Assignment No:5

**Problem statement**: Develop an elementary catboat for any suitable customer interaction application.

import streamlit as st

import random

from datetime import datetime

# Define responses

responses = {

"greeting": {

"morning": ["Good morning! Welcome to our restaurant.", "Good morning! How can I assist you today?"],

"afternoon": ["Good afternoon! Welcome to our restaurant.", "Good afternoon! How can I assist you today?"],

"evening": ["Good evening! Welcome to our restaurant.", "Good evening! How can I assist you today?"],

},

"menu": {

"pizza": "Our pizza is priced at ₹700.",

"pasta": "Our pasta is priced at ₹800.",

"burgers": "Our burgers are priced at ₹500.",

"salads": "Our salads are priced at ₹400.",

"seafood": "Our seafood dish is priced at ₹1000.",

"steaks": "Our steaks are priced at ₹1500.",

"vegetarian": "Our vegetarian dish is priced at ₹600.",

},

"hours": ["We are open from 11:00 AM to 10:00 PM every day.", "Our restaurant hours are from 11:00 AM to 10:00 PM, seven days a week."],

"location": ["We are located at 123 Main Street, City, State.", "Our restaurant is situated at the corner of First Avenue and Elm Street."],

"thanks": ["You're welcome! Enjoy your meal.", "No problem! Let me know if you need anything else."],

"goodbye": ["Goodbye! Have a great day.", "Thanks for visiting us! Come back soon."],

}

# Streamlit UI

def main():

st.title("Restaurant Chatbot")

st.write("Welcome to our restaurant! How can I assist you today?")

# Initialize chat history

chat\_history = st.session\_state.setdefault("chat\_history", [])

chat\_container = st.empty()

user\_input = st.text\_input("You: ")

if st.button("Send"):

if user\_input:

user\_message = f"You: {user\_input}"

bot\_response = f"Bot: {get\_bot\_response(user\_input)}"

chat\_history.append(user\_message)

chat\_history.append(bot\_response)

display\_chat\_history(chat\_container, chat\_history)

# Function to generate bot response

def get\_bot\_response(user\_input):

user\_input = user\_input.lower()

# Get the current time

current\_time = datetime.now().time()

# Determine the time of day

if current\_time < datetime.strptime("12:00:00", "%H:%M:%S").time():

time\_of\_day = "morning"

elif current\_time < datetime.strptime("18:00:00", "%H:%M:%S").time():

time\_of\_day = "afternoon"

else:

time\_of\_day = "evening"

if "hello" in user\_input or "hi" in user\_input:

return random.choice(responses["greeting"][time\_of\_day])

elif "menu" in user\_input or "food" in user\_input:

return "Our menu items include pizza, pasta, burgers, salads, seafood, steaks, and vegetarian dishes."

elif "price" in user\_input:

return "Please specify the item you want to know the price for."

elif "hours" in user\_input or "open" in user\_input:

return random.choice(responses["hours"])

elif "location" in user\_input or "address" in user\_input:

return random.choice(responses["location"])

elif "thank" in user\_input:

return random.choice(responses["thanks"])

elif "bye" in user\_input:

return random.choice(responses["goodbye"])

elif any(item in user\_input for item in responses["menu"].keys()):

for item in responses["menu"].keys():

if item in user\_input:

return responses["menu"][item]

else:

return "I'm sorry, I didn't understand that. How can I assist you?"

# Function to display chat history

def display\_chat\_history(container, chat\_history):

container.markdown("<br>".join(chat\_history), unsafe\_allow\_html=True)

if \_\_name\_\_ == "\_\_main\_\_":

main()

output:

