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ID: 329

PROJECT ID: Proj\_227277\_Team\_1

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Phase: 4

Adding new data to the existing dataset

I have attached the dataset in my GitHub  
GitHub link: <https://github.com/dhanasekarenb/IBM_AI_Chatbot.git>

Python Code:

from flask import Flask, request, render\_template

import numpy as np

import string

from nltk.corpus import stopwords

import pandas as pd

import matplotlib.pyplot as plt

import seaborn as sns

from sklearn.feature\_extraction.text import CountVectorizer

from sklearn.tree import DecisionTreeClassifier

from sklearn.feature\_extraction.text import TfidfTransformer,TfidfVectorizer

from sklearn.pipeline import Pipeline

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

# importing the dataset

df = pd.read\_csv(r"C:\Users\zerobroz\Desktop\AI\_Phase4\data\_set\dialogs.txt", sep='\t')

#add column names

df.columns=['Questions','Answers']

# Function for converting upper to lower case

def cleaner(x):

    return [''.join([a for a in x if a not in string.punctuation]).lower()]

# Load your pre-trained pipeline model

Pipe = Pipeline([

    ('bow', CountVectorizer(analyzer=cleaner)),

    ('tfidf', TfidfTransformer()),

    ('classifier', DecisionTreeClassifier())

])

# Load your pre-trained model weights

Pipe.fit(df['Questions'], df['Answers'])

# Define route for the home page

@app.route('/')

def index():

    return render\_template('index.html')

# Define route for processing user input and generating chatbot response

@app.route('/get\_response', methods=['POST'])

def get\_response():

    user\_input = request.form['user\_input']

    response = Pipe.predict([user\_input])[0]

    return render\_template('index.html', user\_input=user\_input, response=response)

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

    app.run(debug=True)

HTML file:

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Chatbot</title>

    <link rel="stylesheet" href="{{ url\_for('static', filename='styles.css') }}">

    <link rel="preconnect" href="https://fonts.googleapis.com">

<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>

<link href="https://fonts.googleapis.com/css2?family=Play&display=swap" rel="stylesheet">

</head>

<body>

    <div class="container">

        <div class="word-cloud">

            <h2>Popular keywords</h2>

            <!-- Add your most used words content here -->

            <ul>

                <li>hi</li>

                <li>hey</li>

                <li>hello</li>

                <li>Tell me a joke</li>

                <li>who created you?</li>

                <li>what is the meaning of life?</li>

                <li>tell me a fun fact.</li>

                <li>another fun fact.</li>

                <li>what do you like to do in your free time?</li>

                <li>what languages do you speak?</li>

                <li>tell me a riddle.</li>

                <li>another riddle.</li>

            </ul>

        </div>

        <div class="chat-box">

            <h1>Chatbot</h1>

            <div class="chat-container">

                {% if user\_input %}

                <div class="message user-message">

                    You: {{ user\_input }}

                </div>

                {% endif %}

                {% if response %}

                <div class="message bot-message">

                    Bot: {{ response }}

                </div>

                {% endif %}

            </div>

            <form id="user-form" method="POST" action="/get\_response">

                <input type="text" id="user\_input" name="user\_input" placeholder="Type your message...">

                <button type="submit">Send</button>

            </form>

        </div>

    </div>

</body>

</html>

CSS File:

body {

    /\* font-family: 'Times New Roman', Times, serif; \*/

    font-family: 'Play', sans-serif;

    margin: 0;

    padding: 0;

    background-color: #f2f2f2;

}

.container {

    display: grid;

    grid-template-columns: 1fr 2fr;

    grid-gap: 20px;

    max-width: 1200px;

    height: 700px;

    margin: 0 auto;

    padding: 20px;

}

.word-cloud {

    background-color: #fff;

    padding: 50px;

    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);

}

.chat-box {

    background-color: #fff;

    padding: 20px;

    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);

}

h1 {

    font-size: 24px;

    margin-bottom: 20px;

}

.chat-container {

    height: 500px;

    overflow-y: auto;

    padding: 10px;

    border: 1px solid #ccc;

    margin-bottom: 20px;

}

.message {

    margin-bottom: 10px;

    padding: 10px;

    border-radius: 5px;

}

.user-message {

    background-color: #4caf50;

    color: #fff;

    text-align: right;

}

.bot-message {

    background-color: #008CBA;

    color: #fff;

}

form {

    display: flex;

    align-items: center;

}

input[type="text"] {

    flex: 1;

    padding: 10px;

    font-size: 16px;

    border: 1px solid #ccc;

    border-radius: 5px;

}

button {

    padding: 10px 20px;

    font-size: 16px;

    background-color: #4caf50;

    color: #fff;

    border: none;

    border-radius: 5px;

    margin-left: 10px;

    cursor: pointer;

}

button:hover {

    background-color: #45a049;

}

.user-message {

    color: solid black;

}

.bot-message {

    color: solid black;

}

OUTPUT:

A screen shot of a computer

Description automatically generated

After pasting the <http://127.0.0.1:5000> in browser.

A screenshot of a computer

Description automatically generated

After give in the input.

A screenshot of a chat window

Description automatically generated