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 .R. THANESHWARAN (113319106080), MR. R K. NAVEEN KUMAR(113319106050), MR.N. GOWTHAM (113319106028) AND MR. G.YUGENDAR (113319106085) 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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IndustryEvaluvator

Dr.Sridevi

Sai priya

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Thaneshwaran R (Lead)

Gowtham N

Yugender G

Naveen Kumar R K

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 predefined threshold values. Experimental results shows that the proposed frame work implemented in realtime social networks it with improved notification.

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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 themigration of newsconsumers to the 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'newsrea ding 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. Finallyweevaluated alternative, adaptive euser interfaces for each reader type. The evaluation demonstrates the differential benefit of the adaptation for different users of the news app and the feasibility of adaptive interfaces for newsapps.

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 reducing the time by changing the conventional method of reading news can help. Just tellus what market news you're interested in and get a quick peek for the day. Only read what you feel is relevant and saveyour time. This apphelps you to query for all information about Indic es, Commodities, Currencies, Future Rates, Bonds, etc... as on official websites.

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

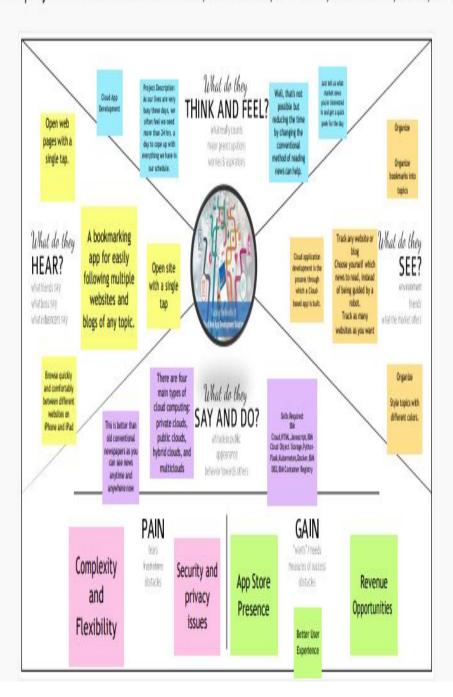
- 1. Theuserneeds away toorganize the newsondaily basis so that he can cope up with daily events in his tight schedule.
- 2. Theuserwantstoreadnewsonlyaboutparticular topics so that he can be informed about his interest.
- 3. The user wants to get informed from only certified news outlets
- .4. Theuserneeds away to search about the newson topic shewants to.
- 5. The user wants to know the news about his surrounding using GPS location.

3. IDEATION&PROPOSED SOLUTION

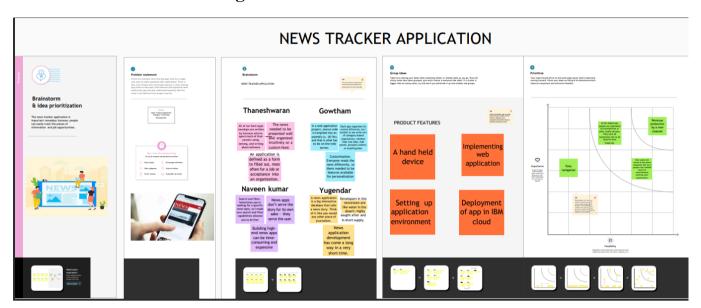
3.1 EmpathyMapCanvas

News Tracker Application

This app helps you to query for all information about Indices, Commodities, Currencies, Future Rates, Bonds, etc.... as on official websites.



3.2 Ideation&Brainstorming

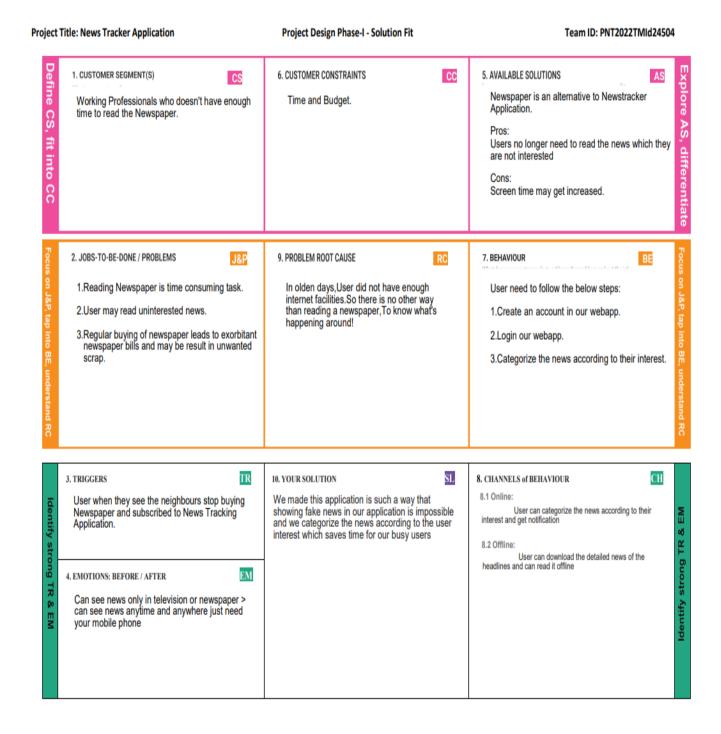


3.3 ProposedSolution

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



4. REQUIREMENTANALYSIS

4.1 Functionalrequirement

Following are the functional requirements of the proposed solution.

FR	Functional	SubRequirement (Story/ Sub-Task)
No.	Requirement(Epic)	
FR-1	UserRegistration	Registration through
		FormRegistrationthroughG
		mail
FR-2	UserConfirmation	Confirmation via
		EmailConfirmationvia
		OTP
FR-3	UserLogin	Userusinghis/herdevicetologintotheapp/webs
		iteforreadingnews
FR-4	Usersearch	Forgettingnewshe/shemustneedtosearchthen
		ewsinthe givensearchbar,
		Whichwillcollectthenewsaccordingtohissear
		chfromtheonlinesourceslikeblog,
		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-functional Requirements:

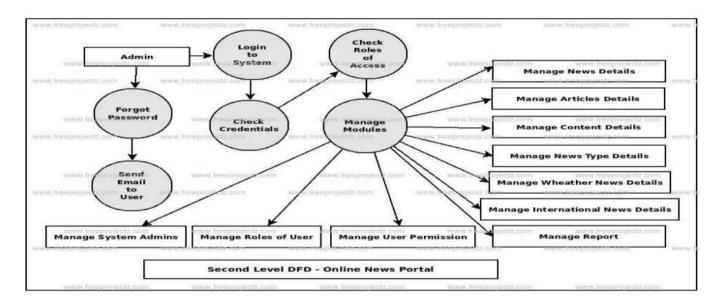
Following are the non-functional requirements of the proposed solution.

FR	Non-Functional	Description						
No.	Requirement							
NFR-	Usability	For getting news he/she must need						
1		tosearch the news in the given search						
		bar, Whichwill collect the news according to is search from the online sources likeblog, e-news paper, Articles etc. Gathered news will be shown to the user inshort lines/summary manner. Along with news Pictures, hyperlinks for the blog, article Ororiginal publisher of the news is given User's data for the Registration and						
		tosearch the news in the given search bar, Whichwill collect the news according to is 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 for the blog, article Ororiginal publisher of the news is given User's data for the Registration and data collected from his activity are maintained in high security and must be used for only product improvement. Disclosing of his/her detail is considered as a crime hence they can take any legal actions against the service provider. News gathered and presented to the user are from only authorized publishers,						
		bar, Whichwill collect the news according to is 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 for the blog, article Ororiginal publisher of the news is given User's data for the Registration and data collected from his activity are maintained in high security and must be used for only product improvement. Disclosing of his/her detail is considered as a crime hence they can take any legal actions against the service provider.						
		Gathered news will be shown to the userinshort lines/ summary manner. Along with news Pictures, hyperlinks fortheblog,article Ororiginalpublisherofthenewsisgiven User's data for the Registration and datacollectedfromhisactivityaremaintaine						
		Along with news Pictures, hyperlinks fortheblog, article Ororiginal publisher of the news is given						
		Along with news Pictures, hyperlinks fortheblog, article						
		Ororiginalpublisherofthenewsisgiven						
		Ororiginalpublisherofthenewsisgiven						
NFR-	Security	User's data for the Registration and						
2		datacollectedfromhisactivityaremaintaine						
		dinhighsecurityandmust beusedforonly						
		product improvement. Disclosingofhis/herdetailisconsideredas						
		Disclosingofhis/herdetailisconsideredas acrimehencetheycantakeany legal						
		acrimehencetheycantakeany legal						
		actionsagainsttheserviceprovider.						
NFR-	Reliability	News gathered and presented to the						
3		News gathered and presented to the userare from only authorized publishers,						
		News gathered and presented to the userare from only authorized publishers, andthesourcesareauthentic.						
		_						
		news.						
NFR-	Performance	24*7 service with best cloud						
4		service,There will be no performance						
		issue to theusers.						
NFR-	Availability	CandownloadfromPlaystoreandonlineweb						
5		sites.						
NFR-	Scalability	Hence it is cloud based						
6		systemScalability will be no issue						
		becauseScalabilityisthepriorfeature						
		ofthe						
		cloudbasedservices.						

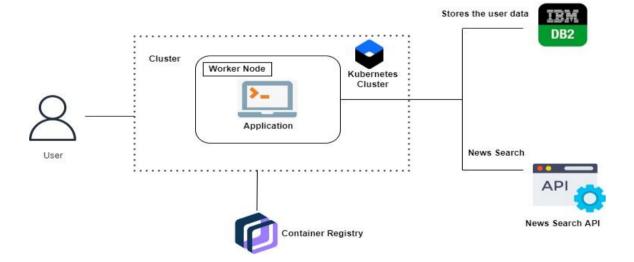
5. PROJECTDESIGN

5.1 DataFlowDiagrams

Dataflow Diagram



5.2 Solution&TechnicalArchitecture



5.3 UserStories

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 confirmingmy password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation emailonce 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 Face book	I can register & access the dashboard with Face book 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 andlook 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 andread 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 confirmingmy password through web applications such as Chrome, Firefox, brave, Opera mini 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 servicewhich is provided in the application help box	I can report to the customer service if I am facing an issue or I didn'tknow 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 applicationhelp box	I can report to the customer service if I am facing an issue or I didn'tknow anything about the application	High	Sprint-1
Administrator	Application	USN-1	Application administrator will rectify the error caused in the application as soon as possibleand provide a patch update in order to have an error free software	I can report to the customer service what theissue has been faced andthey 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	15 Sept2022
PrepareEmpathyMap	publicationsetc. 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 of solution, etc.	17 Oct 2022
ProblemSolution Fit	Prepareproblemsolution fit doc ument	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 functional requirement document	17 October 2022
DataFlowDiagrams	Drawthedataflowdiagramsan dsubmitforreview.	17 October 2022
Technology Architecture	Preparethetechnologya rchitecturediagram.	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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user_l can register to the Application by using my Email and password.	10	High	Thaneshwaran, Gowtham, Naveen kumar, yugender.
Sprint-1	Confirmation mail	USN-2	Confirmation Mail will be received by the user, that heis registered for the Application.	10	High	Thaneshwaran, Gowtham.
Sprint-1	Login	USN-3	As a user I need to login to my registered mail to access the Application.	10	Low	Naveen kumar, Yugender.
Sprint-2	Search box	USN-4	User need search box to search the news	20	Medium	Gowtham, Naveen kumar.
Sprint-3	Newsgathering	USN-5	User need to get result for his search.	20	High	Thaneshwaran, Gowtham, Naveen kumar.
Sprint-4	Chatbot(IBM Watson)	USN-6	If user have any doubt in using the <u>Application</u> , Chat <u>bot</u> is available in the Application to help theuser.	20	High	Thaneshwaran, Gowtham, Naveen kumar, yugender.

6.3 Reports from JIRA

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,andBootstrapcontrib"
utors">
  <metaname="generator"content="Hugo0.84.0">
  <title>SignIn</title>
  k 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 -->
  khref="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.mi
n.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">
krel="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-</pre>
toggle="offcanvas"
                         data-bs-target="#offcanvasDarkNavbar"
                                                                      aria-
controls="offcanvasDarkNavbar">
         <spanclass="navbar-toggler-icon"></span>
        </button>
        <divclass="offcanvasoffcanvas-endtext-bg-dark"tabindex="-</pre>
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">
           cli class="nav-item">
                     class="nav-link
                                           active"
                                                        aria-
current="page"href="home.html">Home</a>
           cli class="nav-item">
             <aclass="nav-link"href="base.html">FetchNews</a>
            class="nav-item">
            <aclass="nav-link"href="about.html">AboutUs</a>
           cli class="nav-item">
            <aclass="nav-link"href="signin.html">SignIn</a>
```

```
cli class="nav-item">
           <aclass="nav-link"href="signup.html">SignUp</a>
          </div>
       </div>
      </div>
     </nav>
<mainclass="form-signin">
 <formaction="{{url_for("getUser")}}"method="POST">
  <imgclass="mb-4"src="static/Images/house-user-</pre>
solid.svg"alt=""width="72"height="57">
  <h1class="h3mb-3fw-normalwhite">Changeyourpassword</h1>
  <divclass="form-floating">
   <inputtype="email"class="form-</pre>
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>
 </form>
</main>
integrity="sha384-
e.min.js"
u10knCvxWvY5kfmNBILK2hRnQC3Pr17a+RTT6rIHI7NnikvbZlHgTPOOmMi466\\
C8"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"</pre>
></script>
<scriptsrc="/docs/5.2/assets/js/docs.min.js"></script>
<script>
 document.querySelectorAll('.btn-edit').forEach(btn =>
  {btn.addEventListener('click',event =>{
                  htmlSnippet
                                                  event.target.closest('.bd-code-
   const
snippet').querySelector('.bd-example').innerHTML
                                      Array.from(event.target.closest('.bd-code-
               classes
   const
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</pre>
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
                                                                                                                                                                                                                                                                                                                                                                                                       needs\.\n\/\/
                                                                                                                                                                                                      to
                                                                                                                                                                                                                                                                                        your
02b\backslash u002b\backslash u002b/ u002b\backslash u0
 02b\backslash u002b\backslash u002b/ u002b\backslash u0
otstrap\u0027sdocs\(https:\v/\getbootstrap\.com\v/\)\n\*Copyright2011\-
2022TheBootstrapAuthors\n\*Copyright2011\-
```

2022Twitter,Inc\.\n*LicensedundertheCreativeCommonsAttribution3\.0Unport

```
For
             details,
                                               https:\/\creativecommons\.org\/\licenses\/\by\/\3\.0\/\.n
                                  see
\ \\\n\n\\\*globalbootstrap:false\\\\n\n\(\(\(\)=\u003e\{\n\u0027use}\)
strict\u0027\n\n\/\/
= u003e
\-
\-\-\-\-\-\n
                           \\/\InstantiateallpopoversinadocsorStackBlitzpage\ndocument\.q
\. for Each (popover = \u003e) {\nnewbootstrap . Popover (popover) }
)\n
                           \-\-\n \/\Usedby\u0027Placement\u0027exampleindocsorStackBlitz\nconst
              toastPlacement
document \\ \label{lementById} \\ (\\ \label{lementbyId} \\ \label{lementbyId}
                                                                                                                                         if
\(toastPlacement\)
                                                                                                                                     \backslash \{ \backslash n \}
document \setminus getElementById \setminus (u0027selectToastPlacement \setminus u0027 \setminus) \setminus addEventLis
tener(\u0027change\u0027,
                                                      function
                                                                          (()
                                                                                     \backslash \{ \backslash n \}
                                                                                                                                         if
\(!toastPlacement\.dataset\.originalClass\)
                                                                                                                                     \backslash \{ \backslash n \}
toastPlacement\.dataset\.originalClass
                                                                                                                                          =
toastPlacement\.className\n\}\n\toastPlacement\.className=
`\$\{toastPlacement\.dataset\.originalClass\}
\ {this\.value\}`\n\}\\n\\\ Instantiate
                                                                                   all toasts
                                                                                                         in
                                                                                                                       docs
                                                                                                                                    page
\. for Each (to a st Node = \u 0 0 3 e) { \n}
                                                                                consttoast=newbootstrap\.Toast\(t
oastNode,\\{\n
                                                                                autohide:false\n
                                                                                \) \n \cdot .show(\) \n \) \n \
Instantiate
                       all
                                                                                           only\nconsttoastTrigger
                                 toasts
                                                in
                                                                docs
                                                                             page
                                                         a
document\.getElementById\(\u0027liveToastBtn\u0027\)\n
const to a st Live Example = document \setminus get Element By Id \setminus (\u0027 live To a st \u0027 \setminus) \setminus n
if
                                      toastTrigger\.addEventListener\(\u0027click\u0027,\(\)
\t \operatorname{Trigger} \
= u003e
                                     \{\nconst
                                                                            toast
                                                                                                                                     new
bootstrap \. To ast \(to ast Live Example \) \n \to ast \. show \(\) \n
                                                                                                         \}\)\n\}\n\n\/\/-\-\-
\-\-\n \\/ Alerts\n \\/ \-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\n \\/
```

Usedin\u0027Showlivetoast\u0027exampleindocsorStackBlitz\nconstalertPlace

const

=

 $alertTrigger=document\.getElementById\(\u0027liveAlertBtn\u0027\)\n\nconstappendAlert=\(message,type\)=\u003e\{\nconstwrapper=document\.createElement\(\u0027div\u0027\)\n}\ wrapper\.innerHTML=\[\n]$

```
\\u003cdivclass=\u0022alertalert\-\$\{type\}alert\-
dismissible \u0022 role = \u0022 alert \u0022 \u003e, \n
\u003cdiv\u003e\ {message}\\u003c\/div\\u003e^,\n\\u0027\\u003cbuttontype=\u
                                                         class = \u0022btn - close \u0022
0022button\u0022
                                                                                                                          data\-bs\-
dismiss=\u0022alert\u0022
                                                                                                                                 aria\-
label = \u0022 Close \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, \u003e, \u0027Nice, \u003e, \u0027Nice, \u003e, \u0027Nice, \u0027Nice
          triggered this alert message!\u0027,
\-\-\-\-\-\-\-\n\/\/
                                     Indeterminate
                                                                  checkbox
                                                                                         example
                                                                                                                      docs
                                                                                                                                    and
StackBlitz\ndocument\.querySelectorAll\(\u0027\.bd\-example\-indeterminate
[type=\u0022checkbox\u0022]\u0027)\n
                                                                                      \. for Each (checkbox = \u003e)
                  \(checkbox\.id\.includes\(\u0027Indeterminate\u0027\)\)
                  |-|-|-|-
|-|-|-|-
\n\/\Disableemptylinksindocsexamplesonly\ndocument\.querySelectorAll\(\u00
27\.bd\-content
\left[ href = \left( u0022 + \left( u0022 \right) \right] \right]
                                                                                 \.forEach\(link
                                                                                                               = u003e
                                                                                                                                   \backslash \{ \backslash n \}
link\.addEventListener\(\u0027click\u0027,
                                                                                      event
                                                                                                          =\u003e
                                                                                                                                   \setminus \{ \setminus n \}
\label{localize} $$ \-\n\ Modal \u0027\V arying modal content \u0027\V example in docs
andStackBlitz\n
                                                                                         exampleModal
                                                             =document\.getElementById\(\u0027exampl
eModal\u0027\)\n
                                                             if
\(exampleModal\)
                                                                                                                                   \setminus \{ \setminus n \}
exampleModal\.addEventListener\(\u0027show\.bs\.modal\u0027,
                                                                                                                                 event
                                                                  triggered
= u003e
                   \{ n \
                                    Button
                                                      that
                                                                                       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
                                                    const modal Title = example Modal \setminus .query Selector \setminus (\setminus a)
u0027\.modal\-title\u0027\)\n
                                                    constmodalBodyInput=exampleModal\.querySele
```

 $\cot \langle u0027 .modal - bodyinput \langle u0027 \rangle \rangle n$

```
\u0027Offcanvas
components\u0027example
                                                                                                                                             in
                                                                                                                                                                                                   docs
                                                                                                                                                                                                                                                                  only\n
                                                                                                                                                                           constmyOffcanvas=document\.
query Selector All \ (\ u0027 \ .bd \ -example \ -off can vas
                                                                                                                                                                                 \(myOffcanvas\)
\.offcanvas\u0027\)\n
                                                                                                                                           if
                                                                                                                                                                                                                                                                           \backslash \{ \backslash n \}
myOff can vas \verb|\|.for Each| (off can vas
                                                                                                                                                                                  =\u003e
                                                                                                                                                                                                                                                                           \setminus \{ \setminus n \}
off can vas \. add Event Listener \(\u 0027 show \. bs \. off can vas \u 0027, even t = \u 003 e
                              event\.preventDefault\(\)\n
                                                                                                                                                                                       \fine {\fine {
\backslash \{ \backslash 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										
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	-	Naveen Kumar		
Sign up	Functional	Login page	Verify user has the option to sign up	Can visible	Yes visible	pass	Successful	-	Gowtham		
Forgot password	Functional	Login page	Verify user has the option to forgot password	Yes the option is available	Option is available	pass	Successful	-	Thaneshwaran		

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	Yugendar, Gowtham
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	-	Naveen

Fetch news	Functional	Home page	Verifyus er cangett he news	News willbe feed totheapp	404error	Fail	unsuccess ful	App integerati on problem	
Typesof news available inthe fetchnews page	Functional	Fetch news	Typesof news available	Weather, Sport, Economy.	Hover buttons willbe shown.	Yes	successful	-	Thaneshwaran Gowtham Naveen Kumar yugender

Result:

New stracker application using cloud is developed and executed at the level of complete dprogress.

10. ADVANTAGES &

DISADVANTAGESAdvantages:-

- ❖ Inthisappnewsisalreadycategorization.
- **\Delta** Easilyaccessibleandportable.
- * Betteruserexperience.
- ❖ Appshelpyouconvertvisitorstoloyalreaders.
- Minutebyminuteupdatesofnews.
- * Thisapp helpsyoutogetlocalnewsupdatesinstantly.
- * Toexploreanddiscovertrendingnewsandtopics.
- Newsfeedsforyoubasedonyourinterest.

Disadvantages:-

- ❖ Someappsdemandpremiumsubscriptionfromuser.
- ❖ Occurance of Advertisment disturb the user.
- **Sometimesthenewsgivesbriefinformation.**
- Prevailanceoffakeanduncertainnewscanconfusetheuserleadtomisco nception.
- ***** Fakenewsmaymisleadthereaders.

11. CONCLUSION

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

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 automaticpersonalisation of newsapps.

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
    1"])
    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

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
       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

```
from flask import
request, after this request from flask 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"]=
```

$$\label{eq:continuous} \begin{split} & retArrprint("Cricbuzzfetchedat"+str(datetime.no\\ & w()))\\ & defnewsCatcherThreader(self): \end{split}$$

```
whileTrue:
       print("NewsCatcherfetching. ....at"+str(datetime.now()))
         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()))
         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()))
         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
  @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
       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 doteny 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'] = "Verfiv your NewsTracker
  Account"msg['From']={"name":"News
  TrackerDevTeam",
           "email":
  "verify@newstracker.com" \right\rightarrow 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>
    நன்றி,forjoiningNewsTracker 🖺 
    <br>
    Hurray
                  ,youjustregisterdatNewsTracker<br><br>
    Pleaseclickthefollowinglinktoverifyyouraccount:<br/><br/>
    <ahref="http://127.0.0.1:5500/frontend/pages/verify.html?token={token}">
Click HeretoVerify <a> </a>
    <hr>>
    >
           Note: This link expires within one hour from the timesent 
    <br>><br>>
    Regrads, <br/>/p>
    <ahref="https://localhost:5000">NewsTrackerDevTeam</a>
    <br>><br>>
    Emailsentat{dt_string}
    </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
  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"</pre>
alt=""class="news_thumbnail">
         </div>
         <divclass="news content">
           <h2class="news_heading">JSVeffect</h2>
```

Lorem ipsum dolor sit ametconsecteturadipisicingelit.Rerumevenietquibusdam autem iste, eligendi nihilquodmolestiasfacereinciduntquiaofficiaatquedistinctioconsequuntur qui,suscipitvoluptates quasi minusipsum.

```
</div>
</div>
</div>
</section>
<scriptsrc="../js/main.js"></script>
</body>
</html>
```

Index.html

```
<!--<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=""</pre>
/>
         <aclass="news_cont"href="./news.html">
            <divclass="img_cont">
               <imgsrc="../assets/pexels-cottonbro-39444181.png"alt=""</pre>
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=""</pre>
/>
         <aclass="news_cont"href="./news.html">
           <divclass="img_cont">
               <imgsrc="../assets/pexels-cottonbro-39444181.png"alt=""</pre>
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=""</pre>
/>
```

```
<aclass="news_cont"href="./news.html">
           <divclass="img_cont">
              <imgsrc="../assets/pexels-cottonbro-3944418 1.png"</pre>
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=""</pre>
/>
         <aclass="news_cont"href="./news.html">
           <divclass="img_cont">
               <imgsrc="../assets/pexels-cottonbro-39444181.png"alt=""</pre>
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"</pre>
alt=""class="news thumbnail">
         </div>
         <divclass="news_content">
           <h2class="news_heading">JSVeffect</h2>
           Lorem ipsum dolor sit ametconsecteturadipisicingelit.
Rerumevenietquibusdam autem iste, eligendi nihil
quodmolestias facereincidunt qui aofficia at que distinctio consequentur qui,
suscipitvoluptates quasi minusipsum.
         </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-</pre>
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"</pre>
requiredautocomplete="name">
           <input type="email" placeholder="E-mail" class="box"</pre>
requiredautocomplete="email">
           <input type="password" placeholder="PASSWORD"</pre>
class="box"required autocomplete="current-password">
           <input type="password" placeholder="RE-ENTER</pre>
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"</pre>
class="box"autocomplete="email">
           <input type="password" placeholder="PASSWORD"</pre>
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">
                <input type="checkbox"</li>
id="checkboxOne"value="sport"checked><labelfor="checkboxOne">sport</lab
el>
                <input type="checkbox"</li>
id="checkboxTwo"value="tech"checked><labelfor="checkboxTwo">tech</lab
el>
                <input type="checkbox"</li>
id="checkboxThree"value="world"><labelfor="checkboxThree">w
orld</label>
                <input type="checkbox"</li>
id="checkboxFour"value="finance"><labelfor="checkboxFour">fi
nance</label>
                <input type="checkbox"</li>
id="checkboxFive"value="politics"checked><labelfor="checkboxFive">politics
<input type="checkbox"</li>
id="checkboxSix"value="business"><labelfor="checkboxSix">business</label>
                <input type="checkbox"</li>
id="checkboxSeven"value="economics"><labelfor="checkboxSeven">economics</la
bel>
```

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

```
<input type="checkbox"</li>
id = "checkboxNine" value = "beauty" > < label for = "checkboxNine" > be\\
auty</label>
                 <input type="checkbox"</li>
id="checkboxTen"value="travel"><labelfor="checkboxTen">trav
el
                 <input type="checkbox"</li>
id="checkboxEleven"value="music"><labelfor="checkboxEleven">
music</label>
                 <input type="checkbox"</li>
id="checkboxTwelve"value="food"><labelfor="checkboxTwelve">fo
od</label>
                <input type="checkbox"</li>
id="checkboxThirteen"value="science"><labelfor="checkboxThirteen"
">science</label>
                 <input type="checkbox"</li>
id="checkboxFourteen"value="cricket"><labelfor="checkboxFourteen"
>cricket</label>
               </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>
```



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"/>
```

GitHub

 $\underline{https://github.com/IBM-EPBL/IBM-Project-53651-1661446798}$