News Tracker Application

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INTRODUCTION

1.1 PROJECT OVERVIEW

Flask is a python framework provides the environment to create web application using python with the knowledge of HTML and CSS. We work with different modules. Application programming interface (API) is act as a interface between different applications.

Using IBM cloud make the application accessible from anywhere. In difficult times like corona or in remote places getting newspaper is difficult thing. So, this application makes it simple with the availability of network. Also is helps user to choose their interested domain and also allows them to search about the particular news.

1.2 PURPOSE

The purpose of this application are listed below:

- To help user to get news even in remote places or in lockdown period.
- Helps to reduce the cost required to read news. And encourage the user to read news.
- To provide the option for the user to choose their interested domain.
- To provide search option for the user to search for the needed information.

LITERATURE SURVEY

2.1 EXISTING PROBLEM

There is a lot of time consumption to read the relevant news that we need to read without categorizing.with the help of categorizing we are able to read the news which we need.only read what need will save time.unable to follow some big publishers and their current news feed.

2.2 REFERENCE

1]https://www.ripublicatio n.com/ijaer18/ijaerv13n 11_78.pdf

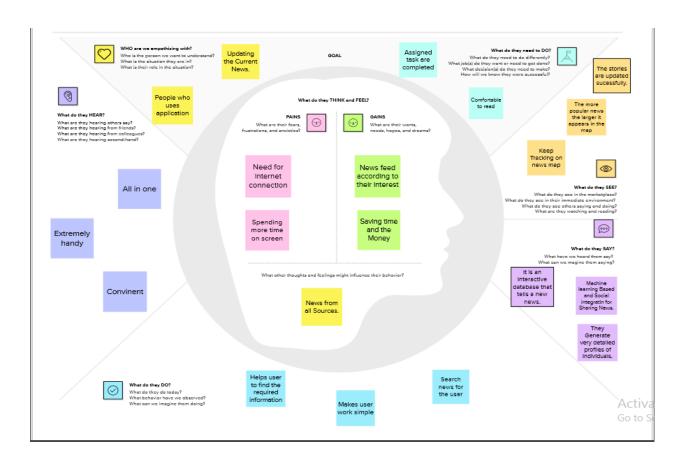
- 2] (PDF) Exploring mobile news reading interactions for news app personalisation (researchgate.net)
- 3] (PDF) Topic Detection and Tracking in News Articles (researchgate.net)
- 4](PDF)Implementing a Mobile Application News Tool for Disseminating Messages and Events of AlBuraimi University College
- 5](PDF) Following the Fed with a News Tracker (researchgate.net)

2.3 PROBLEM STATEMENT DEFINITION

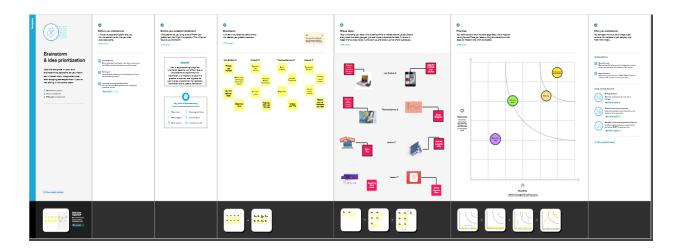
News reading increases peoples knowledge. But now a days news reading habbit reduced due to increase of technology and not getting proper source for reading news in pandemic times. So this application helps the user to read the news anywhere the want and they no need to carry the newspaper everywhere. The application will be user friendly so it encourages the user to read news.

IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS



3.2 IDEATION & BRAINSTORMING

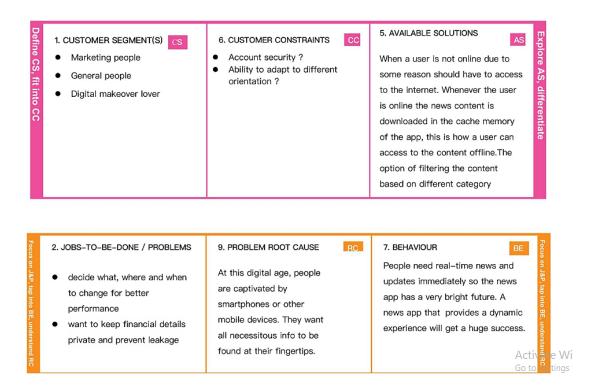


3.3 PROPOSED SOLUTION

S.No.	Proposals	Description
1	Problem Statement	Now a days searching a required information become very difficult due to the presence of large amount of information. It is important to solve this problem to maintain and improve the user interest to search for the necessary information and to update themselves. And also user needs to buy the newspaper or have to carry the newspaper everywhere.
2	Solution description	The application to be developed should be accessible from anywhere and any devices that are connected to the internet. The application should allow the user to search for the specific news that user needs to know.

3	Uniqueness	There are many applications that will provide unwanted messages along with required messages. Our work is develop a cloud application that can be accessed anywhere and it should allow the user to search for the information.
4	Social Impact	In remote areas or in critical times, it is not possible to read the newspaper. But we can able to use app instead.
5	Business Model	Right now the application is profitless but in future we might add an option of premium plans for advanced learning.
6	Scalability of the Solution	Compare to normal newspapers this app provide more information. And it provides news about other countries or other regions.

3.4 PROBLEM SOLUTION FIT



3. TRIGGERS

News app triggers to describe automatically specific news or event faster and more targeted.

4. EMOTIONS: BEFORE / AFTER

Before - User can't get news up to date andwont be able to react to those news

After - User can post their comments and findcategories and individual articles

10. YOUR SOLUTION

Evident that developing a news app helpsyou stand out among all competitors. The aforesaid aspects let a news app promotean online magazine and as a result, the app reaches out and attracts many peoplefrom all across the world.

8. CHANNELS of BEHAVIOUR

ONLINE

User can access all kind of news in manyforms

OFFLINE

User can view news in offline mode

t

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENTS

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User login	Login through browser directly by entering username and password Login through app
FR-4	User interaction	Done through user interface between client and server View the related news by subscripted or requested page
share		Application have tools to share this news in social networks

4.2 NON-FUNCTIONAL REQUIREMENTS

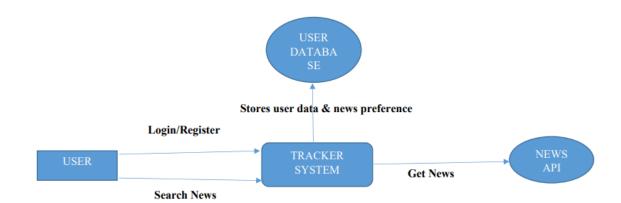
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Usability is a measure of how well a specific user in a specific context can use a product/design to achieve a defined goal effectively, efficiently and satisfactorily. Designers usually measure a design's usability throughout the development process—from wireframes to the final deliverable—to ensure maximum usability.
NFR-2	Security	Assuring all data inside the system or its part will be protected against malware attacks or unauthorized access.
NFR-3	Reliability	The probability that a product, system, or service will perform its intended function adequately for a specified period of time, or will operate in a defined environment without failure. The most important components of this definition must be clearly understood to fully know how reliability in a product or service is established
NFR-4	Performance	Performance is the core non-functional requirements no system can do without. It defines how fast a software system or a particular piece of it responds to certain users actions under a certain workload. In most cases, this metric explains how long a user must wait before the target operation happens (the page renders, a transaction is processed, etc.) given the overall number of users at the moment.

NFR-5	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-6	Scalability	Scalability assesses the highest workloads under 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.

PROJECT DESIGN

5.1 DATA FLOW DIAGRAM

A Data Flow Diagram is a traditional visual representation of the information flows within a system. It shows how data enters and leaves the system, what changes the information, and where data is stored.



5.2 SOLUTION & TECHNICAL ARCHITECTURE

Technical Architecture:

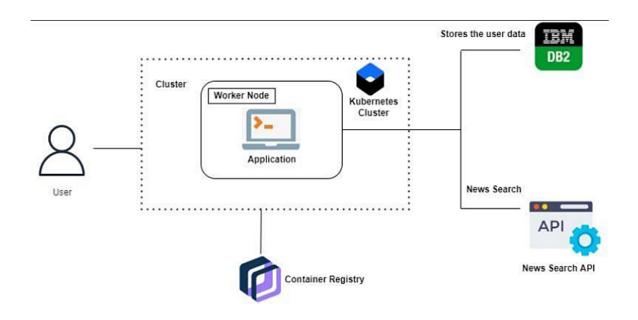


Table-1: Components and Technologies:

S. No	Component	Description	Technology
1	User Interface	How user interacts with application, Ex. Mobile App, Chatbot	, , ,
2	Application Logic-1	Logic for a process in the application	Python
3	Application Logic-2	Logic for a process in the application	SendGrid

4	Application Logic-3	Logic for a process in the application	IBM Watson Application
5	Database	Data Type, Configuration etc.	MySQL
6	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud
7	File Storage	File storage requirements	IBM Object Storage

Table-2: Application characteristics:

S. No	Characteristics	Description	Technology
1	Open-source frameworks	Microweb framework written in Python	Flask
2	Security implementation	A set of cryptographic hash function	SHA-256
3	Scalable Architecture	Kubernetes is a open source container orchestration system and management	Kubernetes
4	Availability	To customize settings for the docker CLI. The configuration file uses JSON formatting.	Docker CLI
5	Performance	The performance will be high because there will be no network traffics in the application	Kubernetes is cluster

5.3 USER STORIES

User Type	Functional Requireme nt (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user / Web User)	Registrati on	USN-1	User can register for the application by entering my email, password.	I can access my account / dashboard	High	Sprint-1
		USN-2	User will receive confirmation email once he/she have registered for the application.	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	User can register for the application through Gmail		Low	Sprint-1
	Login	USN-4	User can log into the application by entering email & password		High	Sprint-1
	Dashboard	USN-5	User can enter the interests and choices of news that he want to see for the first		High	Sprint-2

			time in dashboard.		
		USN-6	User can go through the feed of news filtered according to their wish.	High	Sprint-3
		USN-7	User can log out of his account in settings.	High	Sprint-3
	Settings	USN-8	User can update their interests and choice in account settings.	Medi um	Sprint -
Customer Care Executive	Chat Bot / Query Section	USN-9	Solve issues brought up by client	High	Sprint -
Administra tor		USN-10	Roll out updates and bug fix	High	Sprint -

PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION

Sprint-1:

Registration:

The user can register to by using their username and password. It will be stored in IBM database.

MySQL Database Connection:

MySQL database is connected to the application. the database has table "user". It has id, username and password.

categories:

The user can search for a perticular news that they need to read using search option.

Login:

User can login to application by using the password and eamil.

Sprint-2

Dashboard:

User can select the news category that they want to view in the dashboard. And can search the news they needed.

Dashboard User Interface:

Administrator designing the user interface.

Sprint-3

IBM cloud Connection:

Our application is connected to the cloud.

Sprint-4

Chat bot / Query:

The user can know the information about our application using bot.

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	20	29 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

CHAPTER 7 CODING & SOLUTIONING

7.1 FEATURE 1

Home.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Home</title>
                                                       link
                                                                         rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.1.3/dist/css/bootstrap.min.css"
integrity="sha384-
MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkFOJwJ8ERdknLPMO"
crossorigin="anonymous">
          <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"</pre>
                                                                      integrity="sha384-
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>
          <script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.3/dist/umd/popper.min.js"</pre>
integrity="sha384-
ZMP7rVo3mIykV+2+9J3UJ46jBk0WLaUAdn689aCwoqbBJiSnjAK/l8WvCWPIPm49"
crossorigin="anonymous"></script>
                    src="https://cdn.jsdelivr.net/npm/bootstrap@4.1.3/dist/js/bootstrap.min.js"
           <script
integrity="sha384-
ChfqqxuZUCnJSK3+MXmPNIyE6ZbWh2IMqE241rYiqJxyMiZ6OW/JmZQ5stwEULTy"
crossorigin="anonymous"></script>
  <script>
    function getnews(){
                                                         fetch("https://newsapi.org/v2/top-
```

```
headlines?category=general&apiKey=cdc40c3ada3e44b9b096688f732b4116")
      .then(a=>a.json())
      .then(response =>{
         for(var i=0; i<response.articles.length; i++){</pre>
             document.getElementById("output").innerHTML+="<div class='table-responsive'
style='color:white;'><tbody
                 15px;'><img style='width:300px;height:200px;border-style:solid;'
src=""+response.articles[i].urlToImage+""><h3</pre>
                                                                         style='font-size:
20px;'>"+response.articles[i].title+"</h3><h4
                                                    style='font-size:
                                                                              18px;color:
lime;'>"+response.articles[i].source.name+"</h4><br>"+response.articles[i].description+"
                                                                                      <a
href=""+response.articles[i].url+""
target=' blank'>"+response.articles[i].url+"</a></toody></div>";
      })
      }
  </script>
</head>
<body onload="getnews()" style="background-color: rgb(2, 1, 12);">
  <div class="container-fluid" style="background: linear-gradient(to bottom, #000099</pre>
#003333 100%);">
  <div class="row">
    <div class="col-md-12 mt-3 mb-3">
      <h2 class="text-center" style="color: white">Latest News Headlines</h2>
    </div>
  </div>
 </div>
     <nav class="navbar navbar-expand-lg navbar-light" style="background-color: #e3f2fd;</pre>
margin-bottom: 15px;">
    <a class="navbar-brand" href="/" style="color: red; font-weight: bold;">News App</a>
               <button class="navbar-toggler" type="button" data-toggle="collapse"
                                                                                   data-
                                       aria-controls="navbarSupportedContent"
target="#navbarSupportedContent"
                                                                                    aria-
expanded="false" aria-label="Toggle navigation">
     <span class="navbar-toggler-icon"></span>
    </button>
```

```
<div class="collapse navbar-collapse" id="navbarSupportedContent">
     cli class="nav-item active">
       <a class="nav-link active" href="home" style="font-weight: 500;">Home</a>
      <a class="nav-link dropdown-toggle active" style="font-weight: 500;" href="#"
id="navbarDropdown" role="button" data-toggle="dropdown" aria-haspopup="true" aria-
expanded="false">
       Category
       </a>
       <div class="dropdown-menu" aria-labelledby="navbarDropdown">
        <a class="dropdown-item" href="entertainment">Entertainment</a>
        <a class="dropdown-item" href="sports">Sports</a>
        <a class="dropdown-item" href="technology">Technology</a>
        <a class="dropdown-item" href="science">Science</a>
        <a class="dropdown-item" href="health">Health</a>
        <a class="dropdown-item" href="business">Business</a>
       </div>
      class="nav-item">
           <a class="nav-link" href="/logout" style="color: black;font-weight: 500;">Logout
<span class="sr-only">(current)</span></a>
      <form class="form-inline my-2 my-lg-0" action="/search" method = "POST">
             <input class="form-control mr-sm-2" type="search" placeholder="Search" aria-
label="Search" name="search">
      <button class="btn btn-outline-success my-2 my-sm-0" type="submit">Search</button>
     </form>
    </div>
   </nav>
  <div id="output"></div>
</body>
</html>
```

Index.html

```
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Welome</title>
                                                       link
                                                                          rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.1.3/dist/css/bootstrap.min.css"
integrity="sha384-
MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkFOJwJ8ERdknLPMO"
crossorigin="anonymous">
          <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"</pre>
                                                                       integrity="sha384-
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>
          <script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.3/dist/umd/popper.min.js"</pre>
integrity="sha384-
ZMP7rVo3mIykV+2+9J3UJ46jBk0WLaUAdn689aCwoqbBJiSnjAK/l8WvCWPIPm49"
crossorigin="anonymous"></script>
           <script
                    src="https://cdn.jsdelivr.net/npm/bootstrap@4.1.3/dist/js/bootstrap.min.js"
integrity="sha384-
ChfqqxuZUCnJSK3+MXmPNIyE6ZbWh2IMqE241rYiqJxyMiZ6OW/JmZQ5stwEULTy"
crossorigin="anonymous"></script>
  <style>
    body{
                           background-image: url('https://cvs-images.s3.jp-tok.cloud-object-
storage.appdomain.cloud/bg8.jpg');
      background-position: center center;
      background-repeat: no-repeat;
      background-attachment: fixed;
      background-size: cover;
      background-color: #000033;
    }
```

```
</style>
</head>
<body>
     <nav class="navbar navbar-expand-lg navbar-light" style="background-color: #e3f2fd;</pre>
margin-bottom: 15px;">
    <a class="navbar-brand" href="/" style="color: red; font-weight: bold;">News App</a>
               <button class="navbar-toggler" type="button" data-toggle="collapse" data-</pre>
target="#navbarSupportedContent"
                                        aria-controls="navbarSupportedContent"
                                                                                      aria-
expanded="false" aria-label="Toggle navigation">
     <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbarSupportedContent">
     ul class="navbar-nav mr-auto">
       class="nav-item">
          <a class="nav-link" href="/login" style="color: black;font-weight: 500;">Login <span
class="sr-only">(current)</span></a>
      class="nav-item">
                      <a class="nav-link" href="/register" style="color: black;font-weight:</pre>
500;">Register</a>
      </div>
   </nav>
   <div class="container-fluid">
    <div class="row">
       <div class="col-md-12 mt-3 mb-3">
             <h1 class="text-center" style="color: white; margin-top: 20%;">Welcom To News
App!!</h1>
       </div>
    </div>
   </div>
</body>
</html>
```

app.py

```
from flask import Flask,render_template, request, jsonify, session, redirect
from flask_mysqldb import MySQL
from utils import category, find
from flask import cli
app = Flask(__name__)
app.secret_key = "vani"
#mysql
app.config['MYSQL_HOST'] = 'localhost'
app.config['MYSQL USER'] = 'root'
app.config['MYSQL_PASSWORD'] = "
app.config['MYSQL_DB'] = 'flask'
mysql = MySQL(app)
@app.route('/')
def index():
 return render_template('index.html')
@app.route("/login")
def login():
 return render_template('login.html')
@app.route("/log_res", methods = ['POST', 'GET'])
def log_res():
 if request.method == 'GET':
   msg = "Invalid Credentials!!"
   return render_template("result.html", msg = msg)
 if request.method == 'POST':
   try:
     email = request.form['email']
     password = request.form['password']
     cursor = mysql.connection.cursor()
```

```
sql = "SELECT * FROM USER WHERE EMAIL=%s AND PASSWORD=%s",(email,
password)
     cursor.execute(sql)
     data = cursor.fetchone()
     dbemail = data[1]
     dbpassword = data[2]
     if password == dbpassword:
       session['status']="ok"
       return render_template("home.html")
     else:
       msg = "Invalid Credentials!!"
       return render_template("result.html", msg = msg)
   except TypeError as e:
     msg = "Invalid Credentials!!"
     return render_template("result.html", msg = msg)
@app.route('/logout')
def logout():
  if 'status' in session:
    session.pop('status',None)
    msg = "logout successful!!"
    return render_template("result.html", msg = msg)
  else:
    msg = "User already logged out!!"
    return render_template("result.html", msg = msg)
@app.route('/home')
def getVariable():
 if 'status' in session:
   return render_template('home.html')
 else:
   msg = "Please Login!!"
   return render_template("result.html", msg = msg)
if __name__ == '__main__':
 app.run(port='90', debug=True)
```

7.2 FEATURE 2

Along with the home.html, index.html we added news.html, it provides user to search for perticular news and to choose categories that they want to see. And It has IBM chat bot. And Register.html is provided to add new users to our database.

News.html

```
<!DOCTYPE html>
<html lang="en">
 <head>
  <!-- Required meta tags -->
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <!-- Bootstrap CSS 4-->
  <link rel="stylesheet"</pre>
href="https://cdn.jsdelivr.net/npm/bootstrap@4.1.3/dist/css/bootstrap.min.css"
integrity="sha384-
MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkFOJwJ8ERdknLPMO"
crossorigin="anonymous">
  <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-</pre>
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>
  <script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.3/dist/umd/popper.min.js"</pre>
integrity="sha384-
ZMP7rVo3mIykV+2+9J3UJ46jBk0WLaUAdn689aCwoqbBJiSnjAK/l8WvCWPIPm49"
crossorigin="anonymous"></script>
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@4.1.3/dist/js/bootstrap.min.js"</pre>
integrity="sha384-
ChfqqxuZUCnJSK3+MXmPNIyE6ZbWh2IMqE241rYiqJxyMiZ6OW/JmZQ5stwEULTy"
crossorigin="anonymous"></script>
  <!-- Bootstrap CSS 5-->
  link
   href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
   rel="stylesheet"
```

```
integrity="sha384-
1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
   crossorigin="anonymous"
  />
  <title>Latest News Headlines</title>
 </head>
 <body>
  <div class="container-fluid" style="background-color: #00a3a3;">
   <div class="row">
     <div class="col-md-12 mt-3 mb-3">
        <h2 class="text-center" style="color: white">{{ cat }}</h2>
     </div>
   </div>
  </div>
  <nav class="navbar navbar-expand-lg navbar-light" style="background-color: #e3f2fd;</pre>
margin-bottom: 15px;">
   <a class="navbar-brand" href="/" style="color: red; font-weight: bold;">News App</a>
   <button class="navbar-toggler" type="button" data-toggle="collapse" data-</pre>
target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-
expanded="false" aria-label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
   </button>
   <div class="collapse navbar-collapse" id="navbarSupportedContent">
    ul class="navbar-nav mr-auto">
     class="nav-item active">
       <a class="nav-link active" href="home" style="font-weight: 500;">Home</a>
     class="nav-item dropdown">
       <a class="nav-link dropdown-toggle active" style="font-weight: 500;" href="#"
id="navbarDropdown" role="button" data-toggle="dropdown" aria-haspopup="true" aria-
expanded="false">
        Category
       </a>
       <div class="dropdown-menu" aria-labelledby="navbarDropdown">
        <a class="dropdown-item" href="entertainment">Entertainment</a>
        <a class="dropdown-item" href="sports">Sports</a>
```

```
<a class="dropdown-item" href="technology">Technology</a>
        <a class="dropdown-item" href="science">Science</a>
        <a class="dropdown-item" href="health">Health</a>
        <a class="dropdown-item" href="business">Business</a>
      </div>
     class="nav-item">
      <a class="nav-link" href="/logout" style="color: black;font-weight: 500;">Logout <span
class="sr-only">(current)</span></a>
     </11/>
    <form class="form-inline my-2 my-lg-0" action="/search" method = "POST">
     <input class="form-control mr-sm-2" type="search" placeholder="Search" aria-
label="Search" name="search">
     <button class="btn btn-outline-success my-2 my-sm-0" type="submit">Search</button>
    </form>
   </div>
  </nav>
  <div class="row mt-5">
   <div class="col-md-2"></div>
   <div class="col-md-8">
    <div class="row">
     {% for news in news_articles %}
     <div class="col-md-4 mb-5">
      <div class="card" style="width: 18rem">
        <img src="{{ news.urlToImage }}" class="card-img-top" alt="..." />
        <div class="card-body">
         <h5 class="card-title">{{ news.title }}</h5>
         {{ news.description }}
         <a href="{{ news.url }}" class="btn btn-primary">Read More</a>
       </div>
      </div>
     </div>
     {% endfor %}
    </div>
   </div>
```

```
<div class="col-md-2"></div>
  </div>
  <!-- Bootstrap Bundle with Popper -->
  <script
   src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
   integrity="sha384-
ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+1p"
   crossorigin="anonymous"
  ></script>
  <script>
   window.watsonAssistantChatOptions = {
    integrationID: "380464dc-d472-4156-bdf1-3ba4aca9e386", // The ID of this integration.
    region: "jp-tok", // The region your integration is hosted in.
    serviceInstanceID: "5c2a539f-09e4-4815-bfe8-33e934287400", // 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>
                                       Register.html
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Register</title>
```

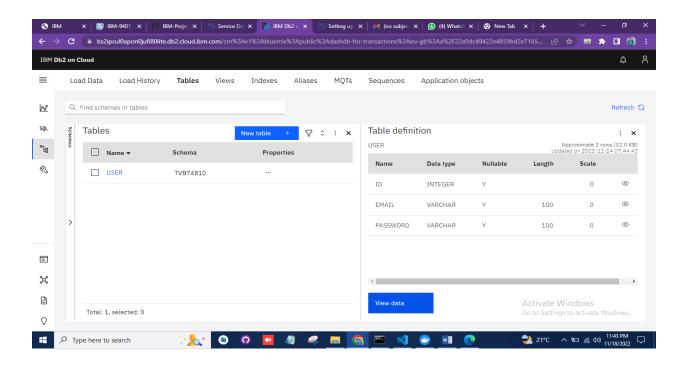
```
<link rel="stylesheet"</pre>
href="https://cdn.jsdelivr.net/npm/bootstrap@4.1.3/dist/css/bootstrap.min.css"
integrity="sha384-
MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkFOJwJ8ERdknLPMO"
crossorigin="anonymous">
  <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-</pre>
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>
  <script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.3/dist/umd/popper.min.js"</pre>
integrity="sha384-
ZMP7rVo3mIykV+2+9J3UJ46jBk0WLaUAdn689aCwoqbBJiSnjAK/l8WvCWPIPm49"
crossorigin="anonymous"></script>
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@4.1.3/dist/js/bootstrap.min.js"</pre>
integrity="sha384-
ChfqqxuZUCnJSK3+MXmPNIyE6ZbWh2IMqE241rYiqJxyMiZ6OW/JmZQ5stwEULTy"
crossorigin="anonymous"></script>
  <style>
    h3{
      color: antiquewhite;
    }
    #form{
      margin: 10%;
      width: 30%;
      height:fit-content;
      color:antiquewhite;
      background-color: #202020;
      border-style: solid;
       border-radius: 10px;
      padding: 10px;
      text-align: left;
      opacity: 0.9;
    }
    #ele{
      padding: 10px;
      color: rgb(250, 248, 245);
```

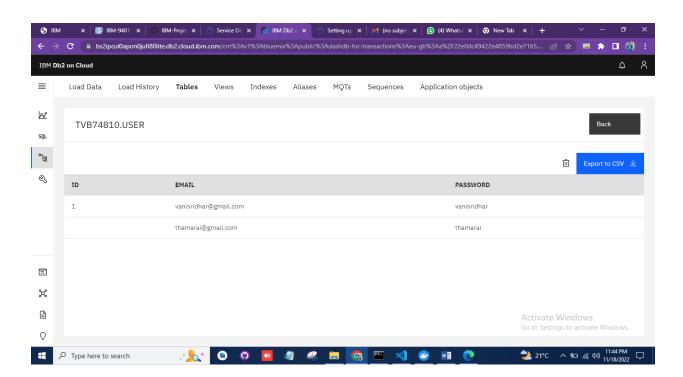
```
font-weight: bold;
     }
    #button1{
     font-weight: bold;
     color: #fbfbfd;
     }
    #button1:hover{
     color: #000033;
     }
    h3{
     color: antiquewhite;
     }
    body{
      background-image: url('static/bg2.jpg');
      background-position: center center;
      background-repeat: no-repeat;
      background-attachment: fixed;
      background-size: cover;
      background-color: #000033;
     }
  </style>
</head>
<body>
  <nav class="navbar navbar-expand-lg navbar-light" style="background-color: #e3f2fd;</pre>
margin-bottom: 15px;">
     <a class="navbar-brand" href="/" style="color: red; font-weight: bold;">News App</a>
     <button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-
expanded="false" aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
     </button>
     <div class="collapse navbar-collapse" id="navbarSupportedContent">
```

```
ul class="navbar-nav mr-auto">
       class="nav-item">
        <a class="nav-link" href="/login" style="color: black;font-weight: 500;">Login <span
class="sr-only">(current)</span></a>
       class="nav-item">
        <a class="nav-link" href="/register" style="color: black;font-weight:</pre>
500;">Register</a>
       </div>
   </nav>
  <center>
   <form id="form" action="/reg res" method = "POST">
    <div class="form-group">
      <label for="exampleInputName1" id="ele">Email Address</label>
      <input type="email" class="form-control" id="exampleInputName1" name="email"</pre>
placeholder="Enter Your Email">
      <small id="emailHelp" class="form-text" style="font-weight: 600;">We'll never share
your email with anyone else.</small>
    </div>
    <div class="form-group">
      <label for="exampleInputEmail1" id="ele">Password</label>
      <input type="password" class="form-control" id="exampleInputEmail1" name =</pre>
"password" aria-describedby="emailHelp" placeholder="Enter Your Password">
    </div>
    <center><button type="submit" class="btn btn-outline-light"</pre>
id="button1">Submit</button></center>
   </form>
  </center>
</body>
</html>
```

7.3 DATABASE SCHEMA

The database has table "user". The user has three columns Id, Email and Password.





ADVANTAGES AND DISADVANTAGES

ADVANTAGES

The advantages of this application are:

- We can assess this application from anywhere.
- The user can get the news even in lockdown situations.
- The user can get the news even in remote areas.
- It reduces the cost of reading newspaper, so it helps in encouraging the user to read news.
- The user can choose the category which the wise to read.
- This application provides the search option, so that user can search the needed news.
- No need to download this application.

DISADVANTAGES

The disadvantage of this application are:

- There should be proper internet connectivity.
- The user should have smart phone or laptop.
- Reduced speed compare to the application that is hosted on a local server.
- Restricted Functionality.

CONCLUSION

Hence this application satisfies the user and encourage them to study the news. They can able to read the news from compact mobile phones to so they no need to carry the newspapers to every place they go. With good interface the users are satisfied. By collecting the requirements, the users are provided the news categories that they can choose to need. And also the search option is provided for user to search for the particular news they need.

This application is reliable with good user interface. The application is secure with the Secure Sockets Layer. The use of IBM cloud makes the application available in all places including remote areas with the presence of good internet facility.

There is no cost for reading this application and user no need to download the application. It is very user friendly and it is like mobile newspaper (i.e it is very compact to use).

FUTURE SCOPE

Providing the facility to the user to choose the country the need to know. Locating the location of the user and providing the news based on his/her location. And changing of news data if the users moves from one location to other. And providing the facility to the user to read the news offline. The security of the user data can be improved. The user can be verified before registering.

APPENDIX

GITHUB LINK:

https://github.com/IBM-EPBL/IBM-Project-9401-1659002289

PROJECT DEMO LINK:

https://drive.google.com/file/d/1tLbHiLVbpWEUIEsu7BPPokouG_W5VuDG/view?usp= share_link