The Superior University, Lahore

Assignment-I (Fall 2023)

Course Title:	Programming for AI			Course Code:	CAI601410	Credit Hours:	4
Instructor:	Prof. Rasikh Ali			Programme Name:	BSDS		
Semester:	4th	Batch: F23	Section:	BSDSM-4A	Date:	1st February, 2025	
Time Allowed:				Maximum Marks:			
Student's Name:	Asaad Iqbal			Reg. No.	SU92-BSDSM-F23-020		

Lab-Task 10
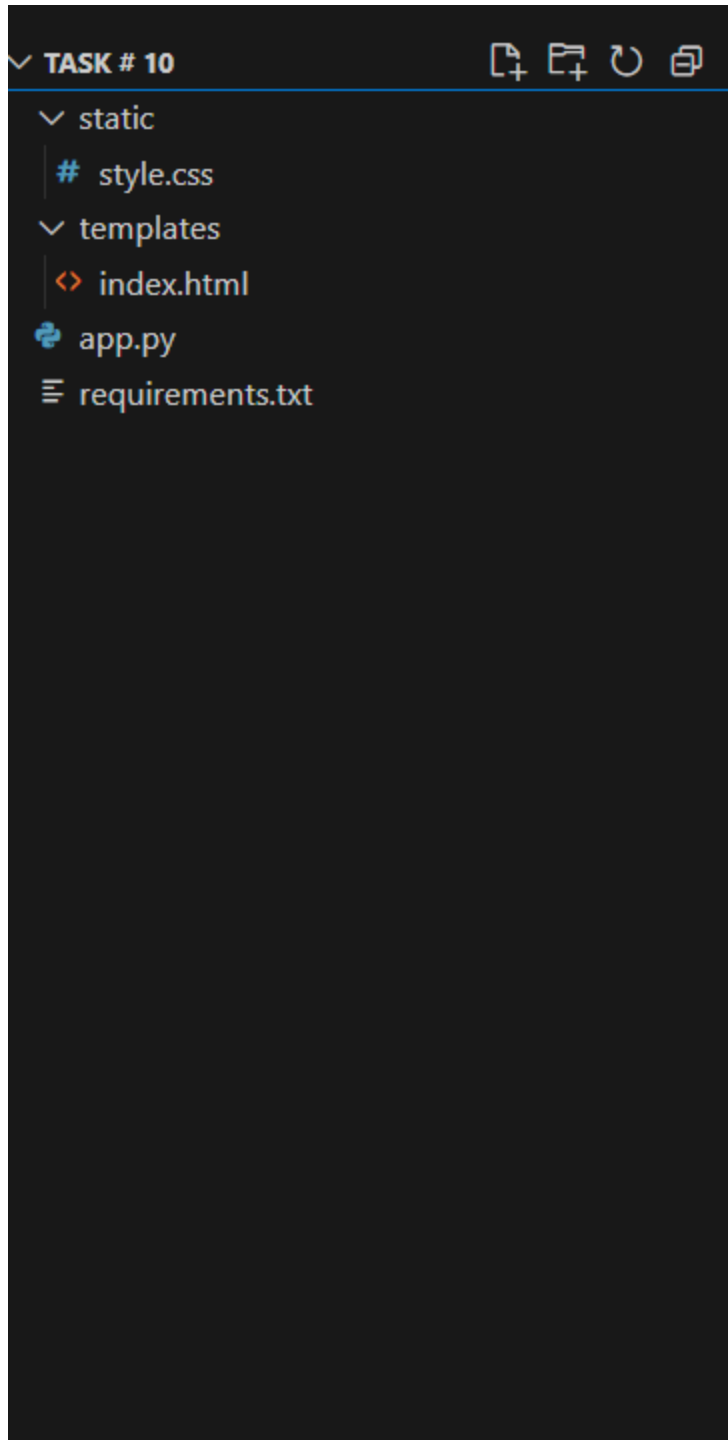   1: Restaurant Chatbot

Task 1

RestaurantBot

Introduction:

RestaurantBot is a Flask-based web application that simulates a chatbot to help users interact with a restaurant virtually. It can answer questions about the menu, timings, special dishes, location, reservations, and more. The chatbot displays a stylish, modern UI with structured chat bubbles for both user and bot interactions.

Features:

- Conversational chatbot interface
- Predefined responses for common queries
- Structured menu presentation (Starters, Main Course, Desserts, Beverages)
- Clean and responsive UI with background image
- Session handling to store chat history temporarily
- Support for custom styling via CSS

Task Structure:

```
∨ TASK # 10                    ⎂  ⎂  ↻  ⊟
  ∨ static
    #  style.css
  ∨ templates
    <>  index.html
  🐍 app.py
  ☰ requirements.txt
```

Technologies Used:
- Python 3.x
- Flask

- HTML5 / CSS3

- Jinja2 (Flask templating)

- Unsplash (background image)

How to Run:

1. Prerequisites:

Make sure Python and Flask are installed.
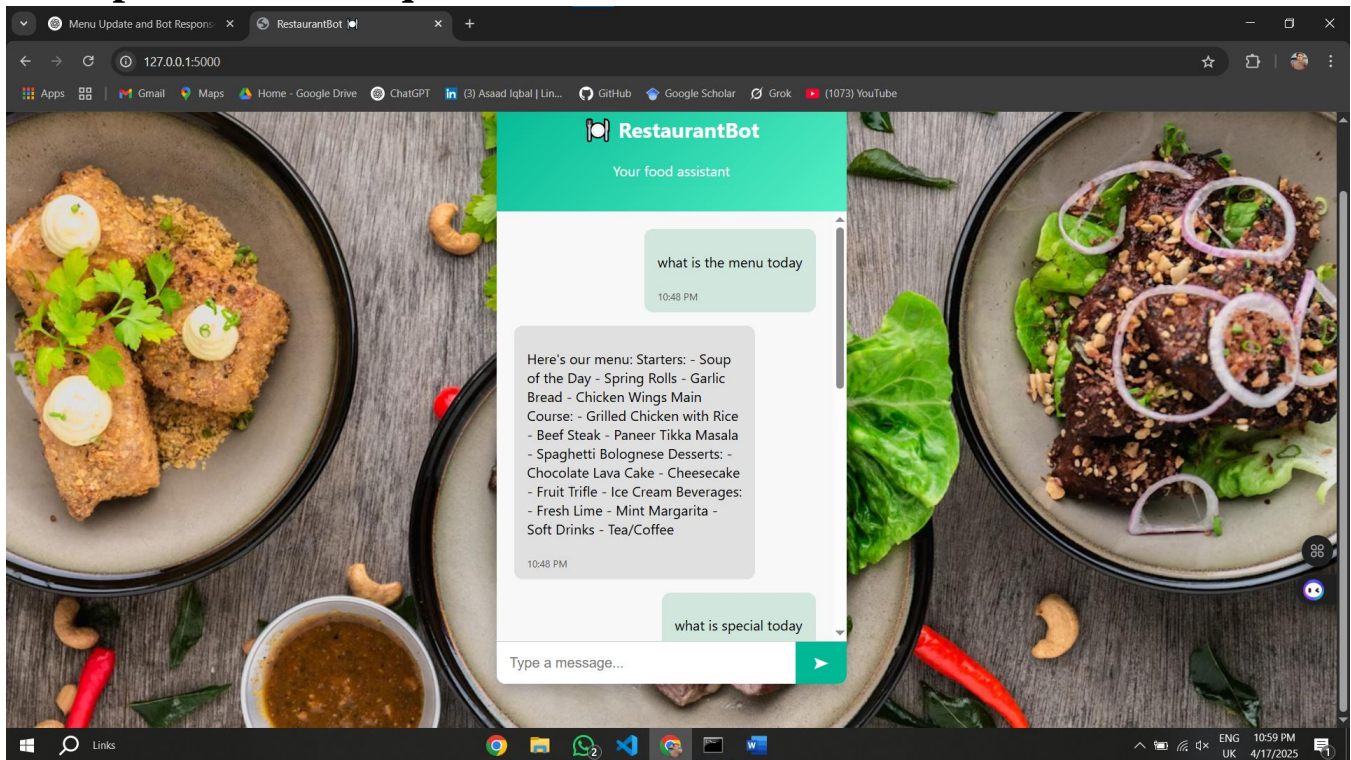
2. Run the Flask App:

```
C:\Users\DELL\Documents\Semester 4\PAI (Lab)\Task # 10>python app.py
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:5000
Press CTRL+C to quit
 * Restarting with watchdog (windowsapi)
 * Debugger is active!
 * Debugger PIN: 691-281-602
```
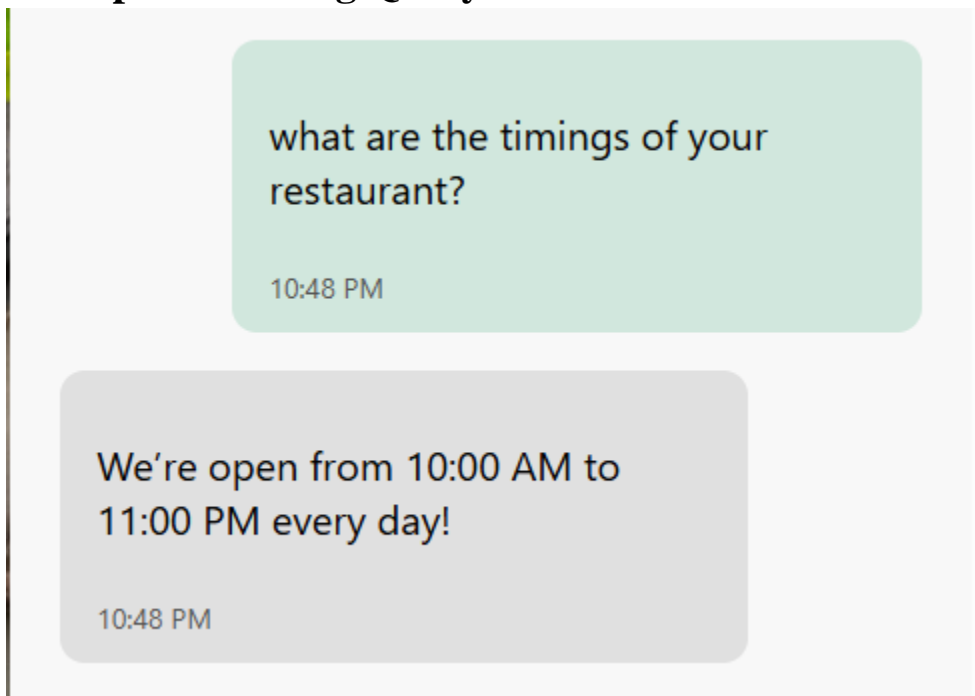
3. Open in Browser:

Visit `http://127.0.0.1:5000` to interact with the chatbot.

Sample Screenshots:

Example 1: Menu Request

Example 2: Timing Query

Example 3: Location Request

RestaurantBot
Your food assistant

Address?
11:01 PM

Bahria Town, Lahore, Pakistan
11:01 PM

Type a message...

Example 4: Contact Info

How can I contact you?
11:03 PM

Call us at (042) 1442-8652 or
WhatsApp +92 301 8092288
11:03 PM

Type a message...
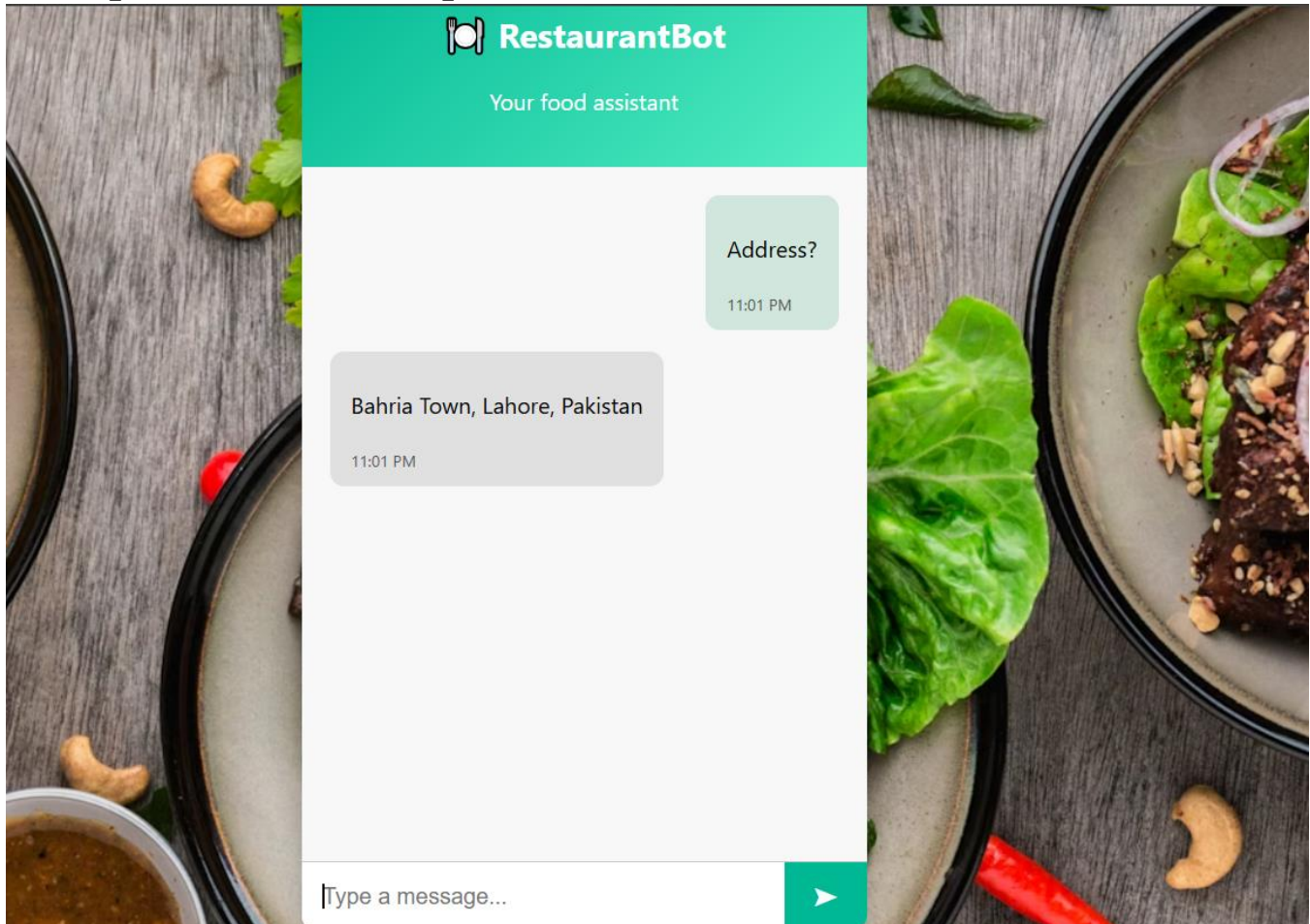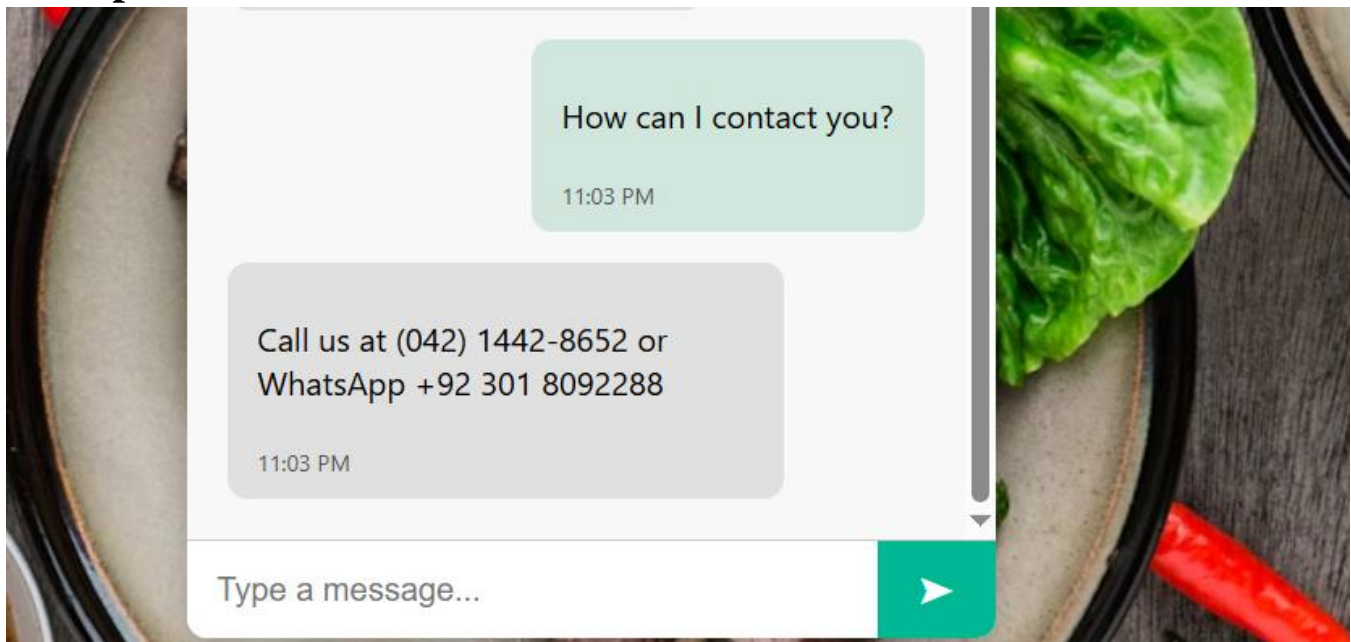
UI Highlights:

- Chat bubbles styled separately for user and bot

- Smooth scrolling chat window with timestamps

- Stylish background from Unsplash

- Gradient header design