PROFORMA FOR THE APPROVAL PROJECT PROPOSAL

(Note: All entries of the proforma of approval should be filled up with appropriate and complete information. Incomplete proforma of approval in any respect will be summarily rejected.)

PNR No.:			Roll no:
1.	Name of the Student		
2.	Title of the Project		
3.	Name of the Guide		
4.	Teaching experience of the Guide		
5.	Is this your first submission?	Yes 🔲	No 🔲
Signat	ure of the Student		Signature of the Guide
Date:.			Date:
Signatu	re of the Coordinator		
Date:			

NEWS VOICE ASSISTANT (NV Assist)

A Project Report

Submitted in partial fulfillment of the Requirements for the award of the Degree of

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

By

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Under the esteemed guidance of **Prof. Mrs. Dineshwari Bisen**



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(Affiliated to University of Mumbai)
NAVI MUMBAI, 400705
MAHARASHTRA
2018-19

WESTERN COLLEGE OF COMMERCE AND BUSINESS MANAGEMENT

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CERTIFICATE

This is to certify that the project entitled, "News Voice Assistant", is bonafied work of

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Submitted in partial fulfilment of the requirements for the award of degree of BACHELOR OF SCIENCE in INFORMATION TECHNOLOGY from University of Mumbai.

	External Examiner	
Date:		College Seal

Coordinator

Internal Guide

ABSTRACT

Newspapers have been a constant source of news and information for us for about 400 years now. Many technological advancements led to newer ways of delivering news and information about various aspects. Since the advent of technological developments such as Artificial Intelligence, researchers and developers have tried to make use of Artificial Intelligence in various fields. This research project is an effort to make news reading more fun and interactive using the News API voice assistant. The web app is completely interactive and the user is able to get news from any topic of interest just by speaking. The user can access news by category, popular news channels, by terms, etc. The web app is completely responsive and works well with any device such as a laptop, tablet, or mobile phone. The project is developed using technologies such as Python, JavaScript, Visual Studio Code, and News API.

ACKNOWLEDGEMENT

I respect and thank to our principal Ms. Susy Kuriakose, for providing me an opportunity to do the project work in Western college of Commerce and Business Management and giving us all support and guidance which made me complete the project duly. I am extremely thankful to her for providing such a nice support and guidance, although she had busy schedule managing the academic affairs.

I owe my deep gratitude to our project guide Prof. Mrs. Dineshwari Bisen Ma'am, who took keen interest on our project work and guided us all along, till the completion of our project work by providing all the necessary information for developing a good system.

I am thankful to and fortunate enough to get constant encouragement, support and guidance from all Teaching staffs of Information Technology department which helped us in successfully completing our project work. Also, I would like to extend our sincere esteems to all staff in laboratory for their timely support.

The success and final outcome of this project required a lot of guidance and assistance from Prof. Mrs. Dineshwari Bisen Ma'am. I am extremely privileged to have got this all along the completion of my project. All that I have done is only due to such supervision and assistance and I would not forget to thank all of them.

DECLARATION

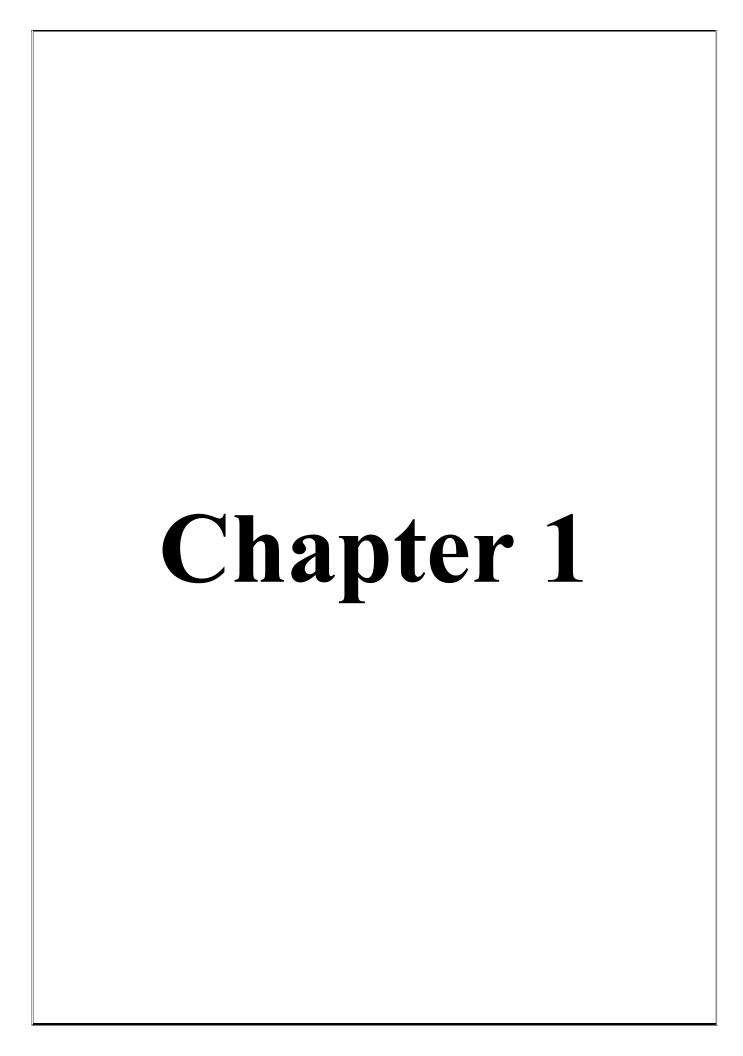
I hereby declare that the project entitled, "News Voice Assistant" done at Western College of Commerce and Business Management, has not been in any case duplicated to submit to any other university for the award of any degree. To the best of my knowledge other than me, no one has submitted to any other university.

The project is done in partial fulfillment of the requirements for the award of degree of **BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)** to be submitted as final semester project as part of our curriculum.

Name and Signature of the Student

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Introduction

1.1 Background:

This project is aimed at developing a responsive website in which user interacts with a website using voice-over commands to get general news from news API. The goal of this Major Qualifying Project is Where in user interacts with the bot and our servers fetches data from News API. The aim of this project is to develop website for educational, business purpose. In this project, we have used News API to help get the user some news that they desire to know about. When a user asks Zara(voice Assistant) about a topic, the AI synthesizes their speech into commands that can then be used to gather information from various applications.

1.2 Objective:

- * The major objectives of this project are as follows:
- People need to learn much from texts. But they tend to want to spend less time while doing this.
- 2 Artificial intelligence assistants have also evolved. Early on, text was the only way to interact with an assistant app (typing in a phrase triggered a response). Now, voice has taken over.
- Voice assistants allow us to do a variety of tasks hands-free, which is a major reason many people like using them, especially on their phones

1.3. Purpose, Scope, and Applicability

1.3.1 Purpose

Artificial intelligence can make real-life conversations come to life. While chatbots have been there in the market for some time now, AI voice assistants are relatively a newer buzzword.

Using voice bots is an intuitive way to help answer customer queries that offer the convenience of talking to a person in a natural language.

Customers can talk to the voice bot just as they would with a live agent to seek support. All without the need for constant human intervention for repetitive questions.

Voice bots can be deployed to answer queries and assist customers with making informed decisions around the clock. They can pick up from previous conversations and devise personalised answers and resolutions that fit the user query the best.

Users can access AI voice assistants at any time to get query resolutions instantaneously. This does away with the wait times and support queues creating happier user experiences

One of the most important metrics in customer support is the Average Handling Time (AHT). AI voice bots can help reduce the average handling time drastically. The voice input and output time is lesser than the time needed to type out a query and read the response on a chat bot. this eases the load off your support staff and result in quicker resolution cycles.

1.3.2 Scope:

Voice assistants can make calls, send text messages, look things up online, provide directions, open apps, set appointments on our calendars, and initiate or complete many other tasks. With the addition of separate apps on the phone, our voice can be a type of remote control for our lives.

- The scope of this project is to assist people through voice assistance.
- The client does not have to visit different websites to perform tasks, it will be done through voice commands. such as opening an application, searching through the web.
- The client can get information through Wikipedia
- To give handsfree experience and interact with the device through voice recognition and commands.
- The website can be more useful in future to educational fields and business sectors.

1.3.3 Applicability:

Voice assistants are changing the way we use technology and the way we live. They have drastically improved over the last few years and are finally available for every application, offering a custom experience for every user.

Voice assistants engage users like no other interface. Users can speak to the applications naturally to ask for whatever they'd like and can do so while multitasking. This also reduces the cognitive effort for the user to get what they want from the application, and applications that take advantage of voice assistants are seen as easier to use than applications that do not.

Voice assistants provide a consistent experience for the user, no matter what type of application or device they're using. If users go from the web app, the assistant will let them pick up right where they left off. This also applies across different applications that have voice assistants.

1.4 Achievements

AI voice assistants are here to stay and grow. Let's see how voice bots and their application will be shaped in future.

• Growth in smartphone-based voice assistant adoption

People today are more reliant on smartphones than ever. Undoubtedly, this will change online search behaviour. Voice assistants will offer a quicker alternative to typing out a query in the search bar or writing an email to receive support.

• AI voice assistants – The primary way to connect to a organization

In fact, Adobe reported that 36% of consumers own a smart speaker like Google Home and Amazon Echo today, and 54% of owners say their speakers are accurate in understanding conversational language. Indeed, there is a great scope for voice assistant chatbots and voice assistant devices to flourish in future

• Increased compatibility and interoperability of services

Future voice assistants will be highly use-case defined. Businesses have different use cases and requirements. Voice AI can be custom-built to suit specific requirements with smooth integrations and compatibility options

1.5 Organization of Report

In remaining chapters, you will get the details of how system is actually flowing through functionality and modules.

In system analysis following details is focused:

- 1. Understand the problem before you begin to create the analysis model.
- 2. Develop prototypes that enable a user to understand how human machine interaction will occur.

Methodology part gives the detail of project approach through technology and how it is achieved. Later on, actual implementation is done in Implementation part, and then testcases are performed.

Finally, Conclusion is to provide the user an interaction with an AI voice assistant.

Chapter 2

System Design

2.1 Existing System:

Voice assistants are programs on digital devices that listen and respond to verbal commands. A user can say, "What's the latest news?" and the voice assistant will answer with the latest news report for that day and location. They could say, "Tell me a joke," and the assistant will jump into a tale. The user could even say, "play music," and song will be played! Voice assistants are so easy to use that many people forget to stop and WONDER how they work. How do voice assistants understand us? Is it magic? A complex system of codes? An actual person listening on the other end? The answer is less complicated than you might think. The application works like Siri, Google Assistant etc. The U.I of the application is self-explainable and very minimum. It takes voice as input. The system is being designed in such a way that all the services provided by the mobile devices are accessible by the end user on the user's voice command.

2.2 Proposed System:

Personalized Experiences

Personalization is more than names at the top of emails, it's staying in touch with customer tastes and preferences and actively including them in the conversation.

Voice Push Notifications

Voice notifications are a valuable tool to engage users within the application and this tendency will keep for the future of voice technology.

• Inbuilt Security Features for Users

The latest trend in the voice assistant market is built-in security features, aiming to help users feel safer when using voice assistants.

• Conversational AI in Video Game Narratives

When mentioning Conversational AI's use in gaming, we can't ignore the importance of text-to-speech as well as voice recognition in creating a more immersive gaming experience.

2.3 Requirement Analysis:

Requirement analysis process is an important stage in the system development. It determines the functions of the whole system integrity and stability. Software requirements analysis is an ongoing process of understanding and progressive refinement. Through requirements analysis, functions of the voice assistant will be designed as below.

2.4 Hardware Requirements:

Processor: Intel i5 Speed:2.5Ghz RAM: 4GB SSD: 240GB

General: Microphone, Speaker, Mouse, Internet.

2.5 Software Requirements:

Front end: HTML, CSS, JavaScript Operating system: Windows 10 Back-end Language: Python (Flask)

Framework : Flask Database : MySQL API : News API

Other Requirement: Internet, browser

2.6 Justification of Platform:

PYTHON:

Python 3.9.5 is the newest major release of the Python programming language, and it contains many new features and optimizations. There's been 111 commits since 3.9.4 which is a similar amount compared to 3.8 at the same stage of the release cycle. Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built-in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and

therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse.

A source level debugger allows inspection of local and global variables, evaluation of arbitrary expressions, setting breakpoints, stepping through the code a line at a time, and so on. The debugger is written in Python itself, testifying to Python's introspective power. On the other hand, often the quickest way to debug a program is to add a few print statements to the source: the fast edit-test-debug cycle makes this simple approach very effectively.

NEWS API:

News API is a simple HTTP REST API for searching and retrieving live articles from all over the web. It can help you answer questions like:

- What top stories is TechCrunch running right now?
- What new articles were published about the next iPhone today?
- Has my company or product been mentioned or reviewed by any blogs recently?

You can search for articles with any combination of the following criteria:

Keyword or phrase. Eg: find all articles containing the word 'Microsoft'.

Date published. Eg: find all articles published yesterday.

Source domain name. Eg: find all articles published on thenextweb.com.

Language. Eg: find all articles written in English.

You can sort the results in the following orders:

- Date published
- Relevancy to search keyword
- Popularity of source

HTML:

HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.A form of HTML, known as HTML5, is used to display video and audio, primarily using the <canvas> element, in collaboration with JavaScript.

JAVASCRIPT:

JavaScript often abbreviated as JS, is an interpreted programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multiparadigm. It has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions.

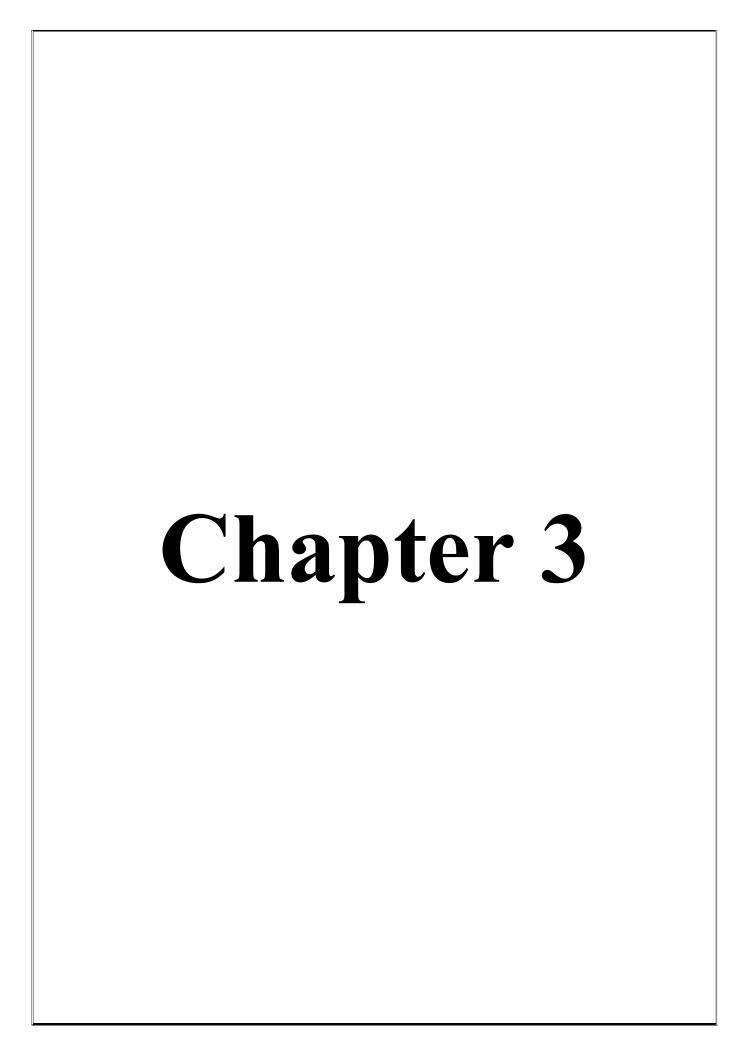
Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. JavaScript enables interactive web pages and is an essential part of web applications.

FLASK:

Flask is a micro web framework written in Python. It is classified as a microframework because it does not require particular tools or libraries. It has no database abstraction layer, form validation, or any other components where pre-existing third-party libraries provide common functions. However, Flask supports extensions that can add application features as if they were implemented in Flask itself. Extensions exist for object-relational mappers, form validation, upload handling, various open authentication technologies and several common framework related tools.

MySQL:

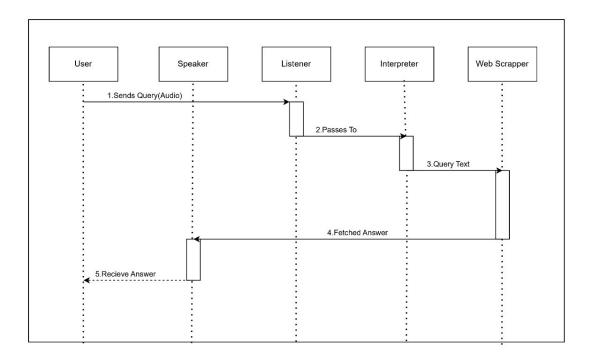
MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter My, and "SQL", the acronym for Structured Query Language. A relational database organizes data into one or more data tables in which data may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access, and facilitates testing database integrity and creation of backups.



SYSTEM DESIGN

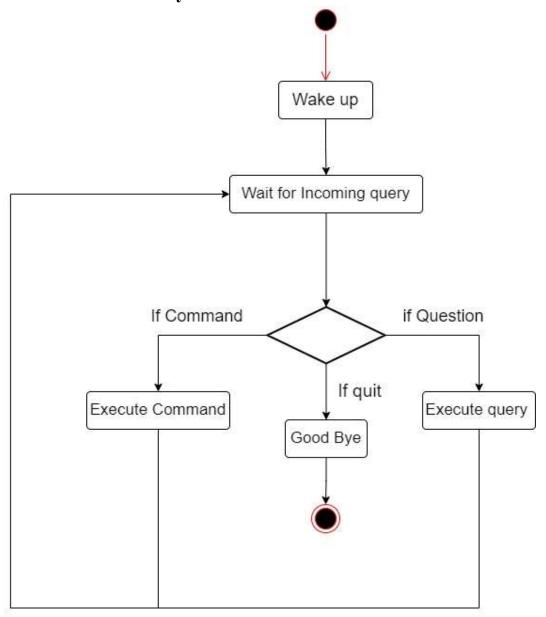
3.1 Module Division:

In this project there is one user module. The user queries command to the system. System then interprets it and fetches answer. The response is sent back to the user.



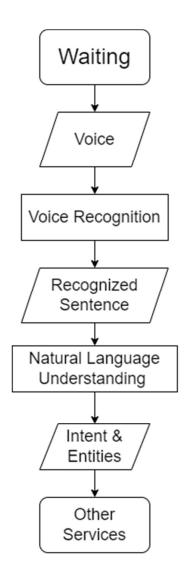
3.1 Module Division

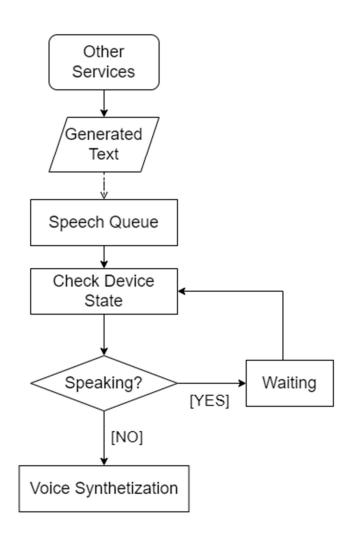
3.2 Data Dictionary:



3.2 Data Dictionary

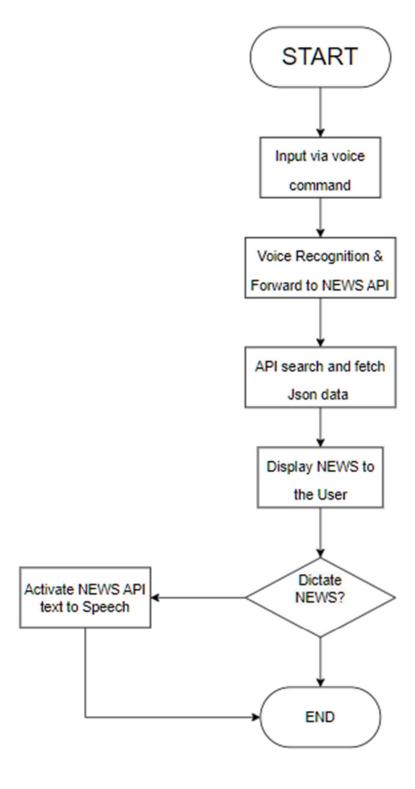
3.2 E-R Diagrams:





3.3 E-R Diagrams:

3.4 Data Flow Diagram:



3.4 Data Flow Diagram:

Chapter 4

Implementation and Testing

4.1 Code:

```
Index.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>{% block title %}##{% endblock %}</title>
  k rel="stylesheet" href="{{ url for('static',filename='style2.css') }}">
</head>
<body>
  {% block permission %}
  {% endblock %}
  <div class="main grid"id="blur">
    <!-- <header id="nav-wrapper"> -->
      <nav id="nav">
         <div class="nav left">
           <span class="gradient skew">
              <h1 class="logo un-skew"><a href="http://127.0.0.1:8000/">##</a></h1>
           <br/><button id="menu" class="btn-nav"><span class="fas fa-bars"></span></button>
         </div>
         <div class="nav right">
           <a href="http://127.0.0.1:8000/index" class="nav-link active"><span class="nav-
link-span"><span
                  class="u-nav">Home</span></span></a>
            <a href="http://127.0.0.1:8000/sports" class="nav-link"><span class="nav-link-
span"><span
```

```
class="u-nav">Sports</span></span></a>
                                                          <a href="http://127.0.0.1:8000/business" class="nav-link"><span clas
span"><span
                                                                                                 class="u-nav">Business</span></span></a>
                                                          <a href="http://127.0.0.1:8000/weather" class="nav-link"><span class
span"><span
                                                                                                 class="u-nav">Weather</span></a>
                                                 </div>
                                    </nav>
                         <!-- </header> -->
                         <div class="news articles">
                                      {% block new %}
                                    <h2 class="title">Top Headline's</h2>
                                     <div class="news card" id="test">
                                                  {% for title,desc,index,url,img,p_date,content in t contents %}
                                                 <div class="items">
                                                            <span class="index">News {{index}}</span>
                                                            <div class="img"><img src="{{img}}}"></div>
                                                             <h3 class="title">{{title}}</h3>
                                                             {{desc}}<br>
                                                            <div class="p date">
                                                                          <a href="{{url}}" class="url">Read more...</a>
                                                                          {{p_date}}
                                                            </div>
                                                  </div>
                                                  {% endfor %}
                                    </div>
                                      {% endblock %}
                         </div>
                         <div class="sidebar">
                                    <h1>Speech<br/>br>Recognition</h1>
                                    <button></button>
                                    <div class="container">
                                                 <div class="texts">
```

```
Say something...try
          "Open News..."
        </div>
      </div>
    </div>
    <footer>
      END of page
    </footer>
  </div>
  {% block script %}
  <script src="{{ url for('static', filename='main.js') }}"></script>
  {% endblock %}
</body>
</html>
Login.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login</title>
  link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
  <!-- <li>!-- <li!-- stylesheet"
<!-- <li>!-- <li!rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"> -->
  link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.8.1/css/all.css">
  <script
src="https://cdnjs.cloudflare.com/ajax/libs/annyang/2.6.0/annyang.min.js"></script>
</head>
```

```
<body>
  <div class="container">
    <div class="row">
       <div class="col-md-6">
         <div class="card">
           <form name="login" action="{{ url for('login') }}" method="post"</pre>
class="box">
              <a href="{{url for('index')}}"><i class='fa fa-arrow-circle-left'
id="backward icon"></i></a>
              <h1>Login</h1>
              <div class="msg">{{ msg }}</div>
              {% for message in get flashed messages() %}
              <div class="msg 1">{{ message }}</div>
              {% endfor %}
              <input type="text" name="username" id="username"</pre>
placeholder="Username" required>
              <input type="password" name="password" id="password"</pre>
placeholder="Password" required>
              <span>Don't have an account?</span> <a class="forgot-text-muted"</pre>
                href="{{ url for('register') }}" id="register">Register</a>
              <input type="submit" name="submit" id="login" value="Login"</pre>
href="/index">
              <div class="col-md-12">
                ul class="social-network social-circle">
                   <a href="#" class="icoFacebook" title="Facebook"><i
                          class="fab fa-facebook-f"></i></a>
                   <a href="#" class="icoTwitter" title="Twitter"><i class="fab fa-
twitter"></i></a>
                   <a href="#" class="icoGoogle" title="Google +"><i
                         class="fab fa-google-plus"></i></a>
                </div>
           </form>
```

```
</div>
       </div>
       <div class="container1">
         <input type="checkbox" id="toggle" checked />
         <label class="button" for="toggle"></label>
         <nav class="nav">
           <span>Try Saying...</span>
            <span>Username</span><span class="commands">"your name"</span>
            <span>Password</span><span class="commands">"the password you
want"</span>
         </nav>
       </div>
    </div>
  </div>
</body>
<script>
  if (annyang) {
    // Let's define our first command. First the text we expect, and then the function it
should call
    const commands = {
       'username *tag': function (variable) {
         let uname = document.getElementById('username');
         uname.value = variable;
         console.log(variable);
       'password *tag': function (variable) {
         let pswd = document.getElementById('password');
         pswd.value = variable;
         console.log(variable);
       },
       'submit': function () {
         let login = document.getElementById('login');
         login.click();
         console.log("submitted");
```

```
},
       'login': function () {
         let login = document.getElementById('login');
         login.click();
         console.log("submitted");
       },
       'register': function () {
         let register = document.getElementById('register');
         register.click();
         console.log("submitted");
       },
       'hello': function () {
         console.log("hi");
       }
    };
    console.log("hello");
    // Add our commands to annyang
    annyang.addCommands(commands);
    // Start listening. You can call this here, or attach this call to an event, button, etc.
    annyang.start();
  }
</script>
<style>
  /* .....*/
  .container1 {
    width: 20%;
    display: flex;
    justify-content: center;
    align-items: center;
    position: absolute;
    right: 1%;
    top: 2%;
```

```
#toggle {
  -webkit-appearance: none;
}
.button {
  position: absolute;
  z-index: 999;
  width: 43px;
  height: 43px;
  background: #8974FB;
  border-radius: 100%;
  cursor: pointer;
  display: flex;
  justify-content: center;
  align-items: center;
  top: 1%;
  right: 1%;
.button:before {
  position: absolute;
  content: "";
  width: 20px;
  height: 2px;
  background: #fff;
  transform: rotate(90deg);
  transition: all 0.4s ease;
.button:after {
  position: absolute;
  content: "";
```

```
width: 20px;
  height: 2px;
  background: #fff;
  transition: all 0.4s ease;
.nav {
  animation: scale-out-tr 0.7s linear 0s 1 normal both;
  background: #fff;
  width: 100%;
  border-radius: 24px;
  flex-direction: column;
 /* transform: translate(0%,0%); */
  box-shadow: 2px 3px 10px 0 rgba(81, 81, 81, 0.1);
  border: 1px solid #e4e4e4;
 padding: 10px;
.nav .commands {
  margin: 5px 0;
  color: #1f852c;
  text-decoration: none;
  letter-spacing: 2px;
  font-size: 14px;
.nav span {
 /* text-align: center; */
 margin: 5px 0;
  color: #644ee2;
  text-decoration: none;
 letter-spacing: 2px;
  font-size: 14px;
```

```
#toggle:checked~.nav {
  /* opacity: 1; */
  animation: scale-in-tr 0.7s linear 0s 1 normal both;
  /* transform: translate(10%,10%); */
  /* transform: translateZ(10%); */
}
#toggle:checked~.button:before {
  transform: rotate(225deg);
}
#toggle:checked~.button:after {
  transform: rotate(135deg);
}
@keyframes scale-in-tr {
  0% {
     transform: scale(0);
     transform-origin: 100% 0%;
     opacity: 1;
  }
  100% {
     transform: scale(1);
     transform-origin: 100% 0%;
     opacity: 1;
@keyframes scale-out-tr {
  0% {
```

```
transform: scale(1);
    transform-origin: 100% 0%;
    opacity: 1;
  }
  100% {
    transform: scale(0);
    transform-origin: 100% 0%;
    opacity: 1;
@media (max-width: 640px) {
  .container {
    width: 100%;
/* ......*/
body {
  margin: 0;
  padding: 0;
  font-family: sans-serif;
  background: linear-gradient(to right, #b92b27, #1565c0)
}
.card {
  margin-bottom: 20px;
  border: none;
span {
  color: whitesmoke;
```

```
.msg \{
  color: red;
.msg_1 {
  color: rgb(0, 255, 0);
}
.box {
  width: 500px;
  padding: 40px;
  position: absolute;
  top: 50%;
  left: 50%;
  background: #191919;
  text-align: center;
  transition: 0.25s;
  margin-top: 100px
.box input[type="text"],
.box input[type="password"] {
  border: 0;
  background: none;
  display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #3498db;
  padding: 10px 10px;
  width: 250px;
  outline: none;
  color: white;
```

```
border-radius: 24px;
  transition: 0.25s
}
.box h1 {
  color: white;
  text-transform: uppercase;
  font-weight: 500
}
.box input[type="text"]:focus,
.box input[type="password"]:focus {
  width: 300px;
  border-color: #2ecc71
}
.box input[type="submit"] {
  border: 0;
  background: none;
  display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #2ecc71;
  padding: 14px 40px;
  outline: none;
  color: white;
  border-radius: 24px;
  transition: 0.25s;
  cursor: pointer
.box input[type="submit"]:hover {
  background: #2ecc71
}
```

```
.forgot-text-muted {
  text-decoration: none;
  color: #2ecc71;
ul.social\text{-}network\ \{
  list-style: none;
  display: inline;
  margin-left: 0 !important;
  padding: 0
ul.social-network li {
  display: inline;
  margin: 0 5px
}
.social-network a.icoFacebook:hover {
  background-color: #3B5998
.social-network a.icoTwitter:hover {
  background-color: #33ccff
.social-network a.icoGoogle:hover {
  background-color: #BD3518
}
.social-network a.icoFacebook:hover i,
.social-network a.icoTwitter:hover i,
.social-network a.icoGoogle:hover i {
  color: #fff
```

```
}
a.socialIcon:hover,
.socialHoverClass {
  color: #44BCDD
}
.social-circle li a {
  display: inline-block;
  position: relative;
  margin: 0 auto 0 auto;
  border-radius: 50%;
  text-align: center;
  width: 50px;
  height: 50px;
  font-size: 20px
}
.social-circle li i {
  margin: 0;
  line-height: 50px;
  text-align: center
}
.social-circle li a:hover i,
.triggeredHover {
  transform: rotate(360deg);
  transition: all 0.2s
}
.social-circle i {
  color: #fff;
  transition: all 0.8s;
  transition: all 0.8s
```

```
}
  #backward_icon {
     font-size: 50px;
     position: absolute;
     right: 5%;
     top: 5%;
     color:#18d851
  #backward icon:hover {
     transition: 500ms;
     color: rgb(28, 227, 241);
  }
</style>
</html>
Register.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Register</title>
  link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
  <!-- <li>!-- <li!rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.bundle.min.js"> -->
  <!-- <li>!-- <li!rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"> -->
  link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.8.1/css/all.css">
```

```
<script src="//cdnjs.cloudflare.com/ajax/libs/annyang/2.6.0/annyang.min.js"></script>
</head>
<body>
  <div class="container">
    <div class="row">
       <div class="col-md-6">
         <div class="card">
            <form name ="register" action="{{ url for('register') }}" method="post"</pre>
class="box">
              <a href="{{url for('index')}}}"><i class='fa fa-arrow-circle-left'
id="backward icon"></i></a>
              <h1>REGISTER</h1>
              <div class="msg" style="color: red;">{{ msg }}</div>
              <input type="text" name="username" id="username"</pre>
placeholder="Username" >
              <input type="email" name="email" id="email" placeholder="Email" >
              <input type="password" name="password" id="password"</pre>
placeholder="Password" >
              <span>Have an account?</span> <a class="forgot-text-muted" href="{{</pre>
url for('login') }}" id="login">Login now</a>
              <input type="submit" name="submit" id="register" value="Register"</pre>
href="/register">
              <div class="col-md-12">
                ul class="social-network social-circle">
                   <a href="#" class="icoFacebook" title="Facebook"><i</a>
                          class="fab fa-facebook-f"></i></a>
                   <a href="#" class="icoTwitter" title="Twitter"><i class="fab fa-
twitter"></i></a>
                   <a href="#" class="icoGoogle" title="Google +"><i
                          class="fab fa-google-plus"></i></a>
                </div>
```

```
</form>
         </div>
       </div>
       <div class="container1">
         <input type="checkbox" id="toggle" checked />
         <label class="button" for="toggle"></label>
         <nav class="nav">
              <span>Try Saying...</span>
              <span>Username</span><span class="commands">"your name"</span>
              <span>email</span><span class="commands">"your email"</span>
              <span>Password</span><span class="commands">"the password you
want"</span>
         </nav>
       </div>
    </div>
  </div>
</body>
<script>
  if (annyang) {
    // Let's define our first command. First the text we expect, and then the function it
should call
    const commands = {
       'username *tag': function(variable) {
         let uname = document.getElementById('username');
         uname.value = variable;
         console.log(variable);
       },
       'password *tag': function(variable) {
         let pswd = document.getElementById('password');
         pswd.value = variable;
         console.log(variable);
       },
       'email *tag': function(variable) {
         let email = document.getElementById('email');
```

```
email.value = variable;
         console.log(variable);
       },
       'submit': function() {
         let register = document.getElementById('register');
         register.click();
         console.log("submitted");
       },
       'register': function() {
         let register = document.getElementById('register');
         register.click();
         console.log("submitted");
       },
       'login': function() {
         let login = document.getElementById('login');
         login.click();
         console.log("submitted");
       },
       'hello': function() {
         console.log("hello");
       }
    };
    console.log("hello");
    // Add our commands to annyang
    annyang.addCommands(commands);
    // Start listening. You can call this here, or attach this call to an event, button, etc.
    annyang.start();
  }
</script>
<style>
  /* ......*/
  .container1 {
    width: 20%;
```

```
display: flex;
  justify-content: center;
  align-items: center;
  position: absolute;
  right: 1%;
  top: 2%;
}
#toggle {
  -webkit-appearance: none;
.button {
  position: absolute;
  z-index: 999;
  width: 43px;
  height: 43px;
  background: #8974FB;
  border-radius: 100%;
  cursor: pointer;
  display: flex;
  justify-content: center;
  align-items: center;
  top: 1%;
  right: 1%;
. button: before \ \{
  position: absolute;
  content: "";
  width: 20px;
  height: 2px;
  background: #fff;
```

```
transform: rotate(90deg);
  transition: all 0.4s ease;
}
.button:after {
  position: absolute;
  content: "";
  width: 20px;
  height: 2px;
  background: #fff;
  transition: all 0.4s ease;
}
.nav {
  animation: scale-out-tr 0.7s linear 0s 1 normal both;
  background: #fff;
  width: 100%;
  border-radius: 24px;
  flex-direction: column;
  /* transform: translate(0%,0%); */
  box-shadow: 2px 3px 10px 0 rgba(81, 81, 81, 0.1);
  border: 1px solid #e4e4e4;
  padding: 10px;
.nav .commands{
  margin: 5px 0;
  color: #1f852c;
  text-decoration: none;
  letter-spacing: 2px;
  font-size: 14px;
}
.nav span {
  /* text-align: center; */
```

```
margin: 5px 0;
  color: #644ee2;
  text-decoration: none;
  letter-spacing: 2px;
  font-size: 14px;
#toggle:checked~.nav {
  /* opacity: 1; */
  animation: scale-in-tr 0.7s linear 0s 1 normal both;
  /* transform: translate(10%,10%); */
  /* transform: translateZ(10%); */
}
#toggle:checked~.button:before {
  transform: rotate(225deg);
}
#toggle:checked~.button:after {
  transform: rotate(135deg);
@keyframes scale-in-tr {
  0% {
     transform: scale(0);
     transform-origin: 100% 0%;
     opacity: 1;
  }
  100% {
     transform: scale(1);
     transform-origin: 100% 0%;
     opacity: 1;
```

```
@keyframes scale-out-tr {
  0% {
    transform: scale(1);
    transform-origin: 100% 0%;
    opacity: 1;
  100% {
    transform: scale(0);
    transform-origin: 100% 0%;
    opacity: 1;
@media (max-width: 640px) {
  .container {
    width: 100%;
/* .....register.....*/
body {
  margin: 0;
  padding: 0;
  font-family: sans-serif;
  background: linear-gradient(to right, #b92b27, #1565c0)
}
.card {
  margin-bottom: 20px;
  border: none;
```

```
}
span {
  color: white;
.box {
  width: 500px;
  padding: 40px;
  position: absolute;
  top: 50%;
  left: 50%;
  background: #1a1919;
  text-align: center;
  transition: 0.25s;
  margin-top: 100px
.box input[type="text"],
.box input[type="email"],
.box input[type="password"] {
  border: 0;
  background: none;
  display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #3498db;
  padding: 10px 10px;
  width: 250px;
  outline: none;
  color: white;
  border-radius: 24px;
  transition: 0.25s
```

```
}
.box h1 {
  color: white;
  text-transform: uppercase;
  font-weight: 500
}
.box input[type="text"]:focus,
.box input[type="email"]:focus,
.box input[type="password"]:focus {
  width: 300px;
  border-color: #2ecc71
}
.box input[type="submit"] {
  border: 0;
  background: none;
  display: block;
  margin: 20px auto;
  text-align: center;
  border: 2px solid #2ecc71;
  padding: 14px 40px;
  outline: none;
  color: white;
  border-radius: 24px;
  transition: 0.25s;
  cursor: pointer
}
.box input[type="submit"]:hover {
  background: #2ecc71
}
```

```
. forgot\text{-}text\text{-}muted \{
  text-decoration: underline;
  color: #2ecc71;
}
ul.social-network {
  list-style: none;
  display: inline;
  margin-left: 0 !important;
  padding: 0
ul.social-network li {
  display: inline;
  margin: 0 5px
}
.social-network a.icoFacebook:hover {
  background-color: #3B5998
}
.social-network a.icoTwitter:hover {
  background-color: #33ccff
.social-network a.icoGoogle:hover {
  background-color: #BD3518
}
.social-network a.icoFacebook:hover i,
.social-network a.icoTwitter:hover i,
.social-network a.icoGoogle:hover i {
  color: #fff
```

```
a.socialIcon:hover,
.socialHoverClass {
  color: #44BCDD
.social-circle li a {
  display: inline-block;
  position: relative;
  margin: 0 auto 0 auto;
  border-radius: 50%;
  text-align: center;
  width: 50px;
  height: 50px;
  font-size: 20px
}
.social-circle li i {
  margin: 0;
  line-height: 50px;
  text-align: center
}
.social-circle li a:hover i,
.triggeredHover {
  transform: rotate(360deg);
  transition: all 0.2s
}
.social-circle i {
  color: #fff;
  transition: all 0.8s;
  transition: all 0.8s
```

```
#backward_icon {
     font-size: 50px;
    position: absolute;
    right: 5%;
    top: 5%;
    color:#18d851
  #backward icon:hover {
     transition: 500ms;
    color: rgb(28, 227, 241);
</style>
</html>
main.js
// Mute/ unmute
// const texts = document.getElementById['#innercontaint'] //error
const speech = new SpeechSynthesisUtterance();
const voices = window.speechSynthesis.getVoices();
speech.voice = voices[4];
speech.volume = 0.8;
speech.continuous = false;
const texts = document.querySelector(".texts");
window.SpeechRecognition =
 window.SpeechRecognition || window.webkitSpeechRecognition;
const recognition = new window.SpeechRecognition();
recognition.interimResults = true;
```

```
let currentwindow;
var links;
var myarray = [];
// next pervious search
function urlSearch() {
 var urlsearch = [];
 urlsearch.push(links);
 i = myarray.indexOf(links);
function nextSearch() {
 if (i \ge 0 \&\& i \le myarray.length - 1) {
  i++;
  nextUrl = myarray[i];
 currentwindow.close();
 currentwindow = window.open(nextUrl);
 nextIndex = myarray.indexOf(nextUrl);
 links = myarray[nextIndex];
}
var x = document.getElementsByClassName("url");
for (var i = 0; i < x.length; i++) {
 // myarray[i] = parseInt(num);
 // var nametext = x[i].textContent;
 // var cleantext = nametext.replace(\\s+\/g, ' ').trim();
 var cleanlink = x[i].href;
 myarray.push([cleanlink]);
function scrolldownwindow() {
 document.getElementById("test").scrollBy(0, 500);
function scrollupwindow() {
```

```
document.getElementById("test").scrollBy(0, -500);
}
function readOut(message) {
 const speech = new SpeechSynthesisUtterance();
 const voices = window.speechSynthesis.getVoices();
 speech.voice = voices[4];
 speech.text = message;
 speech.volume = 0.8;
 // speech.voice = voices.filter(function(voice) { return voice.name == 'Microsoft David -
English (United States)'; })[0];
 window.speechSynthesis.speak(speech);
 console.log(speech);
let p = document.createElement("p");
recognition.addEventListener("result", (e) => {
 const text = Array.from(e.results)
  .map((results) => results[0])
  .map((results) => results.transcript)
  .join("");
 p.innerText = text;
 p.classList.add("inputs");
 texts.appendChild(p);
 scrollToBottom();
 // document.getElementById("innercontaint").appendChild(p);//alternative
 if (e.results[0].isFinal) {
  //user input commands and there reply's
  if (text.includes("Hi") || text.includes("hi")) {
   p = document.createElement("p");
   p.classList.add("reply");
   p.innerText = "Hello There";
```

```
readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("Hello") || text.includes("hello")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "Hi";
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("How are you?") || text.includes("how are you?")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "I am fine, how do you do";
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (
text.includes("who build you?") ||
text.includes("Who build you?") ||
text.includes("Who created you?")
) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText =
  "I am created by team K11 from TYIT as there group project.";
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("Who are you?") || text.includes("who are you?")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText =
  "Hi I am Zara, your personal news voice assistant AI. I can provide you news update
```

```
daily to make your day informative";
   readOut(p.innerText);
   texts.appendChild(p);
   scrollToBottom();
  } else if (text.includes("Zara") || text.includes("zara")) {
   p = document.createElement("p");
   p.classList.add("reply");
   p.innerText = "Hi, how can i help you?";
   readOut(p.innerText);
   texts.appendChild(p);
   scrollToBottom();
  } else if (
   text.includes("top headlines") ||
   text.includes("Top headlines") ||
   text.includes("top headlines.") ||
   text.includes("Top headlines.")
  ) {
   p = document.createElement("p");
   p.classList.add("reply");
   p.innerText = "This are todays top headlines";
   readOut(p.innerText);
   texts.appendChild(p);
   currentwindow = window.open("http://127.0.0.1:8000", " self");
   scrollToBottom();
  } else if (
   text.includes("homepage") ||
   text.includes("Homepage") ||
   text.includes("home page.") ||
   text.includes("Home page.")
  ) {
   p = document.createElement("p");
   p.classList.add("reply");
   p.innerText = "Here is the homepage";
   readOut(p.innerText);
```

```
texts.appendChild(p);
 currentwindow = window.open("http://127.0.0.1:8000/index", " self");
 scrollToBottom();
} else if (
 text.includes("TOI") ||
text.includes("times of india") ||
text.includes("Times of india") ||
 text.includes("Times of India")
) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "news from TimesOfIndia";
 readOut(p.innerText);
 texts.appendChild(p);
 currentwindow = window.open("http://127.0.0.1:8000/toi", " self");
 scrollToBottom();
} else if (text.includes("sports news") || text.includes("Sports News")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "Here are the top sports news";
 readOut(p.innerText);
 texts.appendChild(p);
 currentwindow = window.open("http://127.0.0.1:8000" + "/sports", " self");
 scrollToBottom();
} else if (text.includes("health news") || text.includes("Health")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "todays health news";
 readOut(p.innerText);
 texts.appendChild(p);
 currentwindow = window.open("http://127.0.0.1:8000" + "/health", " self");
 scrollToBottom();
} else if (
 text.includes("buisness news") ||text.includes("Business News") ||text.includes("business
```

```
news?") ||text.includes("Business News?") ||text.includes("business news.")
||text.includes("Business news.")
  ) {
   p = document.createElement("p");
   p.classList.add("reply");
   p.innerText = "Here is todays Business news";
   readOut(p.innerText);
   texts.appendChild(p);
   currentwindow = window.open(
     "http://127.0.0.1:8000" + "/business",
     " self"
   );
   scrollToBottom();
  } else if (
   text.includes("health news") ||
   text.includes("Health News") ||
   text.includes("health news?") ||
   text.includes("Business News?") ||
   text.includes("business news.") ||
   text.includes("Business news.")
  ) {
   p = document.createElement("p");
   p.classList.add("reply");
   p.innerText = "Here is todays health news";
   readOut(p.innerText);
   texts.appendChild(p);
   currentwindow = window.open("http://127.0.0.1:8000" + "/health", " self");
   scrollToBottom();
  } else if (
   text.includes("abp news") ||
   text.includes("ABP News") ||
   text.includes("ABP news?") ||
   text.includes("Business News?") ||
   text.includes("business news.") ||
```

```
text.includes("Business news.")
) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "Here is todays ABP news";
 readOut(p.innerText);
 texts.appendChild(p);
 currentwindow = window.open("http://127.0.0.1:8000" + "/abp", " self");
 scrollToBottom();
} else if (text.includes("weather") || text.includes("Weather")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "Here is todays weather report. scroll for more details";
 readOut(p.innerText);
 texts.appendChild(p);
 currentwindow = window.open(
  "http://127.0.0.1:8000" + "/weather",
  " self"
 );
 scrollToBottom();
//article numbers
else if (text.includes("10.") || text.includes("10")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[9]);
 links = myarray[9];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("11.") || text.includes("11")) {
 p = document.createElement("p");
```

```
p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[10]);
 links = myarray[10];
 urlSearch();
 readOut(p.innerText);
texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("12.") || text.includes("12")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[11]);
 links = myarray[11];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("13.") || text.includes("13")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[12]);
 links = myarray[12];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("14.") || text.includes("14")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[13]);
 links = myarray[13];
```

```
urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("15.") || text.includes("15")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[14]);
 links = myarray[14];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("16.") || text.includes("16")) {
 p = document.createElement("p");
p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[15]);
links = myarray[15];
urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("17.") || text.includes("17")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[16]);
 links = myarray[16];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
```

```
} else if (text.includes("18.") || text.includes("18")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[17]);
 links = myarray[17];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("19.") || text.includes("19")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[18]);
 links = myarray[18];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("20.") || text.includes("20")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[19]);
links = myarray[19];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("1") || text.includes("1")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
```

```
currentwindow = window.open(myarray[0]);
 links = myarray[0];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("2") || text.includes("2")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[1]);
 links = myarray[1];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("3") || text.includes("3")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[2]);
 links = myarray[2];
urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("4") || text.includes("4")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[3]);
 links = myarray[3];
 urlSearch();
 readOut(p.innerText);
```

```
texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("5") || text.includes("5")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[4]);
 links = myarray[4];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("6") || text.includes("6")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[5]);
 links = myarray[5];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("7") || text.includes("7")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[6]);
 links = myarray[6];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("8") || text.includes("8")) {
 p = document.createElement("p");
```

```
p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[7]);
 links = myarray[7];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("9") || text.includes("9")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "opening news";
 currentwindow = window.open(myarray[8]);
 links = myarray[8];
 urlSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
//end of article numbers
else if (
 text.includes("scroll up") ||
 text.includes("Scroll up") ||
 text.includes("Go up")
) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "ok";
 scrollupwindow();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (
 text.includes("scroll down") ||
```

```
text.includes("Scroll \ down") \parallel
 text.includes("Go down")
) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "ok";
 scrolldownwindow();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("Refresh") || text.includes("refresh")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "refreshing";
 currentwindow = window.open("http://127.0.0.1:8000", " self");
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (
text.includes("open youtube") ||
text.includes("Open youtube") ||
text.includes("Open YouTube")
) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "ok";
 currentwindow = window.open("https://www.youtube.com/");
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (text.includes("open spotify") || text.includes("Open Spotify")) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "ok";
```

```
currentwindow = window.open("https://open.spotify.com/");
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (
 text.includes("Go back") ||
 text.includes("go back") ||
 text.includes("Go Back") ||
 text.includes("go Back") ||
 text.includes("Close") ||
 text.includes("close")
) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "ok";
 currentwindow.close();
 currentwindow.close();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else if (
 text.includes("Go next") ||
 text.includes("go next") ||
 text.includes("next") ||
 text.includes("Next")
) {
 p = document.createElement("p");
 p.classList.add("reply");
 p.innerText = "ok";
 nextSearch();
 readOut(p.innerText);
 texts.appendChild(p);
 scrollToBottom();
} else {
```

```
p = document.createElement("p");
   p.classList.add("reply");
   p.innerText = "Sorry i didnt get it, repeat this";
   texts.appendChild(p);
    scrollToBottom();
  p = document.createElement("p");
 console.log(text);
 // console.log($SCRIPT ROOT);
});
recognition.addEventListener("end", () \Longrightarrow \{
 recognition.start();
});
recognition.start();
function scrollToBottom() {
 texts.scrollTop = texts.scrollHeight;
}
Style2.css
body {
 margin: 0px;
 width: 100%;
 height: 100vh;
 overflow: hidden;
 background: linear-gradient(to bottom right, #ff00d4 0%, #00ddff 100%);
.title {
```

```
justify-content: center;
 text-align: center;
 margin: 2px;
/* -----*/
.popup {
 display: none;
 background-color: rgb(235, 232, 232);
 width: 450px;
 padding: 30px 40px;
 z-index: 100;
 position: absolute;
 transform: translate(-50%, -120%);
 transition: 0.2s;
 transition: ease-in-out;
 left: 50%;
 top: 50%;
 border-radius: 8px;
 font-family: "Poppins", sans-serif;
 box-shadow: 5px 5px 15px 1px rgb(36, 36, 36);
.main_grid#blur.blur{
 filter: blur(20px);
 transition: 0.2s;
.popup button {
 display: block;
 margin: 0 0 20px auto;
 background-color: transparent;
 font-size: 30px;
 color: #757070;
 border: none;
```

```
outline: none;
cursor: pointer;
.popup button:hover{
background-color: #b8b0b0;
color: white;
border-radius: 80%;
.popup p{
  font-size: 20px;
  text-align: justify;
  margin: 20px 0;
.popup a{
display: block;
position: relative;
width: 150px;
margin: auto;
text-align: center;
background-color: #00ddff;
color: white;
text-decoration: none;
padding: 5px 0px;
border-radius: 5px;
.main_grid {
display: grid;
grid-template-columns: repeat(4, 1fr);
grid-template-rows: 0.1fr 1fr 0.1fr;
/* grid-column-gap: 5px;
```

```
grid-row-gap: 5px; */
nav {
 grid-area: 1 / 1 / 2 / 4;
 background-color: rgb(131, 128, 128);
/* nav bar */
/*----*/
button {
 background: none;
 box-shadow: none;
 border: none;
 cursor: pointer;
button:focus,
input:focus {
 outline: 0;
html {
 scroll-behavior: smooth;
/*----*/
body {
 padding: 0;
 margin: 0;
section {
 height: 100vh;
```

```
#home {
background-color: #ddd;
#about {
 background-color: #aaa;
#work {
background-color: #888;
#contact {
background-color: #666;
/*-----*/
.skew {
transform: skew(-20deg);
.un-skew {
transform: skew(20deg);
/*----*/
#nav-wrapper {
 overflow: hidden;
width: 100%;
margin: 0 auto;
position: fixed;
top: 0;
left: 0;
```

```
}
#nav {
 background-color: #fff;
 box-shadow: 0px 3px 10px rgba(0, 0, 0, 0.1);
 display: flex;
 flex-direction: column;
 font-family: "Saira Semi Condensed", sans-serif;
 height: 4;
 overflow: hidden;
#nav.nav-visible {
height: 100%;
 overflow: auto;
.nav {
 display: flex;
height: 4em;
 line-height: 3em;
 flex-grow: 1;
.nav-link,
.logo {
padding: 0 1em;
span.gradient {
 background: #f857a8;
 background: -webkit-linear-gradient(45deg, #f857a8, #ff5858);
 background: linear-gradient(45deg, #f857a8, #ff5858);
 padding: 0 1em;
 position: relative;
```

```
right: 1em;
 margin-right: auto;
span.gradient:hover {
 animation-name: logo-hover;
 animation-duration: 0.3s;
 animation-fill-mode: forwards;
 animation-timing-function: cubic-bezier(0.17, 0.57, 0.31, 0.85);
}
h1.logo {
 font-weight: 300;
 font-size: 1.75em;
 line-height: 0.1em;
 color: #fff;
}
h1.logo a,
a:active,
a:hover,
a:visited {
 text-decoration: none;
 color: #fff;
.nav-link {
 text-transform: uppercase;
 text-align: center;
 border-top: 0.5px solid #ddd;
a:link,
a:visited,
a:active {
```

```
text-decoration: none;
 color: #f857a8;
a:hover {
 text-decoration: underline;
.right {
 display: flex;
 flex-direction: column;
 height: 100%;
.btn-nav {
 color: #f857a8;
 padding-left: 2em;
 padding-right: 2em;
@media (min-width: 800px) {
 #nav-wrapper {
  overflow: hidden;
 #nav {
  overflow: hidden;
  flex-direction: row;
 .nav-link {
  border-top: none;
```

```
.right {
 overflow: hidden;
 flex-direction: row;
 justify-content: flex-end;
 position: relative;
 left: 1.5em;
 height: auto;
.btn-nav {
 display: none;
.nav a:link.active,
a:visited.active,
a:active.active {
 background: #f857a8;
 background: -webkit-linear-gradient(45deg, #f857a8, #ff5858);
 background: linear-gradient(45deg, #f857a8, #ff5858);
 color: #fff;
.nav-link-span {
 transform: skew(20deg);
 display: inline-block;
.nav-link {
 transform: skew(-20deg);
 color: #777;
 text-decoration: none;
.nav-link:last-child {
 padding-right: 3em;
```

```
}
 a:hover.nav-link:not(.active) {
  color: #444;
  background: #ddd;
  background: linear-gradient(45deg, #fff, #ddd);
@keyframes logo-hover {
 20% {
  padding-right: 0em;
 100% {
  padding-right: 5em;
/* nav bar */
.news_articles {
 grid-area: 2 / 1 / 3 / 4;
 background: linear-gradient(to bottom right, #ff00d4 0%, #00ddff 100%);
 padding-right: 5px;
.sidebar {
 grid-area: 1 / 4 / 4 / 5;
 background: linear-gradient(to bottom right, #ff00d4 0%, #00ddff 100%);
 height: 100vh;
 /* width: 25%; */
 text-align: center;
 align-content: right;
footer {
 grid-area: 3 / 1 / 4 / 4;
```

```
background-color: rgb(131, 128, 128);
 text-align: center;
}
@media only screen and (max-width: 550px) {
 .main_grid {
  display: grid;
  grid-template-columns: 1fr;
  grid-template-rows: 0.1fr repeat(2, 1fr) 0.1fr;
  grid-column-gap: 0px;
  grid-row-gap: 0px;
 nav {
  grid-area: 1 / 1 / 2 / 2;
 .news_articles {
  grid-area: 2 / 1 / 3 / 2;
 .sidebar {
  grid-area: 3 / 1 / 4 / 2;
 footer {
  grid-area: 4 / 1 / 5 / 2;
 .news_card {
  grid-template-columns: 1fr;
}
.news card {
padding-right: 10px;
 display: grid;
 grid-template-columns: repeat(auto-fit, minmax(300px, 1fr));
 grid-template-rows: 1fr 1fr 1fr;
```

```
grid-column-gap: 5px;
 overflow-y: auto;
height: 80vh;
.url {
text-align: left;
.p_date {
 text-align: right;
 display: grid;
 grid-template-columns: 1fr 1fr;
.url {
text-align: left;
.news_card::-webkit-scrollbar {
/* overflow-y: auto; */
width: 0px;
.items {
 position: relative;
 display: grid;
 height: 460px;
 width: 94%;
 align-items: center;
justify-content: center;
 background: linear-gradient(to top right, #fe8de6 0%, #fed1c7 100%);
 margin: 10px;
 padding: 10px;
```

```
border-radius: 10px;
.index {
z-index: +1;
top: 162px;
left: 12px;
position: absolute;
margin-right: 85%;
background: linear-gradient(to top right, #11d13b 0%, #f5da40 100%);
padding: 2px 10px;
border-radius: 50px;
font-weight: bold;
font-size: 20px;
/* border-top-left-radius: 0px; */
box-shadow: 0px 5px 15px 0px rgb(36, 36, 36);
.items .img img {
position: relative;
width: 100%;
height: 200px;
object-fit: cover;
border-radius: 10px;
/* box-shadow: 0px 5px 15px 0px rgb(36, 36, 36); */
.texts {
overflow-y: auto;
max-height: 70vh;
/* max-width: 30%; */
padding-right: 20px;
/* padding-left: 5px; */
```

```
.texts::-webkit-scrollbar {
 /* overflow-y: auto; */
 width: 0px;
.texts p {
 font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
 font-weight: bold;
 font-size: 16px;
 color: black;
 text-align: left;
 background-color: white;
 padding: 5px;
 padding-left: 15px;
 margin: 8px 3px;
 border-radius: 20px;
 border-top-left-radius: 0px;
 box-shadow: 0px 3px 5px 0px #000;
#innercontaint {
 margin-right: 30px;
#outeriframe {
 border-radius: 10px;
 width: 100%;
 height: 290%;
 overflow: hidden;
 position: relative;
#inneriframe {
```

```
/* animation: scroll 50s linear infinite; */
 border-radius: 10px;
 position: absolute;
 /* top:-100px; */
 left: 10px;
 /* width:1280px; */
 /* height:1200px; */
p.inputs {
 margin-right: 30px;
p.reply {
 text-align: right;
 background-color: lightgray;
 border-radius: 20px;
 border-top-right-radius: 0px;
 margin-left: 30px;
 padding-right: 15px;
Main.py
from flask import Flask, render_template, request, url_for, session, redirect, flash
from flask_sqlalchemy import SQLAlchemy
from flask mysqldb import MySQL
from newsapi import NewsApiClient
import MySQLdb.cursors
import webbrowser
import re
```

```
app = Flask(__name__)
app.config['SECRET_KEY']='kombra11TYITgroup'
# app.config['SQLALCHEMY DATAuser URI'] = 'mysql://root:@localhost/nvassist'
app.config['MYSQL HOST'] = 'localhost'
app.config['MYSQL USER'] = 'root'
app.config['MYSQL PASSWORD'] = "
app.config['MYSQL DB'] = 'nvassist'
mysql = MySQL(app)
# sources = newsapi.get sources()
# create routes/views
# NEWSAPI Python Code
@app.route('/')
def popup():
  if 'loggedin' in session:
    return redirect(url for('user'))
  return render template('popup.html')
@app.route('/login',methods=['GET','POST'])
def login():
  msg = "
  if request.method == 'POST' and 'username' in request.form and 'password' in request.form:
    username = request.form['username']
    password = request.form['password']
```

```
cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
    cursor.execute('SELECT * FROM login WHERE username = %s AND password = %s',
(username,password,))
    login user = cursor.fetchone()
    print(login user)
    if login user:
       session['loggedin'] = True
       session['id'] = login user['sno']
       session['username'] = login user['username']
       return redirect(url for('user'))
    else:
       # account doesnt exist or username/password incorrect
       msg = 'Incorrect username/password!'
  return render template('login.html',msg=msg)
@app.route('/logout')
def logout():
  session.pop('loggedin', None)
  session.pop('id', None)
  session.pop('username', None)
  return redirect(url for('login'))
@app.route('/register', methods =['GET', 'POST'])
def register():
  msg = "
  if request.method == 'POST' and 'username' in request.form and 'email' in request.form and
'password' in request.form:
    username = request.form['username']
```

```
email = request.form['email']
    password = request.form['password']
    cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
    cursor.execute('SELECT * FROM login WHERE username = % s', (username, ))
    login user = cursor.fetchone()
    if login user:
       msg = 'Account already exists!'
    elif not username or not password or not email:
       msg = 'Please fill out the form!'
    elif not re.match(r'[A-Z,a-z,0-9]+', username):
       msg = 'Username must contain only characters and numbers!'
    elif not re.match(r'[^{\wedge}@]+@[^{\wedge}@]+\.[^{\wedge}@]+\, email):
       msg = 'Invalid email address!'
    else:
       cursor.execute('INSERT INTO login VALUES (NULL, % s, % s, % s)', (username,
email, password, ))
       mysql.connection.commit()
       flash('You have successfully registered, Login now!')
       return redirect(url for('login'))
  elif request.method == 'POST':
    msg = 'Please fill out the form!'
  return render template('register.html', msg = msg)
@app.route('/search', methods=['GET','POST'])
def search():
  if request.method == "POST":
    search keyword = request.form.get("search")
```

```
newsapi = NewsApiClient(api key='032f556e3d3345afba3606d0554885ec')
  search = newsapi.get everything(q=search keyword)
  search articles = search['articles']
  title = []
  desc = []
  index = []
  url = []
  img = []
  p_date = []
  content = []
  for i in range(len(search articles)):
    src_articles = search_articles[i]
    title.append(src articles['title'])
    desc.append(src articles['description'])
    index.append(i + 1)
    url.append(src articles['url'])
     img.append(src articles['urlToImage'])
    p date.append(src articles['publishedAt'])
     content.append(src articles['content'])
    Search contents = zip(title,desc,index,url,img,p date,content)
  return
render template('search.html',search contents=Search contents,keyword=search keyword)
```

```
@app.route('/history')
def history():
  return render_template('history.html',username=session['username'])
@app.route('/index')
def index():
  # if 'loggedin' in session:
    newsapi = NewsApiClient(api key='032f556e3d3345afba3606d0554885ec')
     top headlines = newsapi.get top headlines(country="in")
     t articles = top headlines['articles']
     title = []
    desc = []
    index = []
    url = []
    img = []
    p_date = []
     content = []
     for i in range(len(t articles)):
       main\_articles = t\_articles[i]
       title.append(main_articles['title'])
       desc.append(main articles['description'])
       index.append(i + 1)
       url.append(main_articles['url'])
```

```
img.append(main articles['urlToImage'])
       p date.append(main articles['publishedAt'])
       content.append(main articles['content'])
       t contents = zip(title,desc,index,url,img,p date,content)
    return
render template('index.html',t contents=t contents,#username=session['username']
    )
  # return redirect(url for('login'))
# .....user.html.....
@app.route('/user')
def user():
  if 'loggedin' in session:
    newsapi = NewsApiClient(api key='032f556e3d3345afba3606d0554885ec')
    top headlines = newsapi.get top headlines(country="in")
    t articles = top headlines['articles']
    title = []
    desc = []
    index = []
    url = []
    img = []
    p_date = []
    content = []
```

```
for i in range(len(t articles)):
       main articles = t articles[i]
       title.append(main articles['title'])
       desc.append(main articles['description'])
       index.append(i + 1)
       url.append(main articles['url'])
       img.append(main articles['urlToImage'])
       p date.append(main articles['publishedAt'])
       content.append(main articles['content'])
       t contents = zip(title,desc,index,url,img,p date,content)
    return render template('user.html',t contents=t contents,username=session['username'])
  return redirect(url for('login'))
@app.route('/sports')
def sports():
  newsapi = NewsApiClient(api key='032f556e3d3345afba3606d0554885ec')
  sports news = newsapi.get top headlines(country="in",category="sports")
  s articles = sports news['articles']
  title = []
  desc = []
  index = []
  url = []
  img = []
  p_date = []
```

```
content = []
  for i in range(len(s articles)):
    sports articles = s articles[i]
    title.append(sports_articles['title'])
     desc.append(sports articles['description'])
    index.append(i + 1)
    url.append(sports_articles['url'])
     img.append(sports articles['urlToImage'])
    p_date.append(sports_articles['publishedAt'])
    content.append(sports articles['content'])
    s contents = zip(title,desc,index,url,img,p date,content)
  return render_template('sports.html',s_contents=s_contents)
@app.route('/business')
def business():
  newsapi = NewsApiClient(api key='032f556e3d3345afba3606d0554885ec')
  business news = newsapi.get top headlines(country="in",category="business")
  b articles = business news['articles']
  title = []
  desc = []
  index = []
```

```
url = []
  img = []
  p_date = []
  content = []
  for i in range(len(b articles)):
    business articles = b articles[i]
    title.append(business_articles['title'])
    desc.append(business articles['description'])
    index.append(i + 1)
    url.append(business articles['url'])
    img.append(business articles['urlToImage'])
    p_date.append(business_articles['publishedAt'])
    content.append(business articles['content'])
    b contents = zip(title,desc,index,url,img,p date,content)
  return render template('business.html',b contents=b contents)
@app.route('/health')
def health():
  newsapi = NewsApiClient(api key='032f556e3d3345afba3606d0554885ec')
  health news = newsapi.get top headlines(country="in",category="health")
  h articles = health news['articles']
  title = []
```

```
desc = []
  index = []
  url = []
  img = []
  p_date = []
  content = []
  for i in range(len(h articles)):
    health articles = h articles[i]
    title.append(health_articles['title'])
    desc.append(health articles['description'])
    index.append(i + 1)
    url.append(health articles['url'])
    img.append(health articles['urlToImage'])
    p_date.append(health_articles['publishedAt'])
    content.append(health articles['content'])
    h contents = zip(title,desc,index,url,img,p date,content)
  return render template('health.html',h contents=h contents)
@app.route('/toi')
def toi():
  newsapi = NewsApiClient(api key='032f556e3d3345afba3606d0554885ec')
  toinews news = newsapi.get top headlines(sources='the-times-of-india')
  toinews_articles = toinews_news['articles']
```

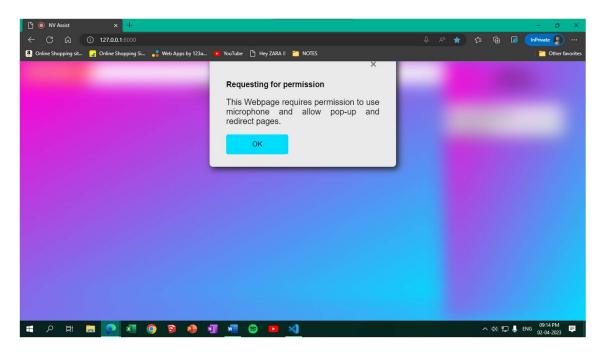
```
title = []
  desc = []
  index = []
  url = []
  img = []
  p_date = []
  content = []
  for i in range(len(toinews_articles)):
    toi_articles = toinews_articles[i]
    title.append(toi_articles['title'])
     desc.append(toi articles['description'])
    index.append(i + 1)
    url.append(toi_articles['url'])
     img.append(toi_articles['urlToImage'])
    p_date.append(toi_articles['publishedAt'])
     content.append(toi_articles['content'])
    toi contents = zip(title,desc,index,url,img,p date,content)
  return render_template('toi.html',toi_contents=toi_contents)
@app.route('/weather')
def weather():
  return render template('weather.html')
```

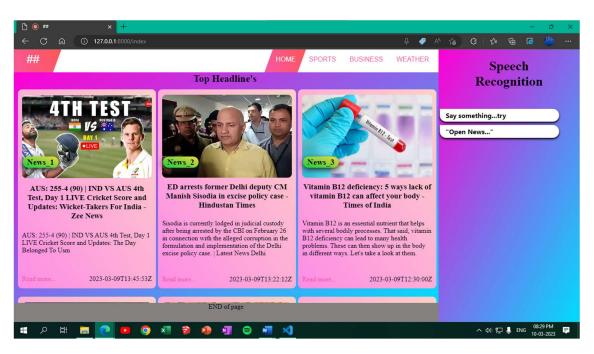
ifname == 'main':				
app.run(debug=True,port				

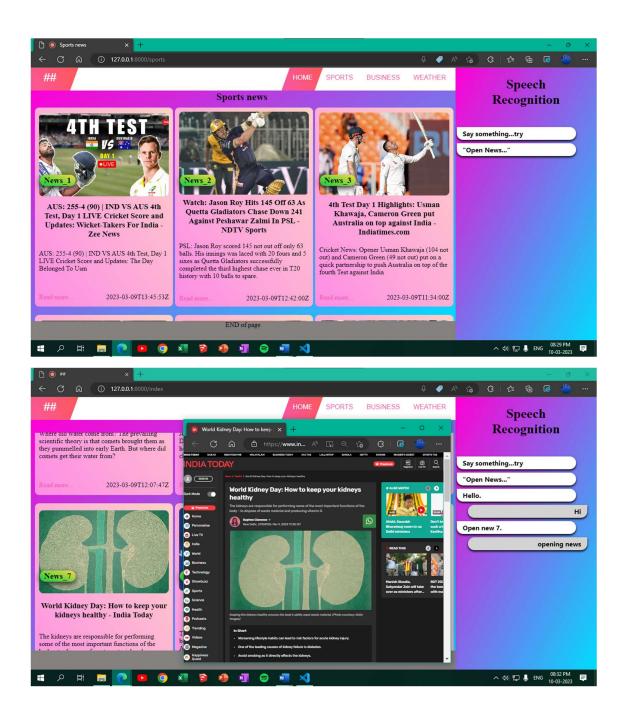
Chapter 5

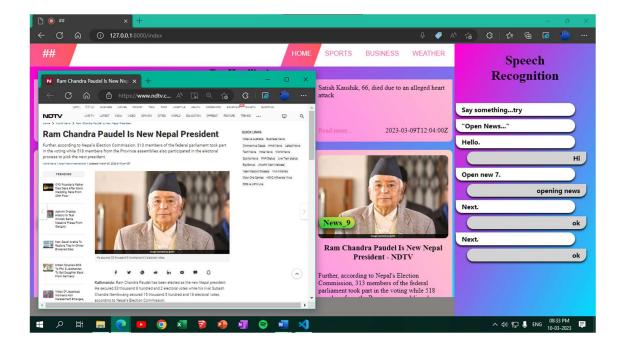
RESULTS and DISCUSSIONS

Index.html

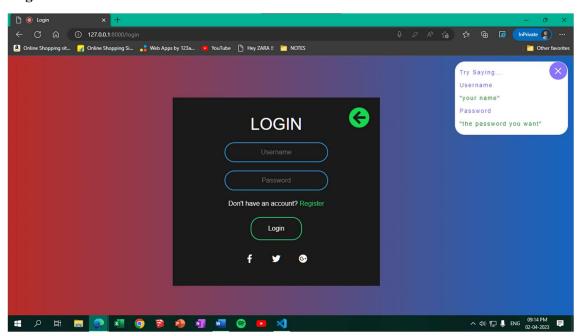


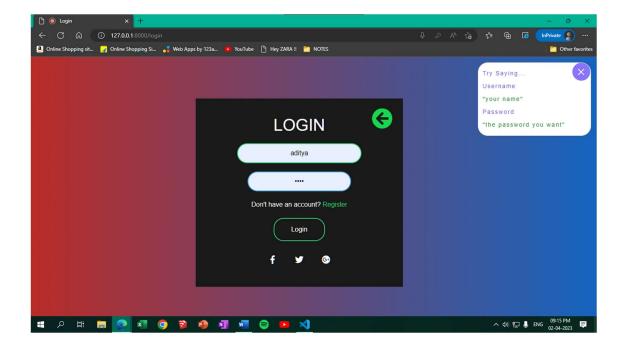




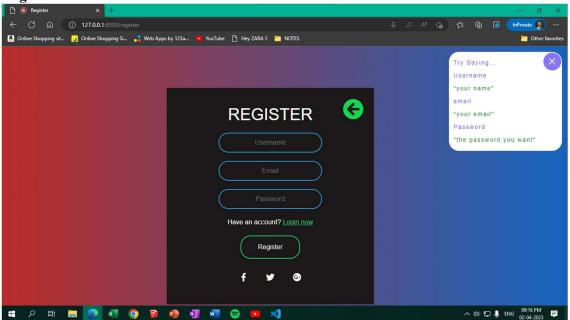


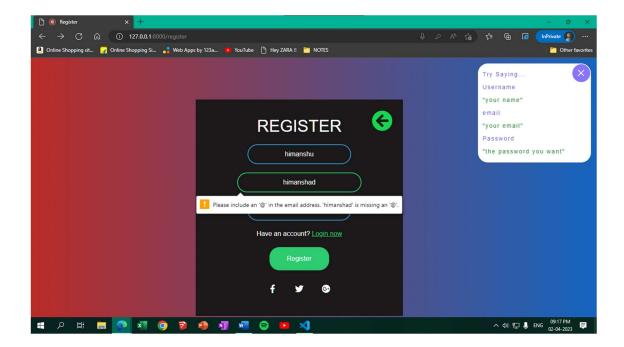
Login.html



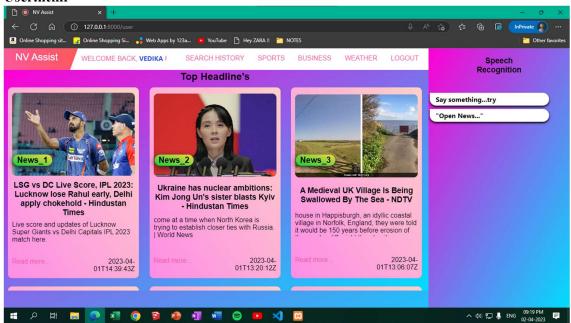


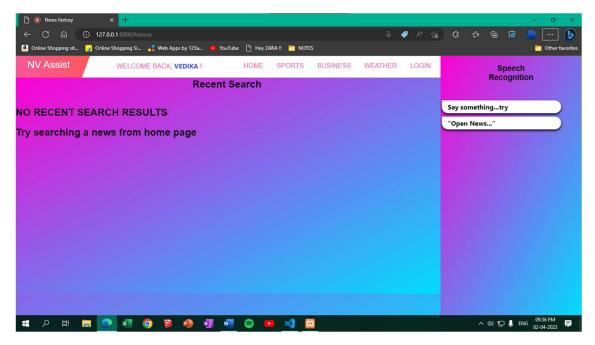
Register.html



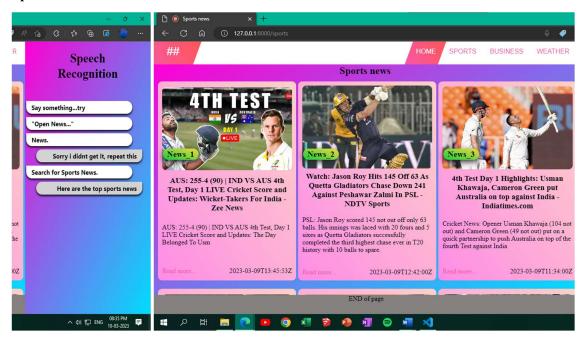


User.html

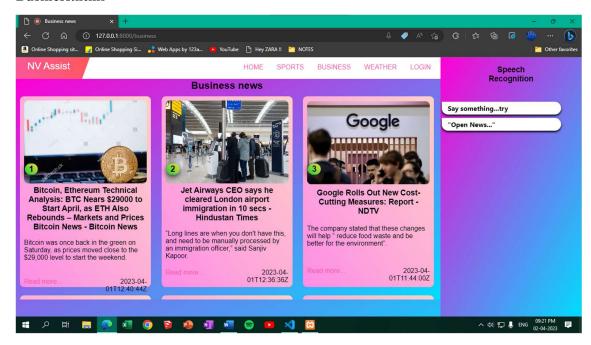




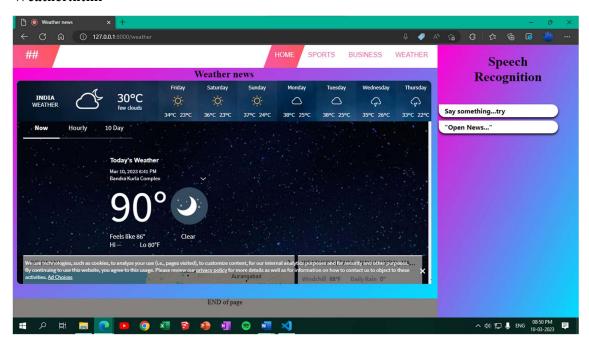
Sports.html

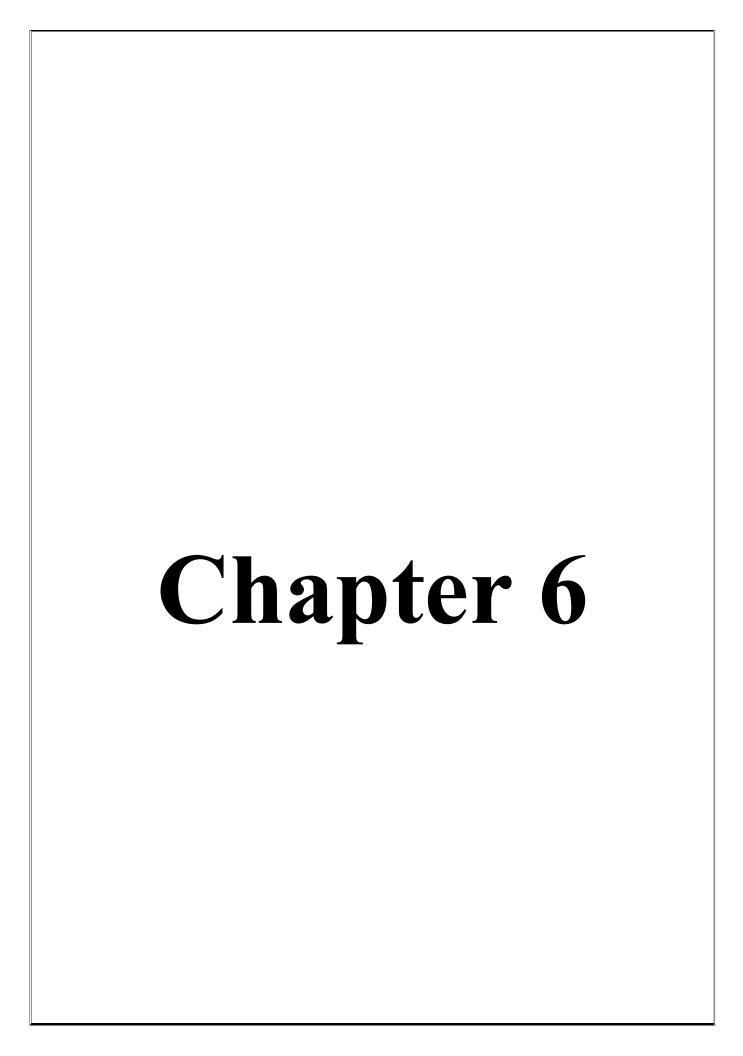


Business.html



Weather.html





Conclusion and future work

6.1 CONCLUSION

News Voice Assistant has various functions as like of Siri, ok Google like managing various applications on the voice commands. It helps to access the system hands-free and to get rid of typing chaos. By the use of voice recognition an individual can access the system, in this project we have developed a Voice Activated Personal Assistant using python. This assistant currently works online and performs basic tasks like Latest News updates, weather updates, stream music, search Wikipedia, open desktop applications, etc. The functionality of the current system is limited to working online only. The upcoming updates of this assistant will have machine learning incorporated in the system which will result in better suggestions with IoT to control the nearby devices similar to what Amazon's Alexa does.

6.2 LIMITATIONS OF THE SYSTEM

While voice assistants have interesting and useful features, they also pose several unique problems. One main issue with these voice-activated devices is security. Anyone with access to a voice-activated device can ask it questions, gather information about the accounts and services associated with the device. This poses a major security risk since the devices will read out calendar contents, emails, and highly personal information.

Voice assistants are also vulnerable to several other attacks. Researchers have recently proven that voice assistants will respond to inaudible commands delivered at ultrasonic frequencies. This would allow an attacker to approach a victim, play the ultrasonic command, and the victim's device would respond.

Privacy is another big concern for voice assistant users. By their very nature, these devices must be listening at all times to respond to users. Amazon, Apple, Google, and Microsoft insist that their devices are not recording unless users speak the command to wake the assistant. Still, there has been at least one case where a malfunctioning device was recording at all times and sending those recordings back to Google's servers. Even if the companies developing these voice assistants are being careful and conscientious, there is a potential for data to be stolen, leaked, or used to incriminate people.

6.3 FUTURE ENHANCEMENT

How rapidly the time changed? If we look back around twenty year ago, Voice Recognition was in its infant stage. As when the computer system came into the existence, It was the dream to fully fledged interaction with the computer machine. Now, we can eventually talk, ask and as well order to do the assigned task. This technology advancement is taking the world to the next level. If we think about the future competence of the voice recognition as well as the face detection, It can help the security agencies which may help to verify the details of the criminal and so forth. If we compare, two decades ago our words may very carried as we could have imagined.

IoT based Voice Assistant for Home Automation

When the Internet of Things is applied to the home, it transforms a simple home into a smart home that is safer and more automated. The goal of this paper is to create a Voice/Text controlled Home Application that allows users to operate their home appliances from afar. Users can simply send voice commands or text messages to turn appliances ON or OFF based on their needs. When the users are not physically present in the area, they can schedule the status of the equipment. They will also be given information about past schedules and will be able to turn on the appliances for a set length of time.

Chapter 7

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