First, create a folder for **speech\_web\_app** project and navigate into it. Then, create the following files:

1. speechPython.py (for the Flask backend)
2. index.html (for the HTML structure)
3. styles.css (for the CSS styling)
4. script.js (for the JavaScript functionality)

Here's the content for each file:

**1. speechPython.py:**

from flask import Flask, render\_template, request, jsonify

app = Flask(\_\_name\_\_)

@app.route('/')

def index():

return render\_template('index.html')

@app.route('/process', methods=['POST'])

def process():

data = request.json

text = data['text']

# Here you would implement logic to integrate with Excel

# For demonstration, let's just print the received text

print('Received text:', text)

return jsonify({'message': 'Text received and processed successfully'})

if \_\_name\_\_ == '\_\_main\_\_':

app.run(debug=True)

**2. index.html:**

Create a folder called **templates,** in side it create a index.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Speech Recognition Web App</title>

<link rel="stylesheet" href="static/styles.css">

</head>

<body>

<div class="container">

<h1>Speech Recognition Web App</h1>

<div id="output"></div>

<button id="start-btn">Start Listening</button>

</div>

<script src="static/script.js"></script>

</body>

</html>

**3. styles.css:**

Create a folder in root directory called **static,** in side it create a styles.css

body {

font-family: Arial, sans-serif;

}

.container {

max-width: 600px;

margin: 50px auto;

text-align: center;

}

h1 {

color: #333;

}

#output {

margin-top: 20px;

padding: 10px;

border: 1px solid #ccc;

min-height: 50px;

background-color: #f9f9f9;

}

#start-btn {

margin-top: 20px;

padding: 10px 20px;

font-size: 16px;

background-color: #007bff;

color: #fff;

border: none;

border-radius: 5px;

cursor: pointer;

}

#start-btn:hover {

background-color: #0056b3;

}} **4. script.js:**

In the same **static** folder**,** create a script.js

dconst startBtn = document.getElementById('start-btn');

const outputDiv = document.getElementById('output');

const recognition = new window.webkitSpeechRecognition(); // Using WebkitSpeechRecognition for Chrome

recognition.continuous = true;

recognition.interimResults = true;

startBtn.addEventListener('click', () => {

recognition.start();

outputDiv.innerHTML = 'Listening...';

});

recognition.onresult = function(event) {

const transcript = Array.from(event.results)

.map(result => result[0])

.map(result => result.transcript)

.join('');

outputDiv.innerHTML = transcript;

// Send transcript to server for processing (you need to implement this part)

fetch('/process', {

method: 'POST',

body: JSON.stringify({ text: transcript }),

headers: {

'Content-Type': 'application/json'

}

});

};Make sure we have Flask installed (pip install Flask). Then we can run the Flask app by executing python app.py in our terminal. Use this url http://127.0.0.1:5000/ in web browser to see the speech recognization web application in action.

<https://github.com/anjalikishore/simpleinterestcalculator>