NEWS TRACKER APPLICATION
USING CLOUD

A Project report submitted inpartial fulfillment of the 7th semester in degree of

BACHELOR OF ENGINEERING
IN

Electronics and Communication Engineering
Submitted by

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BONAFIDECERTIFICATE

CERTIFIED THAT THIS PROJECT REPORT "NEWS TRACKER APPLICATION" IS THE BONAFIDE RECORD WORK DONE BY .MR .P.SELVA GANDHI (113319106068), MR. V.PREM KUMAR(113319106060), MR.S.HARISH SHAKTHI (113319106031) AND MR.N.DINESHWAR (113319106022) FOR "HX8001 PROFESSIONAL READINESS FOR INNOVATION , EMPLOYABILITY AND ENTREPRENEURSHIP " IN VII SEMESTER OF B.E., DEGREE COURSE IN ELECTRONICS AND COMMUNICATION ENGINEERING BRANCH DURING THE ACADEMIC YEAR OF 2022-2023.

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Head of the Department Dr.Sridevi	IndustryEvaluvator Sai priya

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SELVA GANDHI P (Lead)
PREM KUMAR V
HARISH SHAKTHI S
DINESHWAR N

ABSTRACT

Everyone has the right to freedom of speech. However, this right is being misused to differentiate and attack others, physically or verbally, in the name of free speech. This discrimination is known as hate speech. Hate speech can be well-defined as the language used to express hate towards a person or a group of people based on characteristics such as race, religion, ethnicity, gender, nationality, disability, and sexual orientation. The increasing usage of social sites and information sharing has specified major benefits to humanity. However, this has also assumed rise to a variety of challenges including the spreading and sharing of hate speech messages. Thus, to solve this emerging issue in social media sites, recent studies employed a variety of machine learning and deep learning algorithms with text mining algorithms to automatically detect hate speech messages on real –time data sets Hence ,the aim of this Project is to analyze comments on social networks using the Natural Language processing technique (NLP) and Deep Learning algorithm named Back propagation neural network algorithm. Using the NLP technique, can extract the keywords from user-generate dntent and implement Back Propagation neural network to classify the text whether it is positive or negative. If it is negative means, automatically block the comments as per user wish and also block the friends based on pre-defined threshold values. Experimental results shows that the proposed frame work implemented in realtime social networks it with improved notification.

TABLEOFFIGURES

News Tracker Application

1.INTRODUCTION

Mobile app ecosystems are transforming patterns of news consumption. Until quiterecently, reading the news was a niche use for smartphones [12], mostly for when userswere ‘on the go’; now, however, two in every three users of mobile devices in the USregularly access news and as many as one in five read in-depth news articles daily [2]; asimilar picture is found in the UK [1]. This growth in mobile news access continues themigrationof newsconsumerstothe Internet.

1.1 Projectoverview

As news is increasingly accessed on smartphones and tablets, the need for personalisingnews app interactions is apparent. We report a series of three studies addressing keyissuesinthedevelopmentofadaptivenewsappinterfaces.Wefirstsurveyedusers’newsreading preferences and behaviours; analysis revealed three primary types of reader. Wethen implemented and deployed an Android news app that logs users’ interactions withthe app. We used the logs to train a classifier and showed that it is able to reliablyrecogniseauseraccordingtotheirreadertype.Finallyweevaluatedalternative,adaptiveuser interfaces for each reader type. The evaluation demonstrates the differential benefitof the adaptation for different users of the news app and the feasibility of adaptiveinterfaces fornewsapps.

1.2 Purpose

As our lives are very busy these days, we often feel we need more than 24 hrs. a day tocope up with everything we have in our schedule. Well, that's not possible but reducingthetimebychangingtheconventionalmethodofreadingnewscanhelp.Justtelluswhatmarket news you're interested in and get a quick peek for the day. Only read what youfeelisrelevantandsaveyourtime.Thisapphelpsyoutoqueryforallinformationabout Indices,Commodities,Currencies,FutureRates,Bonds,etc.…asonofficialwebsites.

2. LITERATURESURVEY

2.1 Existingproblem

weoftenfeelweneedmorethan24hrs.adaytocopeupwitheverythingwehaveinourschedule. Well, that's not possible but reducing the time by changing the conventionalmethodof readingnewscanhelp.

2.2 References

Like articles, websites,

blogs.https://www.researchgat

e.net/.

https://techvidvan.com/tutorials/android-news-app-project-source-

code/https://www.ripublication.com/

2.3 Problem Statement Definition

1.Theuserneedsawaytoorganizethenewsondailybasissothathecancopeupwithdaily eventsinhis tightschedule.

2.Theuserwantstoreadnewsonlyaboutparticulartopicssothathecanbeinformedabout hisinterest.

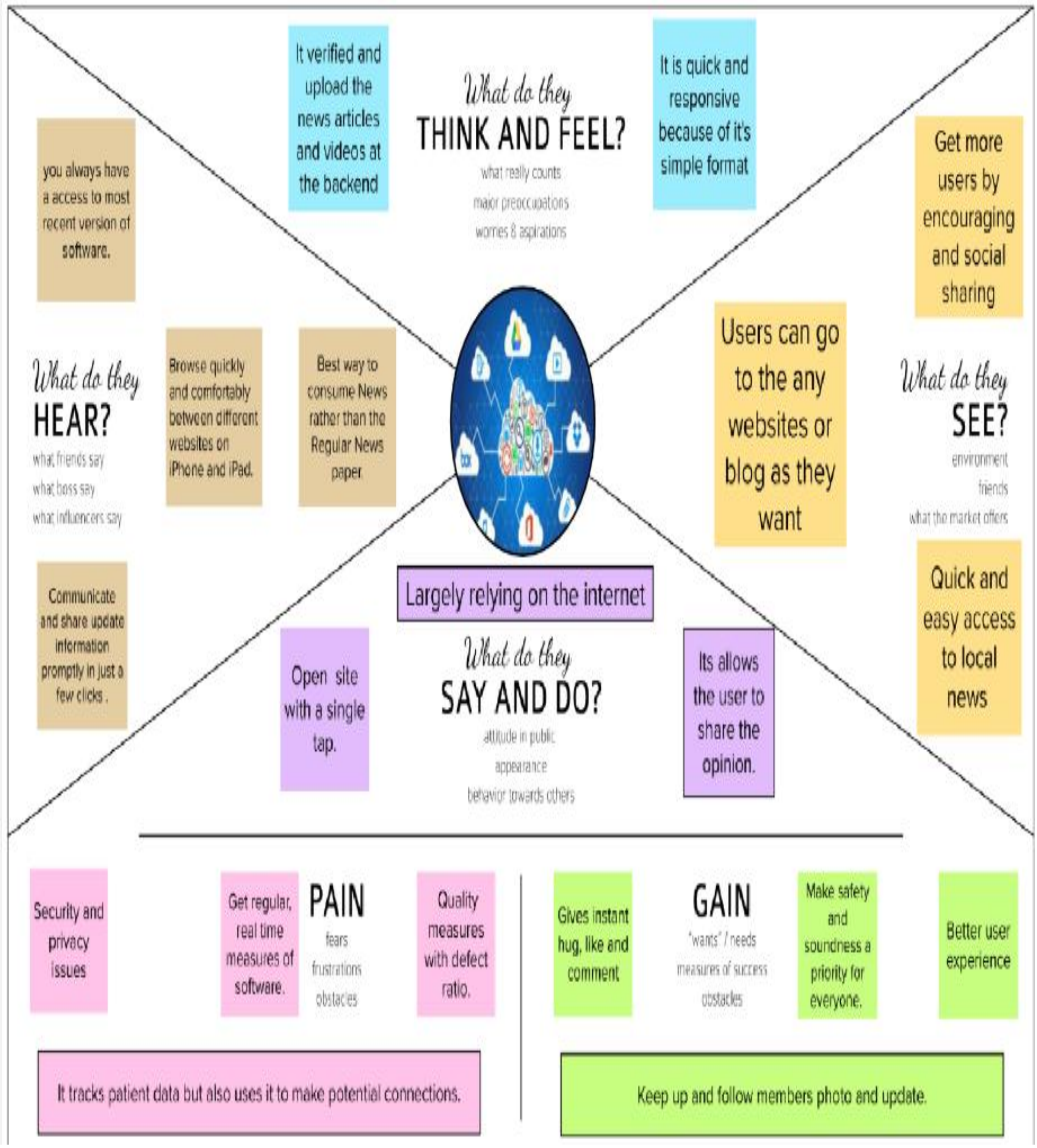
3.The user wants to get informed from only certified news outlets

.4.Theuserneeds away tosearch aboutthenewsontopicshewants to.

5.TheuserwantstoknowthenewsabouthissurroundingusingGPSlocation.

3. IDEATION&PROPOSED SOLUTION

3.1 EmpathyMapCanvas



What do they THINK AND FEEL?

what really counts

major preoccupations

worries & aspirations

It verified and upload the news articles and videos at the backend

It is quick and responsive because of it's simple format

What do they HEAR?

what friends say

what boss say

what influencers say

you always have a access to most recent version of software.

Browse quickly and comfortably between different websites on iPhone and iPad.

Best way to consume News rather than the Regular News paper

Communicate and share update information promptly in just a few clicks .

What do they SEE?

environment

friends

what the market offers

Get more users by encouraging and social sharing

Users can go to the any websites or blog as they want

Quick and easy access to local news

Largely relying on the internet

What do they SAY AND DO?

attitude in public

appearance

behavior towards others

Open site with a single tap.

Its allows the user to share the opinion.

PAIN

fears

frustrations

obstacles

Security and privacy issues

Get regular, real time measures of software.

Quality measures with defect ratio.

It tracks patient data but also uses it to make potential connections.

GAIN

"wants" / needs

measures of success

obstacles

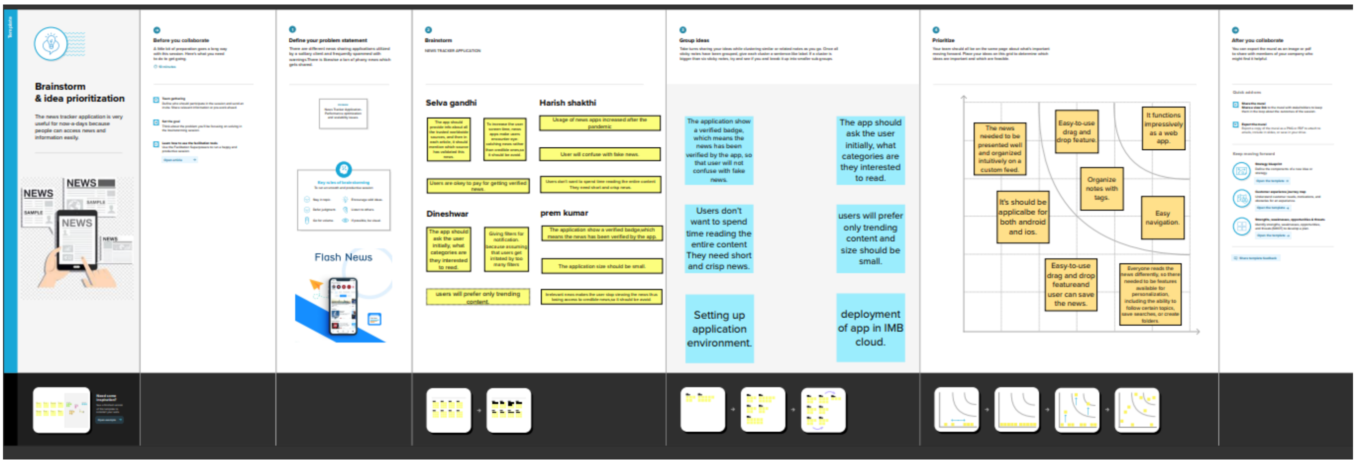
Gives instant hug, like and comment

Make safety and soundness a priority for everyone.

Better user experience

Keep up and follow members photo and update.

3.2 Ideation&Brainstorming



Brainstorm
& idea prioritization

The news tracker application is very useful for now-a-days because people can access news and information easily.

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

10 minutes

Team gathering

Set the goal

Learn how to use the facilitation tools

Define your problem statement

There are different news sharing applications utilized by a solitary client and frequently spammed with warnings.There is likewise a ton of phony news which gets shared.

Key rules of brainstorming

To run an smooth and productive session

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

Flash News

Brainstorm

NEWS TRACKER APPLICATION

Selva gandhi

The app should provide info about all the trusted worldwide sources, and then in each article, it should mention which source has validated this news.

To increase the user screen time, news apps make users encounter eye-catching news rather than credible ones,so it should be avoid.

Users are okey to pay for getting verified news.

Harish shakthi

Usage of news apps increased after the pandemic

User will confuse with fake news.

Users don't want to spend time reading the entire content They need short and crisp news.

Dineshwar

The app should ask the user initially, what categories are they interested to read.

Giving filters for notification. because assuming that users get irritated by too many filters

users will prefer only trending content.

prem kumar

The application show a verified badge,which means the news has been verified by the app.

The application size should be small.

Irrelevant news makes the user stop viewing the news thus losing access to credible news,so it should be avoid.

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

The application show a verified badge, which means the news has been verified by the app, so that user will not confuse with fake news.

The app should ask the user initially, what categories are they interested to read.

Users don't want to spend time reading the entire content They need short and crisp news.

users will prefer only trending content and size should be small.

Setting up application environment.

deployment of app in IMB cloud.

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.

The news needed to be presented well and organized intuitively on a custom feed.

Easy-to-use drag and drop feature.

It functions impressively as a web app.

Organize notes with tags.

It's should be applicalbe for both android and ios.

Easy navigation.

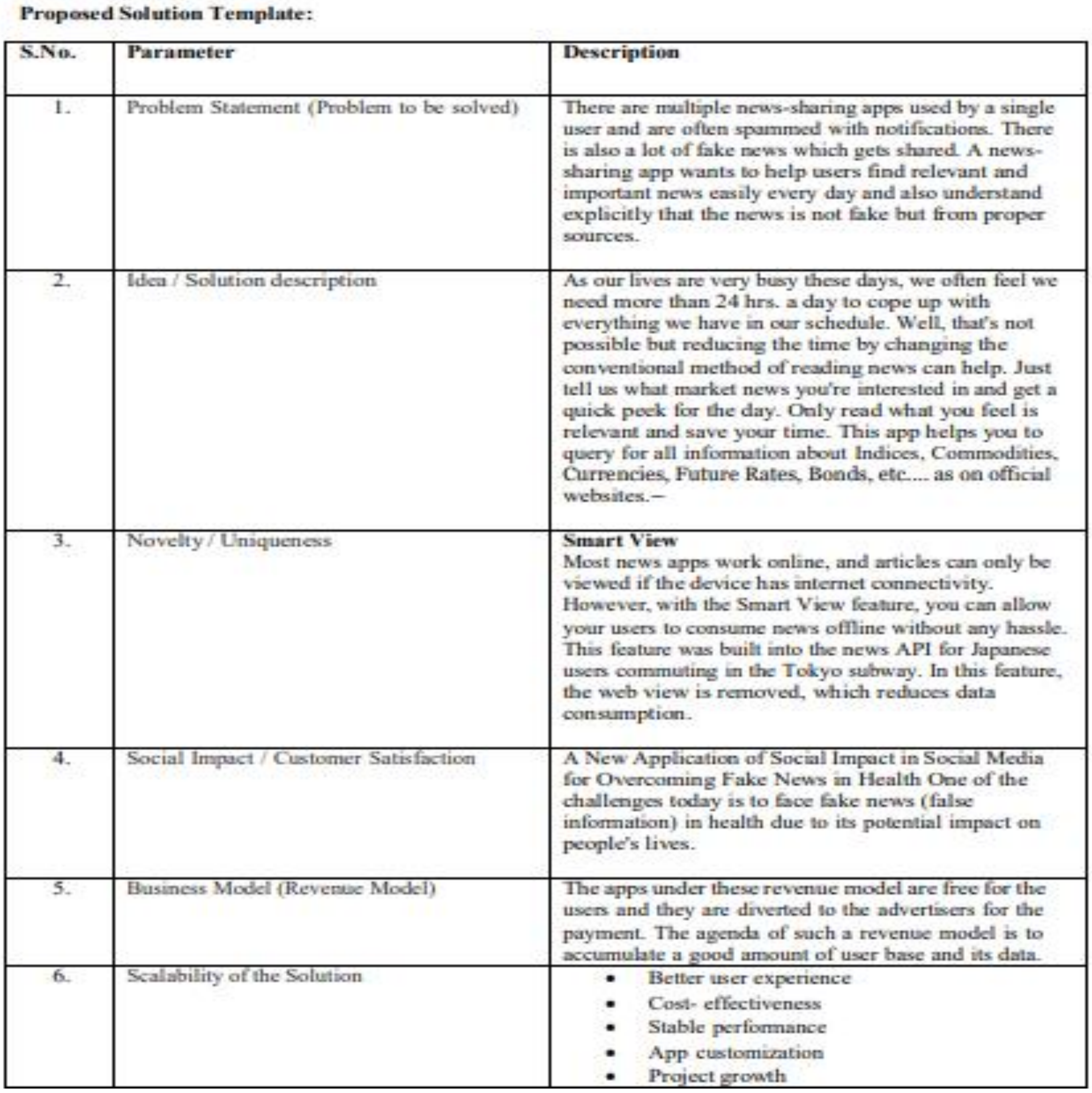
Easy-to-use drag and drop featureand user can save the news.

Everyone reads the news differently, so there needed to be features available for personalization, including the ability to follow certain topics, save searches, or create folders.

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.

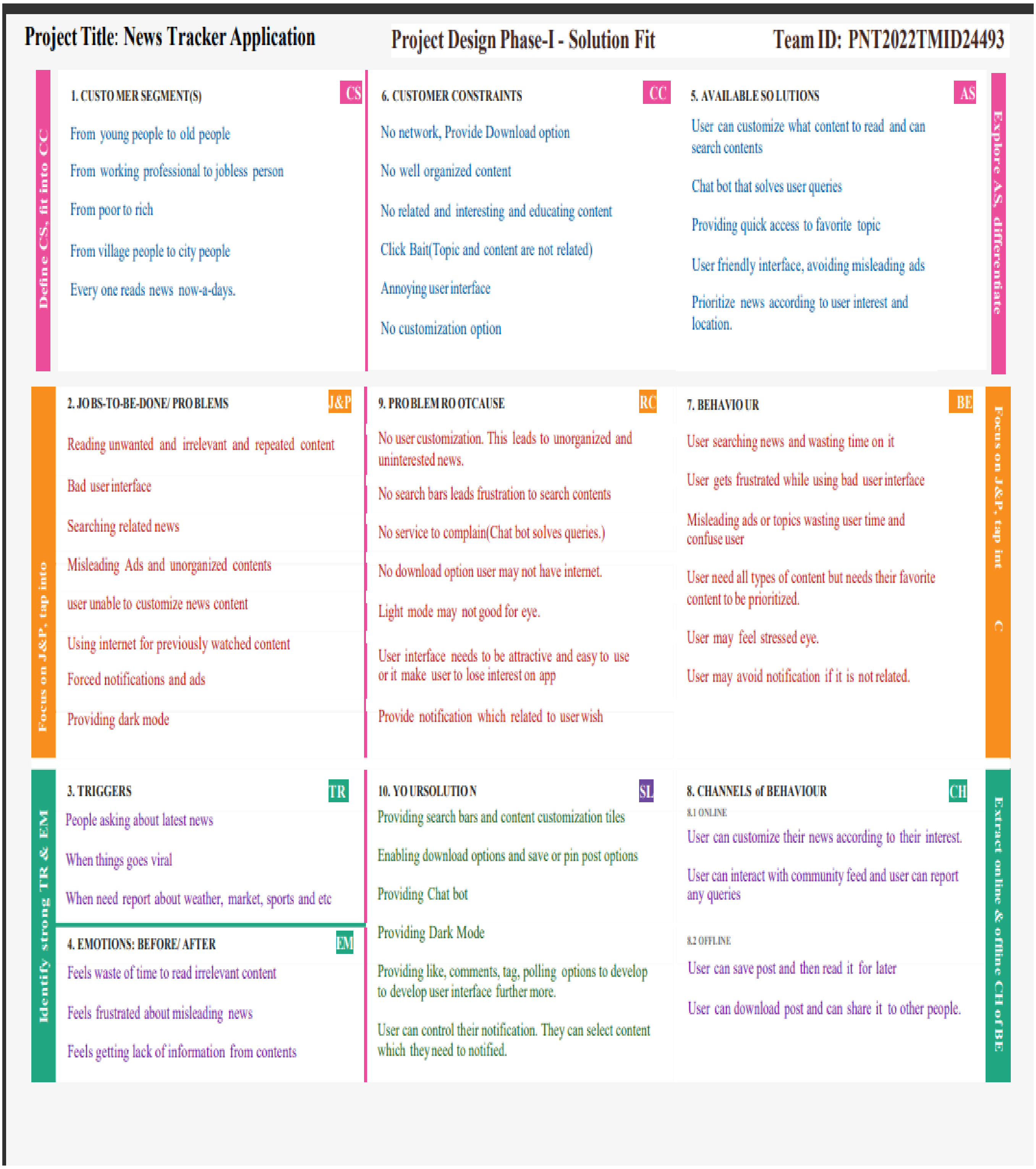
3.3 ProposedSolution



Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	There are multiple news-sharing apps used by a single user and are often spammed with notifications. There is also a lot of fake news which gets shared. A news-sharing app wants to help users find relevant and important news easily every day and also understand explicitly that the news is not fake but from proper sources.
2.	Idea / Solution description	As our lives are very busy these days, we often feel we need more than 24 hrs. a day to cope up with everything we have in our schedule. Well, that'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 helps you to query for all information about Indices, Commodities, Currencies, Future Rates, Bonds, etc.... as on official websites.–
3.	Novelty / Uniqueness	**Smart View** Most news apps work online, and articles can only be viewed if the device has internet connectivity. However, with the Smart View feature, you can allow your users to consume news offline without any hassle. This feature was built into the news API for Japanese users commuting in the Tokyo subway. In this feature, the web view is removed, which reduces data consumption.
4.	Social Impact / Customer Satisfaction	A New Application of Social Impact in Social Media for Overcoming Fake News in Health One of the challenges today is to face fake news (false information) in health due to its potential impact on people's lives.
5.	Business Model (Revenue Model)	The apps under these revenue model are free for the users and they are diverted to the advertisers for the payment. The agenda of such a revenue model is to accumulate a good amount of user base and its data.
6.	Scalability of the Solution	• Better user experience • Cost- effectiveness • Stable performance • App customization • Project growth

3.4 ProblemSolutionfit



Project Title: News Tracker Application

Project Design Phase-I - Solution Fit

Team ID: PNT2022TMID24493

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

From young people to old people

From working professional to jobless person

From poor to rich

From village people to city people

Every one reads news now-a-days.

6. CUSTOMER CONSTRAINTS CC

No network, Provide Download option

No well organized content

No related and interesting and educating content

Click Bait(Topic and content are not related)

Annoying user interface

No customization option

5. AVAILABLE SOLUTIONS AS

User can customize what content to read and can search contents

Chat bot that solves user queries

Providing quick access to favorite topic

User friendly interface, avoiding misleading ads

Prioritize news according to user interest and location.

Explore AS, differentiate

Focus on J&P, tap into

2. JOBS-TO-BE-DONE/ PROBLEMS J&P

Reading unwanted and irrelevant and repeated content

Bad user interface

Searching related news

Misleading Ads and unorganized contents

user unable to customize news content

Using internet for previously watched content

Forced notifications and ads

Providing dark mode

9. PROBLEM ROOT CAUSE RC

No user customization. This leads to unorganized and uninterested news.

No search bars leads frustration to search contents

No service to complain(Chat bot solves queries.)

No download option user may not have internet.

Light mode may not good for eye.

User interface needs to be attractive and easy to use or it make user to lose interest on app

Provide notification which related to user wish

7. BEHAVIOUR BE

User searching news and wasting time on it

User gets frustrated while using bad user interface

Misleading ads or topics wasting user time and confuse user

User need all types of content but needs their favorite content to be prioritized.

User may feel stressed eye.

User may avoid notification if it is not related.

Focus on J&P, tap int C

Identify strong TR & EM

3. TRIGGERS TR

People asking about latest news

When things goes viral

When need report about weather, market, sports and etc

4. EMOTIONS: BEFORE/ AFTER EM

Feels waste of time to read irrelevant content

Feels frustrated about misleading news

Feels getting lack of information from contents

10. YOUR SOLUTION SL

Providing search bars and content customization tiles

Enabling download options and save or pin post options

Providing Chat bot

Providing Dark Mode

Providing like, comments, tag, polling options to develop to develop user interface further more.

User can control their notification. They can select content which they need to notified.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

User can customize their news according to their interest.

User can interact with community feed and user can report any queries

8.2 OFFLINE

User can save post and then read it for later

User can download post and can share it to other people.

Extract online & offline CH of BE

4. REQUIREMENTANALYSIS

4.1 Functionalrequirement

Followingarethefunctionalrequirementsoftheproposedsolution.

FR No.	Functional Requirement(Epic)	SubRequirement (Story/ Sub-Task)
FR-1	UserRegistration	Registration through FormRegistrationthroughG mail
FR-2	UserConfirmation	Confirmation via EmailConfirmationvia OTP
FR-3	UserLogin	Userusinghis/herdevicetologintotheapp/websiteforreadingnews
FR-4	Usersearch	Forgettingnewshe/shemustneedtosearchthenewsinthe givensearchbar, Whichwillcollectthenewsaccordingtohissearchfromtheonlinesourceslikeblog, e-newspaper,Articlesetc
FR-5	UserReads	Gatherednewswill beshowntotheuserinshort lines/summarymanner. Along with news Pictures, hyperlinks fortheblog,article Ororiginalpublisherofthenewsisgiven
FR-6	Userfeatures	User can have lot of features like Like andshareandPost features.

4.2 Non-functionalRequirements:

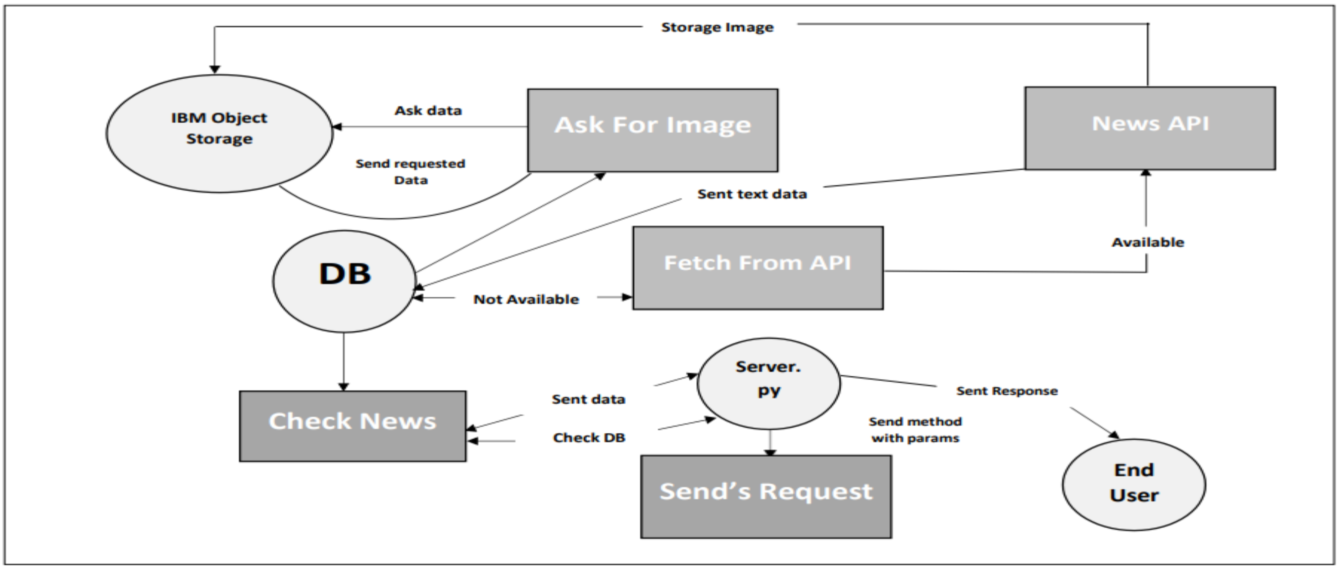
Followingarethenon-functionalrequirementsoftheproposedsolution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	For getting news he/she must need tosearch the news in the given search bar,Whichwillcollectthenewsaccordingtohis search from the online sources likeblog,e-news paper,Articles etc. Gathered news will be shown to the userinshort lines/ summary manner. Along with news Pictures, hyperlinks fortheblog,article Ororiginalpublisherofthenewsisgiven
NFR-2	**Security**	User’s data for the Registration and datacollectedfromhisactivityaremaintainedinhighsecurityandmust beusedforonly product improvement. Disclosingofhis/herdetailisconsideredas acrimehencetheycantakeany legal actionsagainsttheserviceprovider.
NFR-3	**Reliability**	News gathered and presented to the userare from only authorized publishers, andthesourcesareauthentic. Usercan relayonthisapp fororiginal news .
NFR-4	**Performance**	24*7 service with best cloud service,There will be no performance issue to theusers.
NFR-5	**Availability**	CandownloadfromPlaystoreandonlinewebsites.
NFR-6	**Scalability**	Hence it is cloud based systemScalability will be no issue becauseScalabilityisthepriorfeature ofthe cloudbasedservices.

5. PROJECTDESIGN

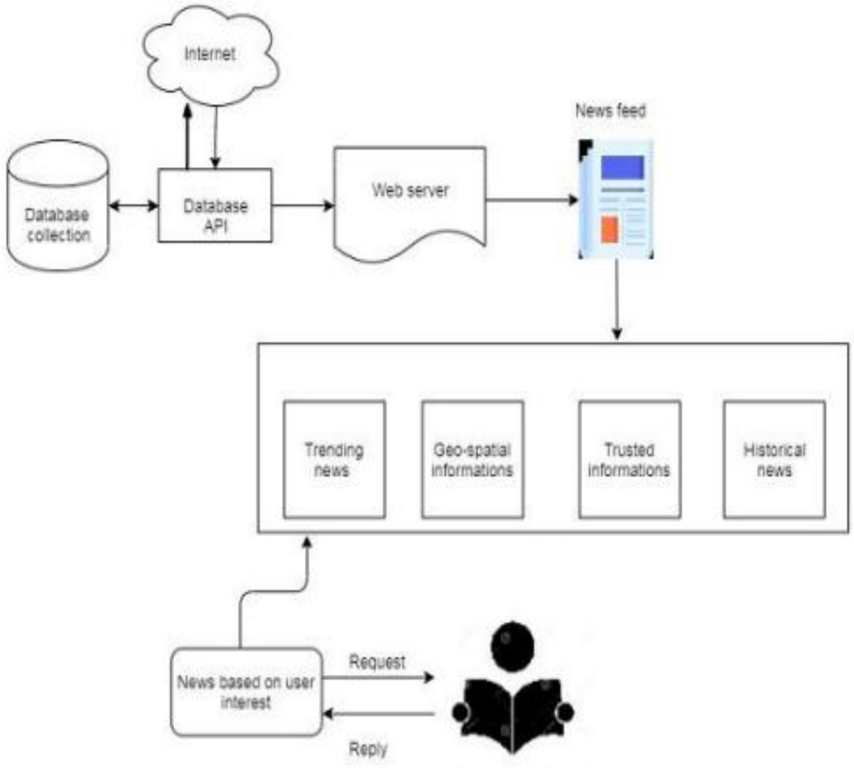
5.1 DataFlowDiagrams

Dataflow Diagram

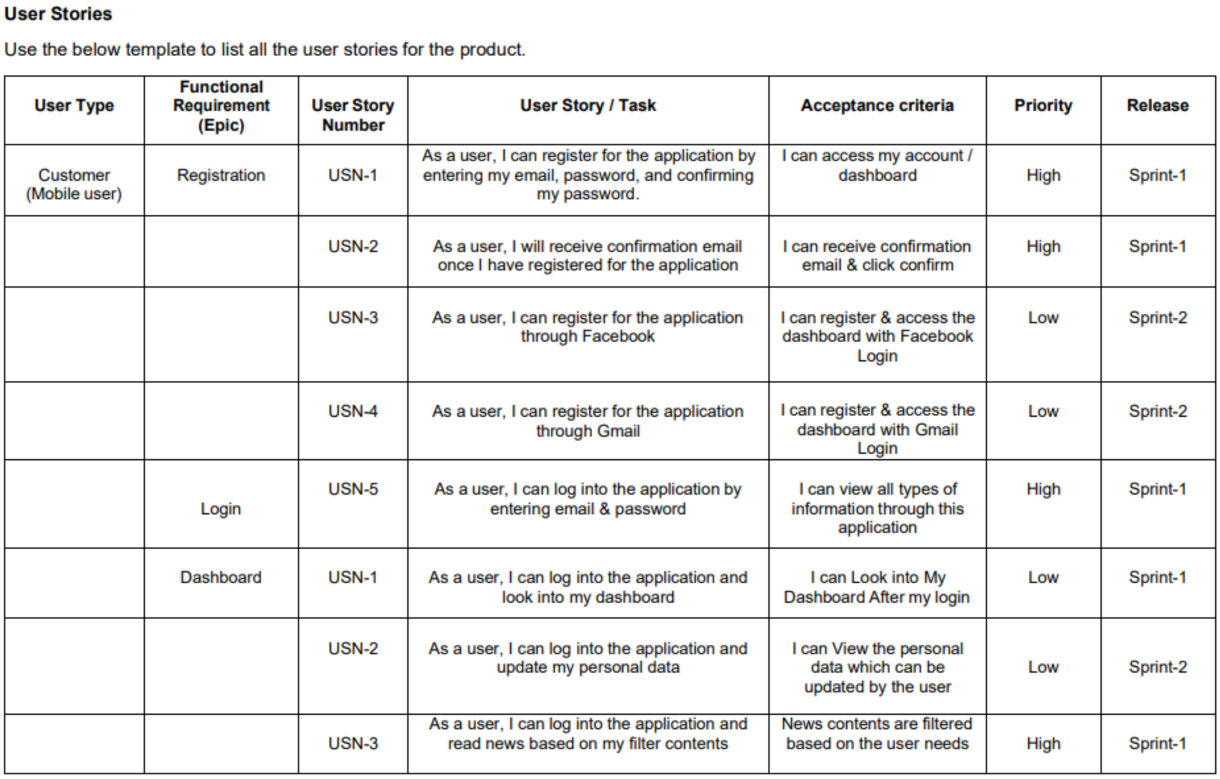


5.2 Solution&TechnicalArchitecture

Solution Architecture Diagram:



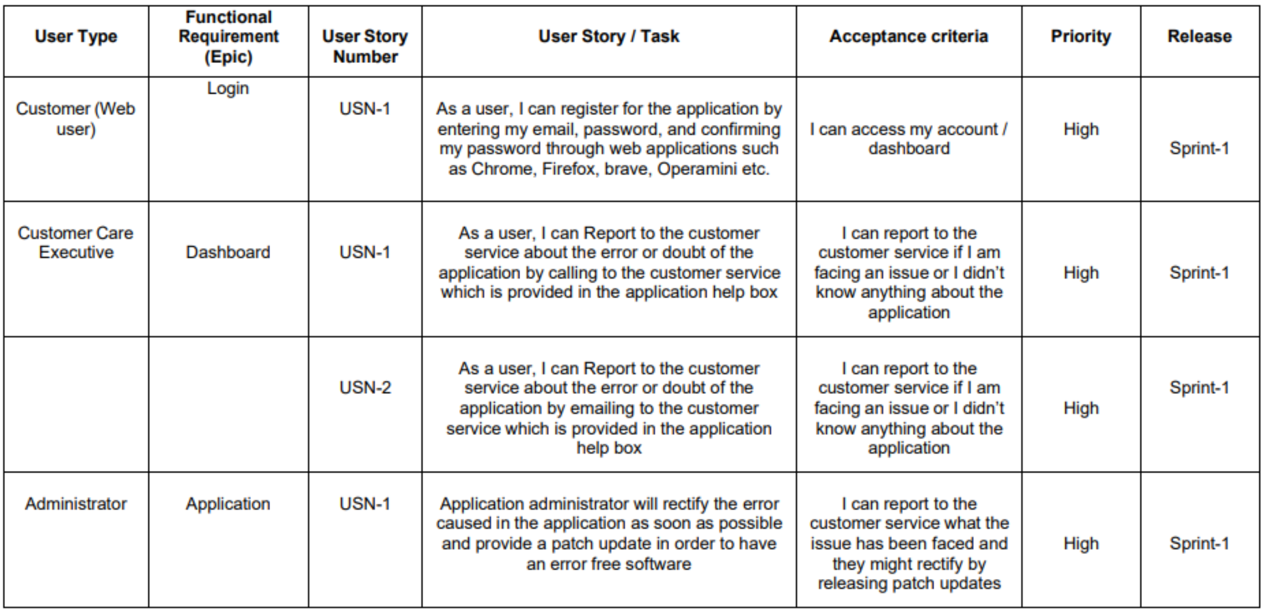
5.3 UserStories



User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail	I can register & access the dashboard with Gmail Login	Low	Sprint-2
	Login	USN-5	As a user, I can log into the application by entering email & password	I can view all types of information through this application	High	Sprint-1
	Dashboard	USN-1	As a user, I can log into the application and look into my dashboard	I can Look into My Dashboard After my login	Low	Sprint-1
		USN-2	As a user, I can log into the application and update my personal data	I can View the personal data which can be updated by the user	Low	Sprint-2
		USN-3	As a user, I can log into the application and read news based on my filter contents	News contents are filtered based on the user needs	High	Sprint-1



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

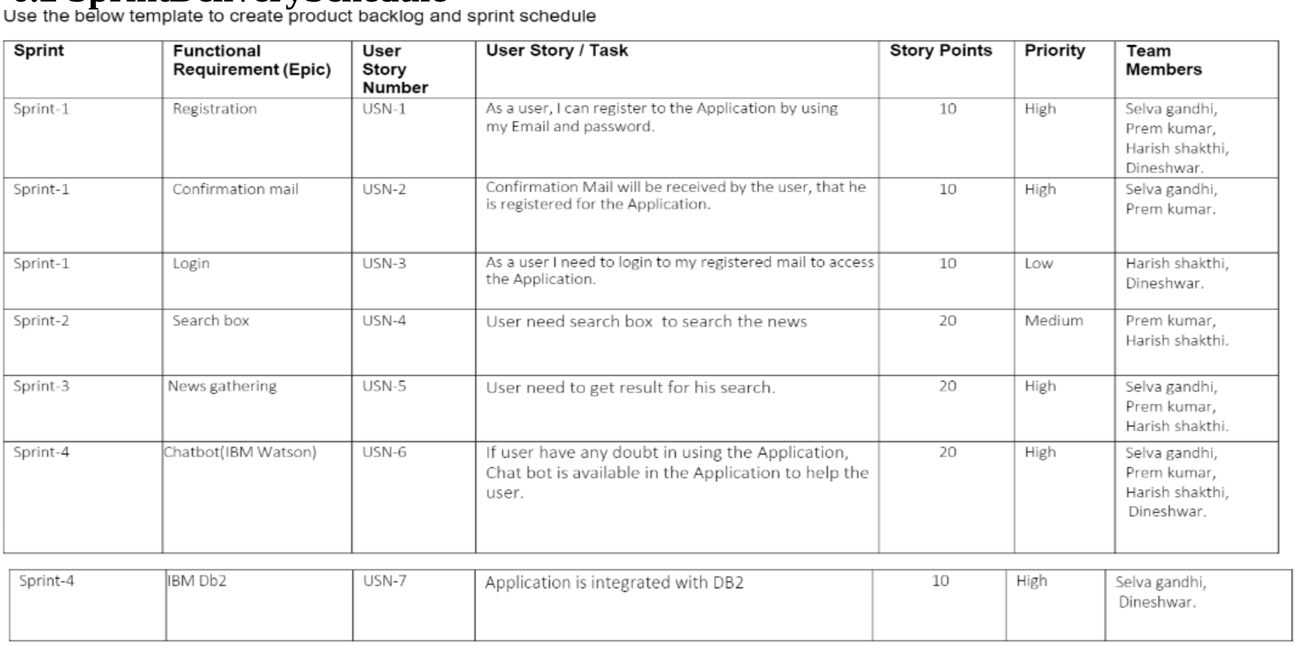
6. PROJECTPLANNING& SCHEDULING

6.1 SprintPlanning&Estimation

TITLE	DESCRIPTION	DATE
Literature Survey & Information Gathering	Literature survey on the selected project &gatheringinformation byreferring the, technical papers, research publicationsetc.	15 Sept2022
PrepareEmpathyMap	Prepare Empathy MapCanvasto capture the user Pains & Gains, Prepare list of problem statements	19 Sept2022
Ideation Brain Storming	List the by organizing thebrainstormingsessionand prioritize the top 3 ideasbasedonthefeasibility& importance.	19 Sept2022
ProposedSolution	Prepare the proposed solutiondocument, whichincludes thenovelty, feasibility of idea,business model,social impact, scalability ofsolution,etc.	17 Oct 2022
ProblemSolution Fit	Prepareproblemsolutionfitdocument	17 Oct 2022
SolutionArchitecture	Prepare solution architecturedocument.	17 Oct 2022
CustomerJourney	Prepare the customer journey maps to	17 Oct 2022

	understand the user interactions& experiences with the application (entry to exit).	
SolutionRequirement	Prepare the functionalrequirement document	17 October 2022
DataFlowDiagrams	Drawthedataflowdiagramsandsubmitforreview.	16 October 2022
Technology Architecture	Preparethetechnologyarchitecturediagram.	17 October 2022
Prepare Milestone &Activity List	Prepare the milestones &activitylist oftheproject.	03 November2022
Project Development- Delivery of Sprint-1,2,3 &4	Develop & submit the developed code by testing it.	12 November 2022

6.2 SprintDeliverySchedule



Use the below template to create product backlog and sprint schedule

Sprint	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 to the Application by using my Email and password.	10	High	Selva gandhi, Prem kumar, Harish shakthi, Dineshwar.
Sprint-1	Confirmation mail	USN-2	Confirmation Mail will be received by the user, that he is registered for the Application.	10	High	Selva gandhi, Prem kumar.
Sprint-1	Login	USN-3	As a user I need to login to my registered mail to access the Application.	10	Low	Harish shakthi, Dineshwar.
Sprint-2	Search box	USN-4	User need search box to search the news	20	Medium	Prem kumar, Harish shakthi.
Sprint-3	News gathering	USN-5	User need to get result for his search.	20	High	Selva gandhi, Prem kumar, Harish shakthi.
Sprint-4	Chatbot(IBM Watson)	USN-6	If user have any doubt in using the Application, Chat bot is available in the Application to help the user.	20	High	Selva gandhi, Prem kumar, Harish shakthi, Dineshwar.
Sprint-4	IBM Db2	USN-7	Application is integrated with DB2	10	High	Selva gandhi, Dineshwar.

6.3 Reports fromJIRA

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7. CODING&SOLUTIONING

Forgot password-

Forpass.html

```
<!doctypehtml>
<htmllang="en">
  <head>
    <metacharset="utf-8">
    <metaname="viewport"content="width=device-width,initial-scale=1">
    <metaname="description"content="">
    <metaname="author"content="MarkOtto,JacobThornton,andBootstrapcontributors">
    <metaname="generator"content="Hugo0.84.0">
    <title>SignIn</title>


    <link rel="canonical" href="https://getbootstrap.com/docs/5.0/examples/sign-in/">


    <link href="https://getbootstrap.com/docs/5.0/assets/css/docs.css" rel="stylesheet">


    <!--BootstrapcoreCSS -->
    <linkhref="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"rel="stylesheet" integrity="sha384-iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT"crossorigin="anonymous">
    <!--Favicons -->
<linkrel="apple-touch-icon"href="/docs/5.0/assets/img/favicons/apple-touch-icon.png"sizes="180x180">
<link rel="icon" href="/docs/5.0/assets/img/favicons/favicon-32x32.png"sizes="32x32"type="image/png">
<link rel="icon" href="/docs/5.0/assets/img/favicons/favicon-16x16.png"sizes="16x16"type="image/png">
<linkrel="manifest"href="/docs/5.0/assets/img/favicons/manifest.json">
<link rel="mask-icon" href="/docs/5.0/assets/img/favicons/safari-pinned-tab.svg"color="#7952b3">
<linkrel="icon"href="/docs/5.0/assets/img/favicons/favicon.ico">
<metaname="theme-color"content="#7952b3">
```

```
  <style>
    .bd-placeholder-
      img{font-size:
      1.125rem;text-
      anchor:middle;
      -webkit-user-select:none;
      -moz-user-select:
      none;user-select:none;
    }

    @media(min-width:768px){
      .bd-placeholder-img-lg
        {font-size: 3.5rem;
      }
    }
  </style>



  <!--Customstylesforthistemplate-->
  <linkhref="static/sheets/signin.css"rel="stylesheet">
  <linkhref="static/sheets/colors.css"rel="stylesheet">
</head>
<bodyclass="text-center">
      <navclass="navbarnavbar-darkbg-darkfixed-top">
          <divclass="container-fluid">
            <aclass="navbar-brand"href="#">NewsTracker</a>
```

```
<buttonclass="navbar-toggler"type="button"data-bs-toggle="offcanvas" data-bs-target="#offcanvasDarkNavbar" aria-controls="offcanvasDarkNavbar">
  <spanclass="navbar-toggler-icon"></span>
</button>
<divclass="offcanvasoffcanvas-endtext-bg-dark"tabindex="-1"id="offcanvasDarkNavbar"aria-labelledby="offcanvasDarkNavbarLabel">
  <divclass="offcanvas-header">
    <h5 class="offcanvas-title" id="offcanvasDarkNavbarLabel">Profile</h5>
    <buttontype="button"class="btn-closebtn-close-white"data-bs-dismiss="offcanvas"aria-label="Close"></button>
  </div>
  <divclass="offcanvas-body">
    <ulclass="navbar-navjustify-content-endflex-grow-1pe-3">
      <li class="nav-item">
        <a class="nav-link active" aria-current="page"href="home.html">Home</a>
      </li>
      <li class="nav-item">
          <aclass="nav-link"href="base.html">FetchNews</a>
        </li>
      <li class="nav-item">
        <aclass="nav-link"href="about.html">AboutUs</a>
      </li>
      <li class="nav-item">
        <aclass="nav-link"href="signin.html">SignIn</a>
      </li>
```

```
                   <li class="nav-item">
                     <aclass="nav-link"href="signup.html">SignUp</a>
                   </li>
               </div>
             </div>
           </div>
         </nav>
<mainclass="form-signin">
  <formaction="{{url_for("getUser")}}"method="POST">
    <imgclass="mb-4"src="static/Images/house-user-solid.svg"alt=""width="72"height="57">
    <h1class="h3mb-3fw-normalwhite">Changeyourpassword</h1>

    <divclass="form-floating">
      <inputtype="email"class="form-control"id="floatingInput"name="uname"placeholder="name@example.com">
      <labelfor="floatingInput">Emailaddress</label>
    </div>
    <br>
    <buttonclass="w-100btnbtn-lgbtn-warningbtn-outline-warning"type="submit"><a href="static/templates/changepass.html">Change Password</a></button><br><br>
  </form>
</main>
<scriptsrc="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/js/bootstrap.bundle.min.js" integrity="sha384-u1OknCvxWvY5kfmNBILK2hRnQC3Pr17a+RTT6rIHI7NnikvbZlHgTPOOmMi466C8"crossorigin="anonymous"></script>
```

```
<scriptsrc="https://cdn.jsdelivr.net/npm/@docsearch/js@3"></script>

<scriptsrc="https://cdn.jsdelivr.net/npm/@stackblitz/sdk@1/bundles/sdk.umd.js"
></script>


<scriptsrc="/docs/5.2/assets/js/docs.min.js"></script>


<script>


  document.querySelectorAll('.btn-edit').forEach(btn =>
    {btn.addEventListener('click',event =>{
      const htmlSnippet = event.target.closest('.bd-code-
snippet').querySelector('.bd-example').innerHTML



      const classes = Array.from(event.target.closest('.bd-code-
snippet').querySelector('.bd-example').classList).join('')


      const jsSnippet = event.target.closest('.bd-code-snippet').querySelector('.btn-
edit').getAttribute('data-sb-js-snippet')
      StackBlitzSDK.openBootstrapSnippet(htmlSnippet,jsSnippet,classes)
    })
  })


  StackBlitzSDK.openBootstrapSnippet = (htmlSnippet, jsSnippet, classes)
    =>{const markup=`<!doctype html>
<htmllang="en">
  <head>
```

```
    <metacharset="utf-8">
    <metaname="viewport"content="width=device-width,initial-scale=1">
    <linkhref="https:\/\/cdn.jsdelivr.net\/npm\/bootstrap@5.2.1\/dist\/css\/bootstra
p.min.c ss"rel="stylesheet">
    <link
                    href="https://getbootstrap.com/docs/5.2/assets/css/docs.css"
rel="stylesheet">
    <title>BootstrapExample</title>
    <${'script'}src="https:\/\/cdn\.jsdelivr\.net\/npm\/bootstrap@5\.2\.1\/dist\/js\/bootstra
p\.bundle\.min\.js"></${'script'}>
  </head>
  <bodyclass="p-3m-0border-0${classes}">

    <!--ExampleCode-->
${htmlSnippet.replace(/^/gm,'     ')}
    <!--End ExampleCode -->
  </body>
</html>`

    constjsSnippetContent=jsSnippet?'\/\/NOTICE!!!Initiallyembeddedinourdocst
hisJavaScript\n\/\/filecontainselementsthatcanhelpyoucreatereproducible\n\/\/
use cases in StackBlitz for instance\.\n\/\/ In a real projectplease adapt this
content to your needs\.\n\/\/
\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u0
02b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b
\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\u0
02b\u002b\u002b\u002b\u002b\u002b\u002b\u002b\n\n\/\*!\n\*JavaScriptforBo
otstrap\u0027sdocs\(https:\/\/getbootstrap\.com\/\)\n\*Copyright2011\-
2022TheBootstrapAuthors\n\*Copyright2011\-
2022Twitter,Inc\.\n\*LicensedundertheCreativeCommonsAttribution3\.0Unport
edLicense\.\n\*
```

```
For details, see https:\/\/creativecommons\.org\/licenses\/by\/3\.0\/\.\n
\*\/\n\n\/\*globalbootstrap:false\*\/\n\n\(\(\)=\u003e\{\n\u0027use
strict\u0027\n\n\/\/
\-\-\-\-\-\-\-\-\-\n\/\/ Tooltips\n\/\/ \-\-\-\-\-\-\-\-\-\n\/\/ Instantiate all tooltips in
adocsorStackBlitzpage\ndocument\.querySelectorAll\(\u0027\[data\-bs\-
toggle=\u0022tooltip\u0022\]\u0027\)\n\.forEach\(tooltip =\u003e
\{\nnewbootstrap\.Tooltip\(tooltip\)\n \}\)\n\n\/\/ \-\-\-\-\-\-\-\-\n\/\/Popovers\n\/\/
\-
\-\-\-\-\-\-\-\n
 \/\/InstantiateallpopoversinadocsorStackBlitzpage\ndocument\.q
uerySelectorAll\(\u0027\[data\-bs\-toggle=\u0022popover\u0022\]\u0027\)\n
 \.forEach\(popover=\u003e\{\nnewbootstrap\.Popover\(popover\
)\n \}\)\n\n\/\/\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-
\-\-\-\-\-\-\-\-\-\-\-\-\-\-\n\/\/Toasts\n\/\/\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-
\-\-\-\n \/\/Usedby\u0027Placement\u0027exampleindocsorStackBlitz\nconst
 toastPlacement =
document\.getElementById\(\u0027toastPlacement\u0027\)\n if
\(toastPlacement\) \{\n
document\.getElementById\(\u0027selectToastPlacement\u0027\)\.addEventLis
tener\(\u0027change\u0027, function \(\) \{\n if
\(!toastPlacement\.dataset\.originalClass\)
 \{\n
toastPlacement\.dataset\.originalClass =
toastPlacement\.className\n\}\n\ntoastPlacement\.className=
`\$\{toastPlacement\.dataset\.originalClass\}
\$\{this\.value\}`\n\}\)\n\}\n\n\/\/ Instantiate all toasts in a docs page
only\ndocument\.querySelectorAll\(\u0027\.bd\-example \.toast\u0027\)\n
\.forEach\(toastNode=\u003e \{\n
 consttoast=newbootstrap\.Toast\(t
oastNode,\{\n autohide:false\n
 \}\)\n\ntoast\.show\(\)\n\}\)\n\n\/\/
Instantiate all toasts in a docs page only\nconsttoastTrigger =
document\.getElementById\(\u0027liveToastBtn\u0027\)\n
consttoastLiveExample=document\.getElementById\(\u0027liveToast\u0027\)\n
if
\(toastTrigger\)\{\n toastTrigger\.addEventListener\(\u0027click\u0027,\(\)
=\u003e \{\nconst toast = new
bootstrap\.Toast\(toastLiveExample\)\n\ntoast\.show\(\)\n \}\)\n\}\n\n\/\/\-\-\-\-
\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-
\-\-\n \/\/ Alerts\n \/\/ \-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\n \/\/
Usedin\u0027Showlivetoast\u0027exampleindocsorStackBlitz\nconstalertPlace
```

```
holder =
document\.getElementById\(\u0027liveAlertPlaceholder\u0027\)\n
const
alertTrigger=document\.getElementById\(\u0027liveAlertBtn\u0027\)\n\nconsta
ppendAlert=\(message,type\)=\u003e\{\nconstwrapper=document\.createEleme
nt\(\u0027div\u0027\)\n     wrapper\.innerHTML=\[\n
```

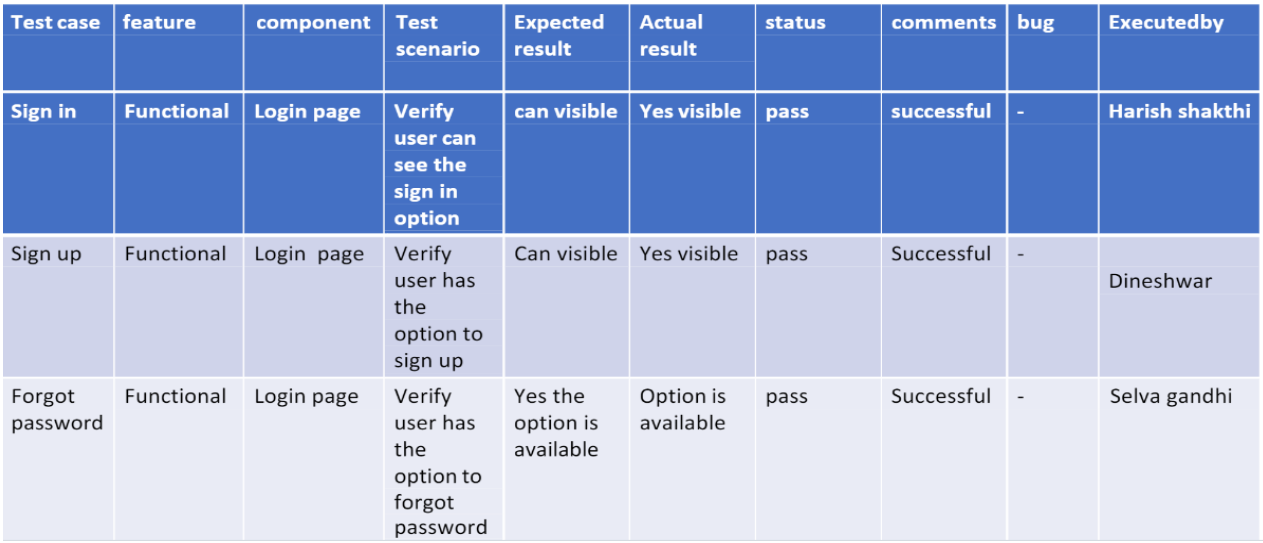
```
`\u003cdivclass=\u0022alertalert\-\$\{type\}alert\-
dismissible\u0022role=\u0022alert\u0022\u003e`,\n `
\u003cdiv\u003e\$\{message\}\u003c\/div\u003e`,\n\u0027\u003cbuttontype=\u
0022button\u0022 class=\u0022btn\-close\u0022 data\-bs\-
dismiss=\u0022alert\u0022 aria\-
label=\u0022Close\u0022\u003e\u003c\/button\u003e\u0027,\n
\u0027\u003c\/div\u003e\u0027\n
\]\.join\(\u0027\u0027\)\n\n
alertPlaceholder\.append\(wrapper\)\n\}\n\nif\(alertTrigger\)\{\nalertTrigger\.ad
dEventListener\(\u0027click\u0027,\(\)=\u003e\{\nappendAlert\(\u0027Nice,
you triggered this alert message!\u0027,
\u0027success\u0027\)\n \}\)\n\}\n\n\/\/\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-
\-\-\-\-\-\-\-\-\n\/\/Checks\u0026Radios\n\/\/\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-
\-\-\-\-\-\-\-\-\-\-\n\/\/ Indeterminate checkbox example in docs and
StackBlitz\ndocument\.querySelectorAll\(\u0027\.bd\-example\-indeterminate
\[type=\u0022checkbox\u0022\]\u0027\)\n \.forEach\(checkbox =\u003e
\{\nif \(checkbox\.id\.includes\(\u0027Indeterminate\u0027\)\)
 \{\ncheckbox\.indeterminate=true\n \}\n \}\)\n\n\/\/\-\-\-\-\-\-\-\-\-
\-\-\-\-\-\-\-
\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\n\/\/Links\n\/\/\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-
\-\-\-\-\-\-
\n\/\/Disableemptylinksindocsexamplesonly\ndocument\.querySelectorAll\(\u00
27\.bd\-content
\[href=\u0022#\u0022\]\u0027\)\n \.forEach\(link =\u003e \{\n
link\.addEventListener\(\u0027click\u0027, event =\u003e \{\n
event\.preventDefault\(\)\n \}\)\n \}\)\n\n \/\/\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-
\-\-\-\-\-\-\-\-\-\-\-\-\n\/\/Modal\n\/\/\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-
\-\-\n\/\/ Modal \u0027Varying modal content\u0027 example in docs
andStackBlitz\n const exampleModal
 =document\.getElementById\(\u0027exampl
eModal\u0027\)\n if
\(exampleModal\) \{\n
exampleModal\.addEventListener\(\u0027show\.bs\.modal\u0027, event
=\u003e \{\n\/\/ Button that triggered the modal\nconst button
=event\.relatedTarget\n\/\/ Extract info from data\-bs\-\*
attributes\nconstrecipient = button\.getAttribute\(\u0027data\-bs\-
whatever\u0027\)\n\n\/\/Update the modal\u0027s content\.\n
 constmodalTitle=exampleModal\.querySelector\(\
u0027\.modal\-title\u0027\)\n
 constmodalBodyInput=exampleModal\.querySele
ctor\(\u0027\.modal\-bodyinput\u0027\)\n\n
```

modalTitle\.textContent= `New message to \$\{recipient\}`\n modalBodyInput\.value=recipient\n \}\)\n\}\n\n\/\/\-\-

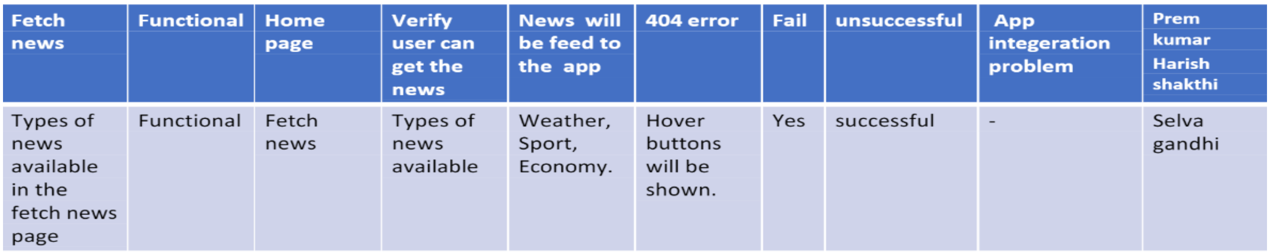
```
\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\n\/\/Offcanvas\n\/\/\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\n\/\/ \u0027Offcanvas components\u0027example in docs only\n constmyOffcanvas=document\. querySelectorAll\(\u0027\.bd\-example\-offcanvas \.offcanvas\u0027\)\n if \(myOffcanvas\) \{\n myOffcanvas\.forEach\(offcanvas =\u003e \{\n offcanvas\.addEventListener\(\u0027show\.bs\.offcanvas\u0027,event=\u003e \{\n event\.preventDefault\(\)\n \},false\)\n \}\)\n\}\n\}\)\(\)\n' :

  nullconstproject={
    files: {
      'index.html':
      markup,'index.js':jsSnippet
      Content
    },
    title:'BootstrapExample',
    description: `Official example from
    ${window.location.href}`,template: jsSnippet?'javascript':
    'html',
    tags:['bootstrap']
  }

  StackBlitzSDK.openProject(project,{openFile:'index.html'})
 }
</script>
 </body>
</html>
```

8. TESTING

8.1 TestCases



Test case	feature	component	Test scenario	Expected result	Actual result	status	comments	bug	Executedby
Sign in	Functional	Login page	Verify user can see the sign in option	can visible	Yes visible	pass	successful	-	Harish shakthi
Sign up	Functional	Login page	Verify user has the option to sign up	Can visible	Yes visible	pass	Successful	-	Dineshwar
Forgot password	Functional	Login page	Verify user has the option to forgot password	Yes the option is available	Option is available	pass	Successful	-	Selva gandhi



Fetch news	Functional	Home page	Verify user can get the news	News will be feed to the app	404 error	Fail	unsuccessful	App integeration problem	Prem kumar Harish shakthi
Types of news available in the fetch news page	Functional	Fetch news	Types of news available	Weather, Sport, Economy.	Hover buttons will be shown.	Yes	successful	-	Selva gandhi

Fetch news	Functional	Home page	Verifyuser cangetthe news	News willbe feed totheapp	404error	Fail	unsuccessful	App integeration problem	
Typesof news available inthe fetchnews page	Functional	Fetch news	Typesof news available	Weather, Sport, Economy.	Hover buttons willbe shown.	Yes	successful	-	Selva Gandhi Prem Kumar Harish Shakthi Dineshwar

Result:

Newstrackerapplicationusingcloudisdevelopedandexecutedatthelevelofcompletedprogress.

10. ADVANTAGES & DISADVANTAGESAdvantages:-

- Inthisappnewsisalreadycategorization.
- Easilyaccessibleandportable.
- Betteruserexperience.
- Appshelpyouconvertvisitorstoloyalreaders.
- Minutebyminuteupdatesofnews.
- Thisapp helpsyoutogetlocalnewsupdatesinstantly.
- Toexploreanddiscovertrendingnewsandtopics.
- Newsfeedsforyoubasedonyourinterest.

Disadvantages:-

- Someappsdemandpremiumsubscriptionfromuser.
- OccuranceofAdvertismentdisturbtheuser.
- Sometimesthenewsgivesbriefinformation.
- Prevailanceoffakeanduncertainnewscanconfusetheuserleadtomisconception.
- Fakenewsmaymisleadthereaders.

11. CONCLUSION

We explored the feasibility of recognising patterns of news reading interactionsand evaluated three adaptive interface designs for different news reader types.We show that from their interaction log, a specific user can be recognised asone of three kinds. The reader types emerging from the online survey are welldefined and distinct. The evaluation of the three variant interfaces suggests thatdifferent news reader types need different user interfaces. We havedemonstrated a method for monitoring users' news reading behaviour andinferring news reader type from it. In the future we will further explore thedesign of adaptive interfaces, in order to be in a position to demonstrate acomplete adaptive mobile news framework providing automatic personalisationofnewsapps.

12.FUTURESCOPE

In the future we will further explore the design of adaptive interfaces, in order tobe in a position to demonstrate a complete adaptive mobile news frameworkproviding automaticpersonalisationofnewsapps.

13. APPENDIX

SourceCode:

Backend_

App.py

```
from dotenv import
dotenv_valuesfromapiFetchimport
*
fromflaskimportFlask
fromflask_corsimportCORS
fromroutes.registerimportRegister
from routes.checkEmail import
CheckEmailfromroutes.verifyimportVerify
fromroutes.getnewsimport*from
routes.islogin import IsLoginfrom
routes.login import
Loginfromflask_restful importApi
from utils.apiFetch import
apiRunnerapp =Flask(_name__)
api =Api(app)
data =
dotenv_values(".env")app.config['SECRET_KEY
'] =
data["secret_key"]app.config['SECURITY_PASS
WORD_SALT']=
data["secured_password_salt"]a
piRunner()
CORS(app,
supports_credentials=True)api.add_resource(Logi
n,
'/login')api.add_resource(IsLogin,'/islogin')api.ad
d_resource(CheckEmail,
'/register/check')api.add_resource(Register,
'/register')api.add_resource(Verify,
'/register/verify')api.add_resource(Personal,
'/news/recommended')api.add_resource(News,'/ne
ws/<topic>')
```

Routes_Check

Email.py

```
fromflaskimportrequest
from flask_restful import
Resourcefrom utils.dbQuery import
selectQueryclass
CheckEmail(Resource):
    def
        post(self):data=request.j
        sonemail=str(data["emai
        l"])
        res=selectQuery("SELECT email FROM USER
WHEREEMAIL=?",(email,))
        print(res)if(
        notres):
            return
        {"status":True},200return{"s
        tatus":False},400
```

Getnews.py

```
fromrandomimportrandom
fromflask_restfulimportResource
fromutils.cookieCheckerimporttoken_requiredfro
mutils.dbQuery importselectQuery
from utils.apiFetch import
apiDataimport random
from utils.testData import
retArrayclass Personal(Resource):
    @token_requiredd
    efget(email,self):
        topicsArr = ["sport", "tech", "world", "finance", "politics",
                     "business","economics","entertainment","beauty","travel","music",
                     "food",
"science","cricket"]
        fav = selectQuery("SELECT favourites from user where
email=?",(email,))[
            'FAVOURITES']
```

```
fav =
fav.split(',')forx
infav:
    topicsArr.remove(x)
retArr =[]
favList= []
# favList =
retArraynonFavList
=[]
for x in
    fav:try:
        data =
    apiData(x)except:
        data=None
    if (data is not
        None):fory
        indata:
            favList.append(y)
try:
    random.shuffle(favList)
    favList = sorted(favList, key=lambda k: k['date'],
reverse=True)except:
    favList=[]
for x in
    topicsArr:try:
        data =
    apiData(x)except:
        data=Noneif(data
    isnotNone):
        fory
            indata:nonFavList.ap
            pend(y)
try:
    random.shuffle(nonFavList)
    nonFavList = sorted(nonFavList, key=lambda k: k['date'],
reverse=True)except:
    nonFavList=[]
retArr =
favList+nonFavListreturn{"
data": retArr},200
```

```
class
    News(Resource):@t
    oken_requir
    defget(email,self,topic):
        topicsArr = ["headline","sport", "tech", "world", "finance",
"politics","business",
                     "economics", "entertainment", "beauty", "travel", "music",
"food","science","cricket"]
        if(topicnotintopicsArr):
            return {"status":"Not a valid
        topic"},404try:
            retArr=apiData(topic)r
            andom.shuffle(retArr)
            retArr=sorted(retArr,key=lambdak:k['date'],reverse=True)excep
        t:
            retArr=[]
        return{"data":retArr},200
```

Islogin.py

```
from flask import request,
after_this_requestfrom utils.password
import
checkPasswordfromflask_restfulimport
Resource
fromutils.cookieCheckerimporttoken_requiredcla
ss IsLogin(Resource):
    @token_requiredd
    efget(email,self):
        return {"status":"Logged in"},200
```

login.py

```
from datetime import
datetimefromflask_restfulimportR
esource
from flask import
request,after_this_requestfrom
utils.password import
checkPasswordfromutils.dbQueryimport*
fromdateparserimport parse
from utils.tokener import
generate_confirmation_tokenfromutils.emailSenderim
portemailSender
import
appimportj
wt
```

```
class
   Login(Resource):de
   fpost(self):
        data=request.jsonip=request
        .headers.get("ip")email=dat
        a["email"]password=data["
        password"]
        queryRes=selectQuery("SELECT * from user where
        email=?",(email,))res=checkPassword(password,queryRes["PASSWO
        RD"])
        if(not res):
            return {"status":"Wrong
        credentials"},400if(notqueryRes["VERIFIE
        D"]):
            lastTime=parse(queryRes["RESEND_TIME"])
            currTime=datetime.now()
            diff=currTime-
            lastTimediff=diff.total_s
            econds()if(diff>3600):
                token=generate_confirmation_token(email)ema
                ilSender(email,token)
                insertQuery("UPDATE user set RESEND_TIME=?
whereemail=?",(datetime.now(),email))
            return {"status":"Not
        verified"},400@after_this_request
        def
            cookieSender(response):a
            ccess_token=jwt.encode(
                {"email":email,"ip":ip},app.app.config['SECRET_KEY']
            )
            #
response.set_cookie("access_token",str(access_token),httponly=True,samesite=
None,path="/")
            #
response.set_cookie("email",str(email),httponly=True,samesite=None,path="/")
            response.headers.add('Set-Cookie',f'access_token={str(access_token)};
SameSite=None; Secure; HttpOnly;
            Path=/')response.headers.add('Set-
            Cookie',f'email={str(email)};
SameSite=None; Secure; HttpOnly;
            Path=/')return response
        return{"status":"SuccessfullyLoggedin"},200
```

Register.py

```
fromdatetimeimportdatetime
```

```
from flask import
request,after_this_requestfromflask_restful
import Resource
fromutils.dbQueryimportinsertQuery
from utils.emailSender import
newEmailSenderfromutils.passwordimportgen
Hash
class
    Register(Resource):de
    fpost(self):
        req=request.jsonname=re
        q['name']email=req['email
        ']password=req['password
        ']favourite=req['favourite'
        ]fav=','.join(favourite)
        if(name==" or email==" or password==" or
            fav=="):return {"status":"Missing data"},404
        password=genHash(password)t=(name,email
        ,password,fav,datetime.now())res=insertQue
        ry('INSERT INTO user
(name,email,password,favourites,resend_time) values
        (?,?,?,?,?)',t)if(not res):
            return{"status":"Errorwhileregistering"},400

        @after_this_requestd
        efemailer(response):
            newEmailSender(email)
            return response
        return{"status":"Successfullyregistered"},200
```

verify.py

```
fromflaskimportrequest
fromflask_restfulimportResourcefrom
utils.tokener import
confirm_tokenfromutils.dbQueryimport
insertQuery

class
    Verify(Resource):de
    fpost(self):
        data=request.jsontoken=data
        ["token"]email=confirm_tok
        en(token)if(not email):
            return{"status":"Couldn'tverify"},400
        res=insertQuery("UPDATE user set verified=True
whereemail=?",(email,))
        if(not res):
            return {"status":"Couldn't
        Update"},400return{"status":"verifiedsucces
        sfully"},200
```

Utils_apiFe

tch.py

```
from datetime import
datetimefromtimeimport sleep
importwarnings
from dotenv import
dotenv_valuesfromthreading
import *
importrequests
from dateparser import
parseclassApi:
    warnings.simplefilter('ignore')
    key=dotenv_values(".env")
    key=key["key"]
    apiMap={}
    mainApiMap ={}
    url="https://newscatcher.p.rapidapi.com/v1/latest_headlines"
    headers ={
        "X-RapidAPI-Key":str(key),
        "X-RapidAPI-Host":"newscatcher.p.rapidapi.com"
    }
    defnewCatcherRunner(self,title):querystring=
        {"topic":title,"lang":"en",
                       "media": "True", "country":
        "IN"}respone=requests.request(
            "GET", url=self.url, headers=self.headers,
        params=querystring)respone=respone.json()
        retArr=[]
        for x in
            respone["articles"]:newJson
            = {}newJson["url"] =
            x["link"]newJson["title"]=x
            ["title"]
            newJson["img"] =
            x["media"]newJson["topic"] =
            x["topic"]currTime=parse(x["publishe
            d_date"])
            newJson["date"] =
            currTime.strftime("%d/%m/%Y")retArr.append(new
            Json)
        returnretArr
    deftopHeadlinesFetcher(self):
```

```
querystring={"topic":"news","lang":"en","media":"True","country":"IN"}
```

```
    respone = requests.request("GET", url=self.url,
headers=self.headers,params=querystring)
    respone =
    respone.json()retArr=[]
    for x in
      respone["articles"]:newJson
      = {}newJson["url"] =
      x["link"]newJson["title"]=x
      ["title"]
      newJson["img"] =
      x["media"]newJson["topic"] =
      x["topic"]currTime=parse(x["publishe
      d_date"])
      newJson["date"] =
      currTime.strftime("%d/%m/%Y")retArr.append(new
      Json)
    self.apiMap["headline"]=retArrprint("headlinefe
    tchedat"+str(datetime.now()))
  defnewsCatcherApiFetcher(self):
    arr= ["sport","tech","world","finance", "politics","business",
        "economics", "entertainment", "beauty", "travel", "music", "food",
    "science"]forx in arr:
      self.apiMap[x] =
    self.newCatcherRunner(x)print("NewsCatcherfetchedat"+str(
    datetime.now()))
  defcricketFetcher(self):
    url = "https://cricbuzz-
    cricket.p.rapidapi.com/news/v1/index"headers ={
      "X-RapidAPI-Key":self.key,
      "X-RapidAPI-Host":"cricbuzz-cricket.p.rapidapi.com"
    }
    response = requests.request("GET", url,
    headers=headers)response= response.json()
    response =
    response["storyList"]retArr=[]
    for x in
      response:try:
        x =
        x["story"]ne
        wJson={}
        newJson["url"] = f'https://www.cricbuzz.com/cricket-
        news/{x["id"]}/newsTrakcer'newJson["title"]=x["hline"]
        newJson["image"]
=f'https://www.cricbuzz.com/a/img/v1/500x500/i1/c{x["id"]}/abc.jpg'
        currTime =
        datetime.fromtimestamp(int(x["pubTime"])/1e3)newJson["d
        ate"] =
        currTime.strftime("%d/%m/%Y")newJson["topic"]="cricket
        "
        retArr.append(newJson)
      except:
        pass
    self.apiMap["cricket"]=
    retArrprint("Cricbuzzfetchedat"+str(datetime.no
    w()))
defnewsCatcherThreader(self):
        whileTrue:
            print("NewsCatcherfetching. ....at"+str(datetime.now()))
            try:
                self.newsCatcherApiFetcher()self.
                mainApiMap=self.apiMap
            except:
                print("ErrorNewsCatcherfetching. ..... at"+str(datetime.now()))
                passsleep(
            30*60)
    def
        topHeadlinesThreader(self):
        whileTrue:
            print("Headlinefetching. ....at"+str(datetime.now()))
            try:
                self.topHeadlinesFetcher()
                self.mainApiMap =
            self.apiMapexcept:
                print("Errorheadlinefetching. ..... at"+str(datetime.now()))
                passsleep(
            30*60)
    def
        cricbuzzThreader(self):
        whileTrue:
            print("Cricbuzzfetching. ....at"+str(datetime.now()))
            try:
                self.cricketFetcher()
                self.mainApiMap =
            self.apiMapexcept:
                print("ErrorCricbuzzfetching. ..... at"+str(datetime.now()))
                passsleep(
            15*60)
    defdataGetter(self,topic):
        return
self.mainApiMap[str(topic)]a=Api()
defapiRunner():
    t1 =
    Thread(target=a.topHeadlinesThreader)t2 =
    Thread(target=a.newsCatcherThreader)t3 =
    Thread(target=a.cricbuzzThreader)t1.daemo
    n=True
    t2.daemon=True
    t3.daemon=True
    t1.start()t2.start(
    )t3.start()
defapiData(topic):
    returna.dataGetter(topic)
```

CookieChecker.py

```
importapp
from functools import
wrapsimport jwt
from flask import
request,after_this_requestdeftoken_required
(f):
    @wraps(f)
    defdecorated(*args,**kwargs):
        token =
        request.cookies.get("access_token")try:
            data = jwt.decode(token,
            app.app.config['SECRET_KEY'],algorithms=['HS256'])ip=request.headers.get("i
            p")
            cookieIp=data['ip']
            if(ip!=cookieIp):
                resp={"status":"not logged
                in"}@after_this_request
                def
                    deleter(response):response.delete_cookie("access
                    _token",path="/")response.delete_cookie("email"
                    ,path="/")
                    return
                responsereturnres
                p,401
        except:
            resp = {"status":"not logged
            in"}@after_this_request
            def
                deleter(response):response.delete_cookie("access
                _token",path="/")response.delete_cookie("email"
                ,path="/")
                return
            responsereturnres
            p, 401
        return f(data['email'],*args,
    **kwargs)returndecorated
```

dbConfig.py

```
from dotenv import
dotenv_valuesdefgetDbCred():
    data=dotenv_values(".env")dsn_hostna
    me=data["ibm_host_name"]dsn_uid=d
    ata["ibm_user_id"]dsn_pwd=data["ibm
    _password"]dsn_driver=data["ibm_dri
    ver"]dsn_database=data["ibm_db_nam
    e"]dsn_port=data["ibm_port"]dsn_prot
    ocol=data["ibm_protocol"]dsn=(
        "DATABASE={1};"
        "HOSTNAME={2};"
        "PORT={3};"
        "PROTOCOL={4};"
        "UID={5};"
         "PWD={6};"
         "SECURITY=SSL").format(dsn_driver,dsn_database,dsn_hostname,dsn_port,dsn
_protocol,dsn_uid,dsn_pwd)
    returndsn
```

dbQuery.py

```
importibm_db
from utils.dbConfig import
getDbCredconn=ibm_db.connect(getDbCre
d(),"","")defselectQuery(query,params=Non
e):
    try:
        stmt=ibm_db.prepare(conn,query)
        if(params==None):
            ibm_db.execute(stmt)data=ibm_db.f
            etch_assoc(stmt)returndata
        ibm_db.execute(stmt,params)d
        ata=ibm_db.fetch_assoc(stmt)r
        eturndata
    except:
        return False
def
    insertQuery(query,params):t
    ry:
        stmt=ibm_db.prepare(conn,query)
        ibm_db.execute(stmt,params)retur
        nTrue
    except:
        returnFalse
```

emailSender.py

```
from___future___importprint_function
from utils.tokener import
generate_confirmation_tokenimport sib_api_v3_sdk
importapp
from sib_api_v3_sdk.rest import
ApiExceptionfromdatetimeimportdatetime
defemailSender(email,token):
    configuration=sib_api_v3_sdk.Configuration()
    configuration.api_key['api-key'] =
    app.data['mail_api_key']api_instance=sib_api_v3_sdk.Tra
    nsactionalEmailsApi(
        sib_api_v3_sdk.ApiClient(configuration))no
    w =datetime.now()
    dt_string = now.strftime("%d/%m/%Y
    %H:%M:%S")msg={}
    msg['Subject'] = "Verfiy your NewsTracker
    Account"msg['From']={"name":"News
    TrackerDevTeam",
                   "email":
    "verify@newstracker.com"}msg['To'] =
    [{"email":
    email}]msg['Text']=f'Pleaseclickthis<a
href="http://127.0.0.1:5500/frontend/pages/verify.html?token={token}">link</a
> to verify your
    account'html =f"""\
    <html>
        <head></head>
        <body>
        <p>நன்றி,forjoiningNewsTracker </p>
        <br>
        <p>Hurray     ,youjustregisterdatNewsTracker<br><br>
        Pleaseclickthefollowinglinktoverifyyouraccount:<br>
        <ahref="http://127.0.0.1:5500/frontend/pages/verify.html?token={token}">
Click HeretoVerify</a>
        </p>
        <br>
        <p>     Note:Thislinkexpireswithinonehourfromthetimesent</p>
        <br><br>
        <p>Regrads,<br></p>
        <p><ahref="https://localhost:5000">NewsTrackerDevTeam</a></p>
        <br><br>
        <p>Emailsentat{dt_string}</p>
        </body>
    </html>
    """
    send_smtp_email =
        sib_api_v3_sdk.SendSmtpEmail(to=msg['To'],html_cont
        ent=html,sender=msg['From'],
subject=msg['Subject'],text_content=msg['Text'])
    try:
        api_response =
        api_instance.send_transac_email(send_smtp_email)print(api_respo
        nse)
    exceptApiExceptionase:
        print("ExceptionwhencallingSMTPApi->send_transac_email:%s\n"%
e)
defnewEmailSender(email):
    token =
    generate_confirmation_token(email)emailSe
    nder(email,token)
```

password.py

```
importbcrypt

def
    genHash(password):salt=bcryp
    t.gensalt()bytes=password.enco
    de('utf-
    8')hash=bcrypt.hashpw(bytes,s
    alt)print(hash)
    returnhash

def
    checkPassword(password,hash):h
    ash=hash.encode('utf-
    8')bytes=password.encode('utf-
    8')res=bcrypt.checkpw(bytes,has
    h)return res
```

tokener.py

```
from itsdangerous import
URLSafeTimedSerializerimport app

def
    generate_confirmation_token(email):serializer=URLSafeTimedSerializer(a
    pp.app.config['SECRET_KEY']) return
serializer.dumps(email,salt=app.app.config['SECURITY_PASSWORD_SALT']
)

def
    confirm_token(token,expiration=3600):serializer=URLSafeTimedSerial
    izer(app.app.config['SECRET_KEY']) try:
        email=serializer.loads(
            token,
            salt=app.app.config['SECURITY_PASSWORD_SALT'],max_age=expir
            ation
        )
    except:
        return
    Falsereturn
    email
```

Frontend_Book

marks.html

```
<!DOCTYPEhtml>
<htmllang="en">
<head>
    <metacharset="UTF-8">
    <metahttp-equiv="X-UA-Compatible"content="IE=edge">
    <metaname="viewport"content="width=device-width,initial-scale=1.0">
    <linkrel="stylesheet"href="../css/bookmarks.css">
    <title>Document</title>
</head>
<body>
    <navid="head_nav">
        <divclass="title_container">
            <imgid="ham_icon"src="../assets/hamburger1.svg"alt="ham_icon">
            <h1id="app_name">NewsApp</h1>
            <!--<divclass="search_container">
                <input
                    type="text"id="s
                    earch_box"
                    placeholder="Searchfortopics,locationsandresources"
                >
            </div> -->
            <imgid="user_icon"src="../assets/user1.svg"alt="user_icon">
            <divclass="profile_divdisplay_none">
                <a class="bookmarked_link"
href="./bookmarks.html"><h3class="bookmarked">Bookmarks</h3>
</a>
                <h3class="logout">Logout</h3>
            </div>
        </div>
        <divclass="menu_container">
            <h3class="nav_buttonselected_nav_item">Home</h3>
            <h3class="nav_button">India</h3>
            <h3class="nav_button">World</h3>
            <h3class="nav_button">Technology</h3>
            <h3class="nav_button">Entertainment</h3>
            <h3class="nav_button">Sports</h3>
            <h3class="nav_button">Science</h3>
            <h3class="nav_button">Health</h3>
        </div>
    </nav>
    <sectionid="home">
        <divclass="news_wrapper">
            <imgclass="bookmark"src="../assets/bookmark-solid.svg"alt=""/>
            <aclass="news_cont"href="./news.html">
                <divclass="img_cont">
                    <imgsrc="../assets/pexels-cottonbro-3944418 1.png"
alt=""class="news_thumbnail">
                </div>
                <divclass="news_content">
                    <h2class="news_heading">JSVeffect</h2>
```

```
          <p>Lorem ipsum dolor sit ametconsecteturadipisicingelit.
Rerumevenietquibusdam autem iste, eligendi nihil
quodmolestiasfacereinciduntquiaofficiaatquedistinctioconsequuntur qui,
suscipitvoluptates quasi minusipsum.</p>
        </div>
      </a>
    </div>
  </section>
<scriptsrc="../js/main.js"></script>
</body>
</html>
```

Index.html

```
<!DOCTYPEhtml>
<htmllang="en">
<head>
  <metacharset="UTF-8">
  <metahttp-equiv="X-UA-Compatible"content="IE=edge">
  <metaname="viewport"content="width=device-width,initial-scale=1.0">
  <linkrel="stylesheet"href="../css/index.css">
  <title>Document</title>
</head>
<body>
  <navid="head_nav">
    <divclass="title_container">
      <imgid="ham_icon"src="../assets/hamburger1.svg"alt="ham_icon">
      <h1id="app_name">NewsApp</h1>
```

```
        <!--<divclass="search_container">
            <input
                type="text"id="s
                earch_box"
                placeholder="Searchfortopics,locationsandresources"
            >
        </div> -->
        <imgid="user_icon"src="../assets/user1.svg"alt="user_icon">
        <divclass="profile_divdisplay_none">
            <a class="bookmarked_link"
href="./bookmarks.html"><h3class="bookmarked">Bookmarks</h3>
</a>
            <h3class="logout">Logout</h3>
        </div>
    </div>
    <divclass="menu_container">
        <h3class="nav_buttonselected_nav_item">Home</h3>
        <h3class="nav_button">India</h3>
        <h3class="nav_button">World</h3>
        <h3class="nav_button">Technology</h3>
        <h3class="nav_button">Entertainment</h3>
        <h3class="nav_button">Sports</h3>
        <h3class="nav_button">Science</h3>
        <h3class="nav_button">Health</h3>
    </div>
</nav>
<sectionid="home">
    <divclass="horizontal_content">
        <divclass="news_wrapper">
```

```
          <imgclass="bookmark"src="../assets/bookmark-regular.svg"alt=""
/>
          <aclass="news_cont"href="./news.html">
            <divclass="img_cont">
                <imgsrc="../assets/pexels-cottonbro-39444181.png"alt=""
class="news_thumbnail">
            </div>
            <divclass="news_content">
              <h2class="news_heading">JSVeffect</h2>
            </div>
          </a>
        </div>
        <divclass="news_wrapper">
           <imgclass="bookmark"src="../assets/bookmark-regular.svg"alt=""
/>
          <aclass="news_cont"href="./news.html">
            <divclass="img_cont">
                <imgsrc="../assets/pexels-cottonbro-39444181.png"alt=""
class="news_thumbnail">
            </div>
            <divclass="news_content">
              <h2class="news_heading">JSVeffect</h2>
            </div>
          </a>
        </div>
        <divclass="news_wrapper">
           <imgclass="bookmark"src="../assets/bookmark-regular.svg"alt=""
/>
```

```
        <aclass="news_cont"href="./news.html">
          <divclass="img_cont">
            <imgsrc="../assets/pexels-cottonbro-3944418 1.png"
alt=""class="news_thumbnail">
          </div>
          <divclass="news_content">
            <h2class="news_heading">JSVeffect</h2>
          </div>
        </a>
      </div>
      <divclass="news_wrapper">
        <imgclass="bookmark"src="../assets/bookmark-regular.svg"alt=""
/>
        <aclass="news_cont"href="./news.html">
          <divclass="img_cont">
             <imgsrc="../assets/pexels-cottonbro-39444181.png"alt=""
class="news_thumbnail">
          </div>
          <divclass="news_content">
            <h2class="news_heading">JSVeffect</h2>
          </div>
        </a>
      </div>
    </div>
    <divclass="news_wrapper">
      <imgclass="bookmark"src="../assets/bookmark-regular.svg"alt=""/>
      <aclass="news_cont"href="./news.html">
```

```
        <divclass="img_cont">
          <imgsrc="../assets/pexels-cottonbro-3944418 1.png"
alt=""class="news_thumbnail">
        </div>
        <divclass="news_content">
          <h2class="news_heading">JSVeffect</h2>
          <p>Lorem ipsum dolor sit ametconsecteturadipisicingelit.
Rerumevenietquibusdam autem iste, eligendi nihil
quodmolestiasfacereinciduntquiaofficiaatquedistinctioconsequuntur qui,
suscipitvoluptates quasi minusipsum.</p>
        </div>
      </a>
    </div>
  </section>
<scriptsrc="../js/main.js"></script>
<scriptsrc="../js/index.js"type="module"></script>
</body>
</html>
```

Login.html

```
<!DOCTYPEhtml>
<htmllang="en">
  <head>
    <metacharset="UTF-8">
    <metahttp-equiv="X-UA-Compatible"content="IE=edge">
    <metaname="viewport"content="width=device-width,initial-scale=1.0">
    <title>LoginandSignUpPage</title>
```

```
        <!--font awesome-->
        <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.2.0/css/all.min.css">
        <!--customcssfilelink-->
        <linkrel="stylesheet"href="../css/login.css">
    </head>
    <body>
        <divclass="container"id="container">
            <divclass="form-containersign-up-container">
                <formid="signup-form"onsubmit="returnfalse;">
                    <h1>CreateAccount</h1>
                    <span>Youcanuseyourcustomemail</span>
                    <input type="text" placeholder="NAME" class="box" requiredautocomplete="name">
                    <input type="email" placeholder="E-mail" class="box" requiredautocomplete="email">
                    <input type="password" placeholder="PASSWORD" class="box"required autocomplete="current-password">
                    <input type="password" placeholder="RE-ENTER PASSWORD"class="box"requiredautocomplete="current-password">
                    <buttonclass="btn">SignUp</button>
                    <h2></h2>
                </form>
            </div>
            <divclass="form-containersign-in-container">
                <formonsubmit="returnfalse;">
                    <h1>SignIn</h1>
                    <span>Enteryoursignincredentials</span>
                    <input type="email" placeholder="E-mail" class="box"autocomplete="email">

                    <input type="password" placeholder="PASSWORD" class="box"autocomplete="current-password">

                    <buttonclass="btn">SignIn</button>

                    <h2></h2>

                </form>

            </div>

            <divclass="overlay-container">

                <divclass="overlay">

                    <divclass="overlay-paneloverlay-left">

                        <divclass="container-checkbox">

                            <ulclass="ks-cboxtags">

                              <li><input type="checkbox" id="checkboxOne"value="sport"checked><labelfor="checkboxOne">sport</label></li>

                              <li><input type="checkbox" id="checkboxTwo"value="tech"checked><labelfor="checkboxTwo">tech</label></li>

                              <li><input type="checkbox" id="checkboxThree"value="world"><labelfor="checkboxThree">world</label></li>

                              <li><input type="checkbox" id="checkboxFour"value="finance"><labelfor="checkboxFour">finance</label></li>

                              <li><input type="checkbox" id="checkboxFive"value="politics"checked><labelfor="checkboxFive">politics</label></li>

                              <li><input type="checkbox" id="checkboxSix"value="business"><labelfor="checkboxSix">business</label></li>

                              <li><input type="checkbox" id="checkboxSeven"value="economics"><labelfor="checkboxSeven">economics</label></li>
```

```
<li><input type="checkbox" id="checkboxEight"value="entertainment"><labelfor="checkboxEight">entertainment</label></li>
```

```
               <li><input type="checkbox" id="checkboxNine"value="beauty"><labelfor="checkboxNine">beauty</label></li>
               <li><input type="checkbox" id="checkboxTen"value="travel"><labelfor="checkboxTen">travel</label></li>
               <li><input type="checkbox" id="checkboxEleven"value="music"><labelfor="checkboxEleven">music</label></li>
               <li><input type="checkbox" id="checkboxTwelve"value="food"><labelfor="checkboxTwelve">food</label></li>
               <li><input type="checkbox" id="checkboxThirteen"value="science"><labelfor="checkboxThirteen">science</label></li>
               <li><input type="checkbox" id="checkboxFourteen"value="cricket"><labelfor="checkboxFourteen">cricket</label></li>
              </ul>
             </div>
            <h1>Alreadyregisted?</h1>
            <buttonclass="btn"id="signin">signin</button>
          </div>
          <divclass="overlay-paneloverlay-right">
          <h1>Welcometolatestworldupdates!</h1>
          <buttonclass="btn"id="signup">signup</button>
          </div>
        </div>
      </div>
    </div>
  <scriptsrc="../js/login.js"type="module"></script>
  </body>
```

</html>

News.html

```
<!DOCTYPEhtml>
<htmllang="en">
<head>
    <metacharset="UTF-8">
    <metahttp-equiv="X-UA-Compatible"content="IE=edge">
    <metaname="viewport"content="width=device-width,initial-scale=1.0">
    <linkrel="stylesheet"href="../css/news.css">
    <title>Document</title>
</head>
<body>
    <navid="head_nav">
        <divclass="title_container">
            <imgid="ham_icon"src="../assets/hamburger1.svg"alt="ham_icon">
            <h1id="app_name">NewsApp</h1>
            <!--<divclass="search_container">
                <input
                    type="text"id="s
                    earch_box"
                    placeholder="Searchfortopics,locationsandresources"
                >
            </div> -->
            <imgid="user_icon"src="../assets/user1.svg"alt="user_icon">
            <divclass="profile_divdisplay_none">
                <h3class="logout">Logout</h3>
            </div>
        </div>
        <divclass="menu_container">
            <h3class="selected_nav_item">Home</h3>
            <h3>India</h3>
            <h3>World</h3>
            <h3>Technology</h3>
            <h3>Entertainment</h3>
            <h3>Sports</h3>
            <h3>Science</h3>
            <h3>Health</h3>
        </div>
    </nav>
    <iframesrc=""frameborder="0">
        <!--newsAPI-->
    </iframe>
    <scriptsrc="../js/main.js"></script>
</body>
</html>
```

Verify.html

```
<!DOCTYPEhtml>
<htmllang="en">
  <head>
    <metacharset="UTF-8"/>
    <metahttp-equiv="X-UA-Compatible"content="IE=edge"/>
    <metaname="viewport"content="width=device-width,initial-scale=1.0"/>
    <linkrel="stylesheet"href="../css/verify.css"/>
    <title>Verify</title>
  </head>
  <body>
    <navid="head_nav">
      <divclass="title_container">
        <h1id="app_name">NewsTracker</h1>
      </div>
    </nav>
    <divclass="status-cont">
      <divclass="welcome-text">Please wait...⏳ </div>
    </div>
  </body>
  <scriptsrc="../js/verify.js"type="module"></script>
</html>
```

GitHub

https://github.com/IBM-EPBL/IBM-Project-53659-1661448543