect

and unify the content of an article from a website. The author suggested that in order to retrieve information or news of an XML formatted site then the user must add the site to the web content news.

Aggregator application on Android-based communication devices. The second thing is that the addition of new RSS address of the user should know in advance the RSS address of a web which will be added into the application of web content News Aggregator communication devices based on Android.

Serverless Stock Market Web Application

The authors have discussed that recent advancements in stock market technology and trading applications have drawn in more individual financial investors to put resources in the stock market. As the monetary market dataset is enormous and changing quickly this paper targets building integrative web applications with advanced technologies like

cloud computing and machine learning framework. The web application is developed in a Microservice engineering with the utilization of React JS as frontend and Python Flask as a backend administration. The web application is facilitated on AWS server less

framework to give accessibility, adaptability and scalability utilizing the Docker container. To make stock forecast more exact, learning algorithm was assessed and coordinated into the stock web application. The result of this web application will give extensive and important data to the clients like verifiable stock information, financial reports, expert evaluations, monetary news, organization data and expectation of stocks.

Curate: A news app for the millennial news consumers

In this paper, the author developed an interactive news application which operates with smooth switching among categories, countries, etc. This news application basically extracts the news articles from different platforms onto a single place. This is basically designed in a simple way so that all the types of users can use the app easily. Offline reading can be introduced in the app as it will help the user to access the articles without the internet and during low connectivity. A favourite option will be added to save the articles for future need. The Opinion section will enable the user to add their opinions under the

articles. More personalization options will be added for the interface which the user can access as per the need. For creating this application, the author used flutter and developed interactive user interface that will get connected to API and Admin Panel which provides the exact full article in the web view.

2.1. References

- Zhang, Zhiheng, and Qinghai Wu. "A News Application Based on the Computer Language Application Framework." In International Conference on Machine

Learning and Big Data Analytics for IoT Security and Privacy, pp. 907-912.
Springer, Cham, 2021.

- Merry, Agustina, and Usman Usman Ependi. "Web Application Content News Aggregator on Communication Devices Based On Android." Web Application Content News Aggregator on Communication Devices Based On Android (2022).
- Kamdar, Priyanka. "Serverless Stock Market Web Application." (2022).
- Yadav, Chirag, Ayushi Verma, Abhishek Singh, and Manish Bhardwaj. "Curate: A news app for the millennial news consumers."

3. IDEATION & PROPOSED SOLUTION

3.1. Empathy Map Canvas



3.2. Ideation & Brainstorming

1

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

5 minutes

Problem:

How can we make it easier for people to find their way around the city?

Key rules of brainstorming

To run an effective and productive session:

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- Go for volume.
- Remember the rules.

2

Brainstorm

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

10 minutes

Tip: You don't need a crazy idea. You just need a good one. It doesn't have to be perfect.

Group 1: How can we make it easier for people to find their way around the city?

Group 2: How can we make it easier for people to find their way around the city?

Group 3: How can we make it easier for people to find their way around the city?

Group 4: How can we make it easier for people to find their way around the city?

3

Group ideas

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

20 minutes

Tip: You don't need a crazy idea. You just need a good one. It doesn't have to be perfect.

Intents:

Notification:

User Interface:

Functionalities:

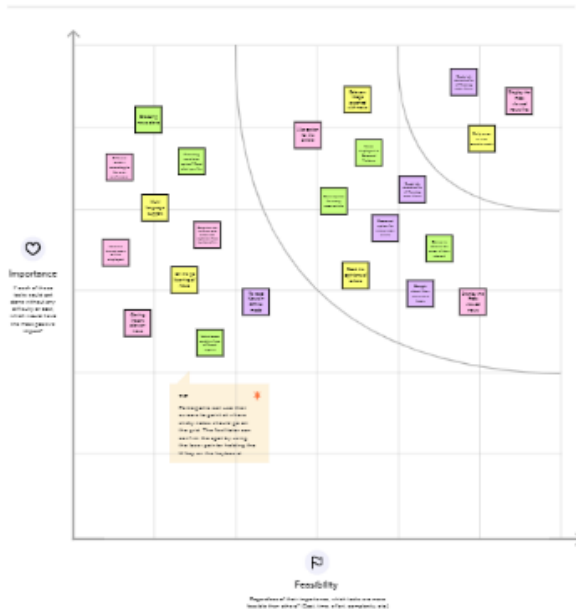
Location:

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.

30 minutes



5

After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

Quick add-ons

- ☐ **Share the mural**
Share a link to the mural with others so they can keep track of the progress of the session.
- ☐ **Export the mural**
Export a copy of the mural as a PDF or PPT to share with others. Includes a link to the mural in your email.

Keep moving forward

- ☐ **Strategy blueprint**
Define the components of a new idea or strategy.
- ☐ **Customer experience journey map**
Create a visual representation of the customer journey and experiences for an experience.
- ☐ **Strategic, performance, opportunities & threats**
Identify strategic, performance, opportunities, and threats (SWOT) to the business.

[Show template feedback](#)

3.3. Proposed Solution

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To develop an application that helps to track day-to-day news.
2.	Idea / Solution description	The main focus of this application is to connect news articles from all around the world and deliver it to users as fast as possible in the best visualized way.
3.	Novelty / Uniqueness	Single tab dedicated for all trending news stories, display the most viewed news first and daily news as one minute reads.
4.	Social Impact / Customer Satisfaction	Customers can strengthen their vocabulary, stay connected with the world and enrich their knowledge.
5.	Business Model (Revenue Model)	A special TV program which quickly summarizes everything especially for the people with hectic schedules.
6.	Scalability of the Solution	The developer will have the privilege to extend the functionalities of the application even after the deployment of the application.

3.4. Problem Solution fit

Define CS, fit into	1. CUSTOMER SEGMENT(S) CS Users	6. CUSTOMER LIMITATIONS CC Available devices Data/wi-fi is needed to get news online	5. AVAILABLE SOLUTIONS AS News given in the form of newspaper Lively update of news in television Important news available and posted in created website	Explore AS,
Focus on J&P, tap into BE, understand	2. JOBS-TO-BE-DONE / PROBLEMS PR To display latest news To add news time to time To queue next news To delete or put a rectification message as audio in case of any false news To give priority to important news	9. PROBLEM ROOT / CAUSE RC Difficult for offline users to access news anytime	7. BEHAVIOUR BE Get current updates on featured news Get notifications on alerts Views news offline also	Focus on J&P, tap into BE, understand
Identify strong TR & EM	3. TRIGGERS TO ACT TR Negative comments in case of any errors or problems	10. YOUR SOLUTION SL A web application that helps user to keep track of day-to-day important news. Users can view news of their interest based on the filter provided in the app.	8. CHANNELS of BEHAVIOUR CH 8.1 ONLINE Up-to date and time with news overall	Extract online & offline CH of BE
	4. EMOTIONS: BEFORE / AFTER EM Before: Need manual access to information. Lack of awareness After : Gain knowledge anywhere and anyhow. Being aware of current affairs		8.2 OFFLINE Store and save any information if necessary	

4. REQUIREMENT ANALYSIS

4.1. Functional requirements

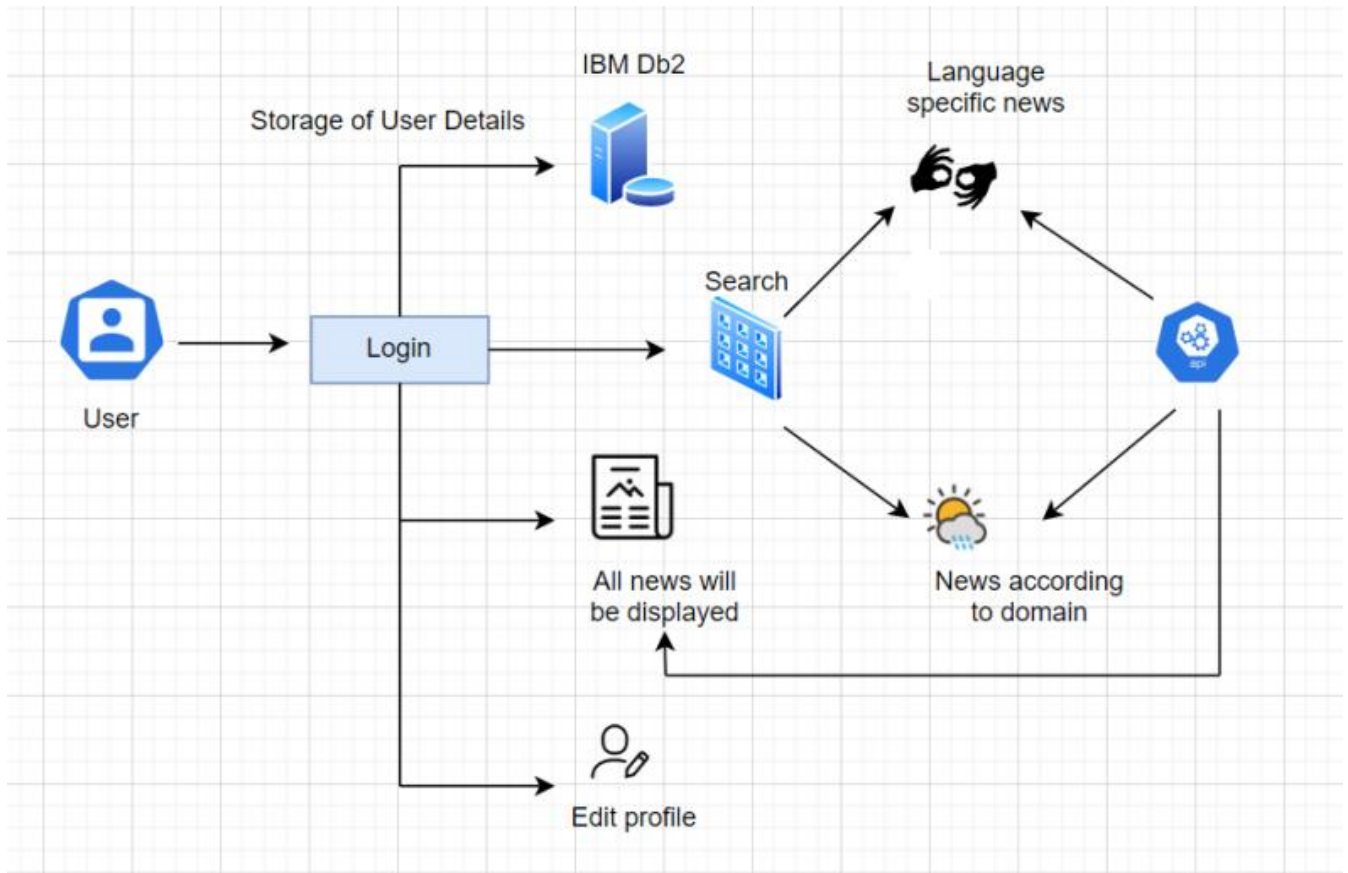
FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through registration form
FR-2	User Confirmation	Confirmation via Email
FR-3	All news feed displayed	The recent news fetched from the API will be displayed to the user.
FR-4	Filter Option	Using filter Option the user can be able to filter the news according to their interest.
FR-5	Search Option	Using Search Option the User can be able to search a particular topic related news.
FR-6	Language Based	The language of the news that are displayed to the user can be changed according to the interest of the user.
FR-7	Edit Profile	The user can be able to edit their profile details whenever needed.

4.2. Non-Functional requirements

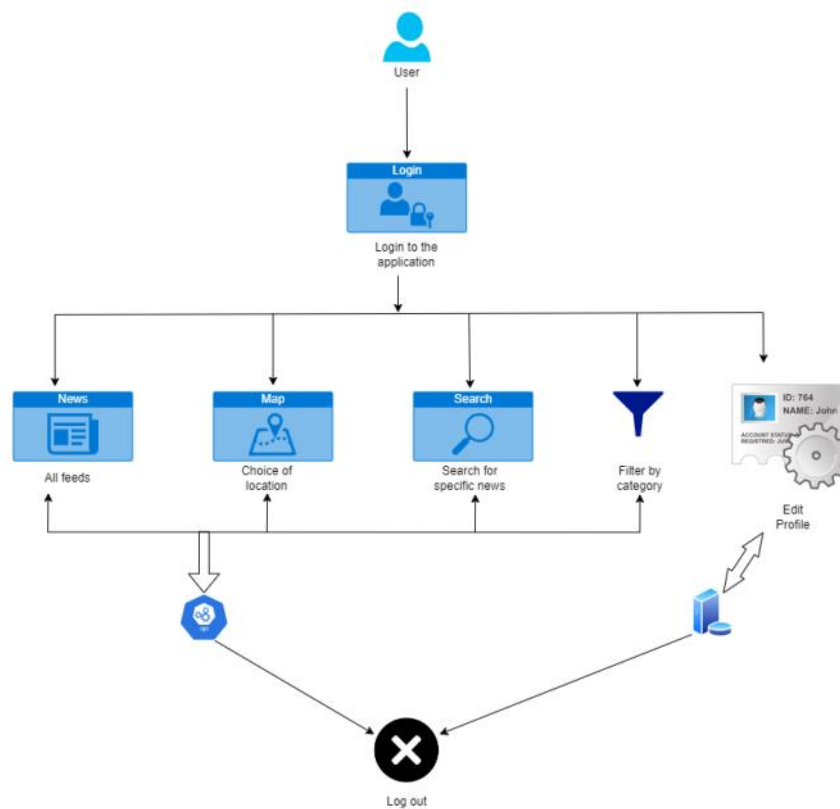
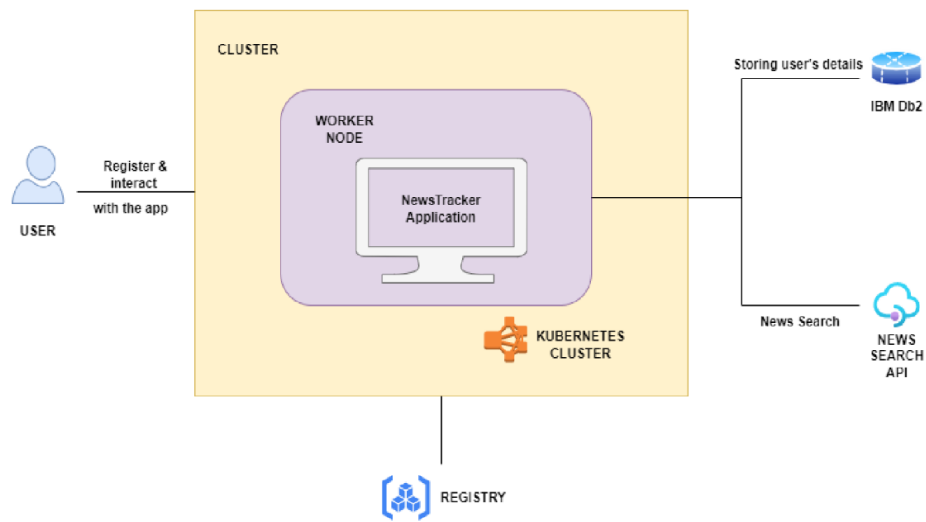
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The UI should be accessible for everyone irrespective of their details like location, language, Interest etc. User should have the flexibility of using the application in any of the devices. Despite of the device the content should be delivered in the correct way.
NFR-2	Security	Only the Authorized users can access the system with their credentials. And no others can able to access the application other than them.
NFR-3	Reliability	<p>The priority for breaking news should be displayed according to their location is first. If it is not available or cannot able to display it then other news should be displayed. That is some kind of news should always be displayed to the user whenever they use the application.</p> <p>The recovery of the application should be immediate such that the downtime of the application should be negligible.</p>
NFR-4	Performance	The performance of the system should be reliable with high-end servers on which the software is running.
NFR-5	Availability	<p>The application should be available to all kind of authorized users all the time.</p> <p>Even when the application needs to be updated the existing modules and their functionalities should be available to the users.</p>
NFR-6	Scalability	The whole software deployed must be easily scalable as the customer base increases.

5. PROJECT DESIGN

5.1. Data Flow Diagram



5.2. Solution & Technical Architecture



5.3. User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story/Task	Acceptance Criteria	Priority	Release
Customer (Web user)	Registration	USN-1	As a user, I can register for the application by entering my username, password and email.	I can access my account / dashboard	High	Sprint-1
	Login	USN-2	As a user, I can log into the application by entering username & password.	I can access my account / dashboard	High	Sprint-1
	Display all news	USN-3	As a user, I can view all day-to-day news.	News fetched from an API can be viewed	High	Sprint-2
	News based on filter	USN-4	As a user, I can view based on the search/filter.	News related to filter will be fetched and displayed.	High	Sprint-3
	Edit profile	USN-5	As a user, I can edit my profile details.	Updated details are stored in the database	Medium	Sprint-2
	Logout	USN-6	As a user, I can log out.	I will be redirected to login page	High	Sprint-1

6. PROJECT PLANNING & SCHEDULING

6.1. Sprint Planning & Estimation

Release	Functional Requirement (Epic)	User Story Number	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.	20	High	Divya Darshini R Harini S Preethika P Swathi Priya M
Sprint-3	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application.	10	High	Divya Darshini R Harini S Preethika P Swathi Priya M
Sprint-2	Registration through Facebook	USN-3	As a user, I can register for the application through Facebook.	20	Medium	Divya Darshini R Harini S Preethika P Swathi Priya M
Sprint-1	Registration through GMail	USN-4	As a user, I can register for the application through Gmail.	20	High	Divya Darshini R Harini S Preethika P Swathi Priya M
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password.	10	High	Divya Darshini R Harini S Preethika P Swathi Priya M

6.2. Sprint Delivery Schedule

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	5	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	9	15 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	8	20 Nov 2022
Sprint	20	6days	20 Nov 2022	22 Nov 2022	11	22 Nov 2022

6.3. Reports from JIRA

NTA Sprint 1

Add dates (2 issues)

000

Start sprint

...

NTA-1 Create new account

TO DO

NTA-2 Create signup and store in db

TO DO

+ Create issue

^

NTA Sprint 3

Add dates (1 issue)

000

Start sprint

...

Creation of Dashboard

NTA-6 Creation of dashboard

TO DO

+ Create issue

⇅

NTA Sprint 4

Add dates (1 issue)

000

Start sprint

...

NTA-7 Display all the news

TO DO

+ Create issue

Get help

NTA Sprint 2

Add dates (2 issues)

000

Start sprint

...

NTA-3 create login page

TO DO

NTA-4 Forgot password and recover

TO DO

+ Create issue

7. CODING & SOLUTIONING

7.1. Signup/Registration

The registration feature of the news tracker application allows external users to register a new user account. Registration is of high priority because only when a user is registered, He/she may be able to log in and use the functionalities.

Signup.html

```
<html>

  <head>

    <title>SIGN UP</title>

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

    <meta charset="utf-8" />

    <link rel="stylesheet" type="text/css" href="{{ url_for('static',
filename='pages.css') }}" />

    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css"/>

    <script src="https://unpkg.com/@lottiefiles/lottie-
player@latest/dist/lottie-player.js"></script>

    <link rel="stylesheet"
href="https://use.fontawesome.com/releases/v5.15.1/css/all.css"
integrity="sha384-
vp86vTRFVJgpjF9jiIGPEEqYqlDwgyBgEF109VFjmqGmIY/Y4HV4d3Gp2irVfcrp"
crossorigin="anonymous">

  </head>

  <body class="body">

    <div class="on-screen">
```

```

    <div class="form">

        <form action="/register" method="POST">

            <input type="text" name="fullname" placeholder="Full Name"
required/>

            <input type="email" name="email" placeholder="Email address"
required/>

            <input type="text" name="username" placeholder="Username"
required/>

            <input type="password" name="password" id="password"
placeholder="Set a password" required/><br>

            <i class="fas fa-eye" onclick="show()"></i><br>

            <h4>{{msg}}</h4><br>

            <button style="width:135px" type="submit">SUBMIT</button>

            <button style="width:135px" type="button"
onclick="window.location.href='/'">LOGIN</button>

        </form>

    </div>

</div>

</body>

<script>

function show()
{
    var password = document.getElementById("password");
    var icon = document.querySelector(".fas");
    if (password.type === "password")
    {
        password.type = "text";

```

```

    }
    else
    {
        password.type = "password";
    }
}

</script>

</html>

```

7.2. Login

The login feature of the news tracker application allows external users to log in to his/her account. This has equal priority to registration because only if the user is registered and logged in, he will be able to access the website and place the order.

login.html

```

<html>
<head>
<title>LOGIN</title>

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

<meta charset="utf-8" />

<link
    rel="stylesheet"
    type="text/css"
    href="{{ url_for('static', filename='pages.css') }}"
/>

<link
    rel="stylesheet"
    href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css"
/>

<script src="https://unpkg.com/@lottiefiles/lottie-
player@latest/dist/lottie-player.js"></script>

```

```

<link
  rel="stylesheet"
  href="https://use.fontawesome.com/releases/v5.15.1/css/all.css"
  integrity="sha384-
vp86vTRFVJgpjF9jiIGPEEqYqlDwgyBgEF109VFjmqGmIY/Y4HV4d3Gp2irVfcrp"
  crossorigin="anonymous"
/>

</head>

<body class="body">
  <div class="on-screen">
    <div class="form">
      <form action="/login" class="innercont" method="POST">
        <br />

        <button
          style="width: 290px;margin-bottom: 24px;"
          type="button"
          onclick="window.location.href='/signup'"
        >
          CREATE AN ACCOUNT</button>
      <br />
      <input
        name="username"
        type="text"
        placeholder="Username"
        required
      />

      <input
        name="password"
        type="password"
        id="password"
        placeholder="Password"
        required
      /><br />

      <i class="fas fa-eye" onclick="show()"></i><br />

      <h4>{{msg}}</h4>
      <br />

```

```

        <button style="width: 135px" type="submit">LOGIN</button>

        <p class="message"></p>
    </form>
</div>
</div>

<script>
    function show() {
        var password = document.getElementById("password");
        var icon = document.querySelector(".fas");
        if (password.type === "password") {
            password.type = "text";
        } else {
            password.type = "password";
        }
    }
</script>
</body>
</html>

```

7.3. Dashboard

The Dashboard feature will display all the famous news channel name. From the user can choose according to their preference. Once they click, it will be directed to the news of the corresponding news channel.

dashboard.html

```

<html>

<head>

    <title>DASHBOARD</title>

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

    <meta charset="utf-8">

```



```

    <link rel="stylesheet" type="text/css" href="{{ url_for('static',
filename='dashboard.css') }}">

    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">

    <script src="https://unpkg.com/@lottiefiles/lottie-
player@latest/dist/lottie-player.js"></script>

    <link rel="stylesheet"
href="https://use.fontawesome.com/releases/v5.15.1/css/all.css"
integrity="sha384-
vp86vTRFVJgpjF9jiIGPEEqYqlDwgyBgEF109VFjmqGmIY/Y4HV4d3Gp2irVfcrp"
crossorigin="anonymous">

</head>

<body class="body">

<div class="on-screen">

    <div class="form">

        <form action="/news" class="innercont" method="POST">

            <h4>Welcome, {{username}}</h4>

            <center><h4>Select one of the below sources.</h4></center>

            <button type="submit" name="newsresource" value="google"></button>

            <button type="submit" name="newsresource" value="bbc"></button><br><br>

            <button type="submit" name="newsresource" value="toi"></button>

```

```

        <button type="submit" name="newsresource" value="abc"></button>

        <p class="message"></p>

    </form>

</div>

</div>

</body>

</html>

```

7.4. Logout

This feature allows customers to log out of his/her account.

7.5. Database Schema

Name	Data type	Nullable	Length	Scale
FULLNAME	VARCHAR	Y	100	0
EMAIL	VARCHAR	Y	500	0
USERNAME	VARCHAR	Y	50	0
PASSWORD	VARCHAR	Y	50	0

8. TESTING

8.1. Test Cases

Test case ID	Feature Type	Component	Test Scenario	Steps To Execute	Expected Result	Status
LoginPage_TC_O1	Functional	Login Page	Verify user is able to see the Login/Registration popup when user enters the site.	1.Enter URL and click go 2.Verify login/Singup popup displayed or not	Login/Signup popup should display	Pass
LoginPage_TC_O2	UI	Login Page	Verify the UI elements in Login/Signup popup	1.Enter URL and click go 2.Verify login/Singup popup with below UI elements: a.name text box b.email text box c.password text box d.Login button e.New customer? Registration link	Application should show below UI elements: a.email text box b.password text box c.Login button with orange colour d.New customer? Create account link e.Last password? Recovery password link	Pass
LoginPage_TC_O3	Functional	Login page	Verify user is able to log into application with Valid credentials	1.Enter URL and click go 2.Enter Valid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button	User should be able to navigate to user account homepage.	Pass
LoginPage_TC_O4	Functional	Login page	Verify user is able to log into application with Invalid credentials	1.Enter URL and click go 2.Enter Invalid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button	Application should show 'Incorrect email or password ' validation message.	Pass

LoginPage_TC_O5	Functional	Login page	Verify user is able to log into application with Invalid credentials	1.Enter URL and click go 2.Enter Valid username/email in Email text box	Application should show 'Incorrect email or password '	Pass
-----------------	------------	------------	--	--	--	------

				4.Enter Invalid password in password text box 5.Click on login button	validation message.	
HomePage_TC_O1	UI	Home page	Verify user is able to navigate to the Prediction page	1.Enter URL and click go 2.Enter Home Page using valid credentials 3.Click on the Prediction button to navigate to Prediction page.	Prediction Page should be displayed	Pass
HomePage_TC_O2	UI	Home page	Verify user is able to navigate to the Logout Page	1.Enter URL and click go 2.Enter Home Page using valid credentials 3.Click on the Logout button	Logout Page should be displayed	Pass
PredictionPage_TC_OO1	UI	Prediction Page	Verify user is able to navigate to the Logout Page	1.Enter URL and click go 2.Enter Home Page using valid credentials 3.Enter on the Prediction Page 4.Click on the Logout button	Logout Page should be displayed	Pass
PredictionPage_TC_OO2	UI	Prediction Page	Verify user is able to navigate to the Home Page	1.Enter URL and click go 2.Enter Home Page using valid credentials 3.Enter on the Prediction Page 4.Click on the Home button	Logout Page should be displayed	Pass
PredictionPage_TC_OO3	Function	Prediction Page	Verify user is able to upload an image	1.Enter URL and click go 2.Enter Home Page using valid credentials 3.Enter on the Prediction Page 4.Upload an image in the given input box 5.Click Submit	Image is uploaded	Pass

Predictio nPage_T C_004	Funciton	Predicito n Page	Verify user is not able to upload any other image formats	1.Enter URL and click go 2.Enter Home Page using valid credentials 3.Enter on the Prediction Page 4.Upload an image in the given input box 5.Click Submit	Image is uploaded	Fail
LogoutPa ge_TC_0 01	UI	Logout Page	Verify User is able to navigate to Login Page	1.Enter URL and click go 2.Enter Home Page	Login Page should be displayed	Pass
				using valid credentials 3.Enter on the Logout Page 4.Click on the Login button		

8.2. User Acceptance Testing

Defect Analysis

Resolution	Severity1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	10	4	2	2	18
Fixed	6	2	2	2	12
Skipped	0	0	0	1	1
Won't Fix	0	0	0	1	1
Totals	16	6	4	6	32

Test Case Analysis

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	8	0	0	8

Client Application	17	0	0	17
Security	2	0	0	2
Exception Reporting	2	0	0	2
Final Report Output	5	0	0	5
Version Control	1	0	0	1

9. RESULTS

News tracker application using cloud is developed and executed at the level of completed progress.

10. ADVANTAGES & DISADVANTAGES

Advantages

In this app news is already categorization.

Easily accessible and portable.

Better user experience.

Apps help you convert visitors to loyal readers.

Minute by minute updates of news.

This app helps you to get local news updates instantly.

To explore and discover trending news and topics.

News feeds for you based on your interest.

Disadvantages

Some apps demand premium subscription from user.

Occurance of Advertisement disturb the user.

Sometimes the news gives brief information.

Prevailance of fake and uncertain news can confuse the user lead to misconception.

Fake news may mislead the readers.

11. CONCLUSION

We explored the feasibility of recognising patterns of news reading interactions and evaluated three adaptive interface designs for different news reader types. We show that from their interaction log, a specific user can be recognised as one of three kinds. The reader types emerging from the online survey are well defined and distinct. The evaluation of the three variant interfaces suggests that different news reader types need different user interfaces. We have demonstrated a method for monitoring users' news reading behaviour and inferring news reader type from it. In the future we will further explore the design of adaptive interfaces, in order to be in a position to demonstrate a complete adaptive mobile news framework providing automatic personalisation of news apps.

12. FUTURE SCOPE

In the future we will further explore the design of adaptive interfaces, in order to be in a position to demonstrate a complete adaptive mobile news framework providing automatic personalisation of news apps.

13. APPENDIX

Source Code

Source code is uploaded in the GitHub:

<https://github.com/IBM-EPBL/IBM-Project-13292-1659515995>

Project Demo Link

Demo link:

<https://drive.google.com/file/d/1of0vZWQEo8h52eP1ND3xzwXygdXyzQUs/view?usp=sharing>