

St. Francis Institute of Technology Borivali (West), Mumbai-400103

(Autonomous Institute)
Department of Information Technology

Academic Year: 2024-25

Class: TE-ITA/B

Semester: VI

Subject: Web Lab

Experiment –8: To Design Feedback Form using Flask.

1. **Aim:** To learn Flask Framework.
2. **Objectives:** Aim of this experiment is that, the students will be able
 - To install Flask Framework
 - To understand Basics of Flask.
 - To understand Flask Application
3. **Outcomes:** After study of this experiment, the students will be able
 - To build applications.
 - To build URL
 - To understand HTTP methods.
4. **Prerequisite:** Basic understanding of HTML and Python etc
5. **Requirements:** Personal Computer, Windows operating system, VSCode, Python 2.6 or higher, browser, Internet Connection, google doc, latest version of Python.
6. **Pre-Experiment Exercise:**
Brief Theory: Refer shared material
7. **Laboratory Exercise**
 - A. **Procedure:**
 - [Install Python 3](#) on local machine
 - Set up a programming environment via the command line
 - Install/activate Python environment
 - Install Flask using the [pip](#) package installer
 - a. **Answer the following:**
 - List What is Web Framework? What is Flask?
 - Write and explain Methods of Mail class?
 - b. **Attach screenshots:**
 - Flask SS
8. **Post-Experiments Exercise**
 - A. **Extended Theory:**
Nil
 - B. **Questions:**
 - Why is Flask called a Microframework?
 - What is the difference between Django and Flask?
 - C. **Conclusion:**
 - Write what was performed in the experiment.
 - Write the significance of the topic studied in the experiment.

D. References:

1. [Flask Web Development](#), by Miguel Grinberg

Laboratory Exercise

A. Answer the following:

Q1] List What is Web Framework?

Answer: A Web Framework is a software tool or library that helps developers build web applications efficiently. It provides:

- Structure for code (MVC, routing, etc.)
- Built-in tools like form handling, templating, and authentication
- Abstraction from low-level web protocols (like HTTP)

Popular web frameworks: Flask, Django (Python), Express (Node.js), Laravel (PHP), etc.

Q2] What is Flask?

Answer: Flask is a micro web framework written in Python. It is:

- Lightweight and flexible
- Suitable for small to medium web apps or APIs
- Built on Werkzeug (WSGI toolkit) and Jinja2 (templating engine)

Key Features:

- Built-in development server
- Easy routing with decorators
- Support for extensions like Flask-Mail, Flask-SQLAlchemy, etc.

Q3] Write and explain Methods of Main class?

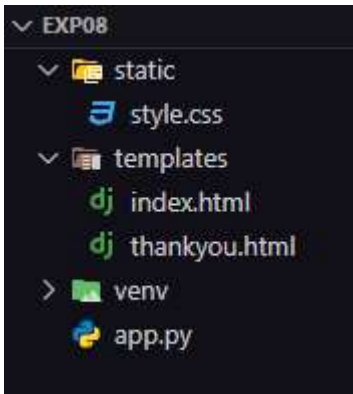
Answer: In Python, a **main class** typically refers to the class that runs the core logic of your program. It's also common to include the `if __name__ == '__main__':` block to run the code.

```
class Main:
    def __init__(self, name):
        self.name = name
    def greet(self):
        print(f"Hello, {self.name}!")

if __name__ == '__main__':
    obj = Main("Vishal")
    obj.greet()
```

B. Attach screenshots:

1. Folder Structure



2. app.py

```
from flask import Flask, render_template, request, redirect, url_for
```

```
app = Flask(__name__)
```

```
@app.route("/", methods=["GET", "POST"])
def feedback():
    if request.method == "POST":
        name = request.form["name"]
        email = request.form["email"]
        rating = request.form["rating"]
        message = request.form["message"]
        return redirect(url_for("thank_you"))
```

```
    return render_template("index.html")
```

```
@app.route("/thankyou")
def thank_you():
    return
    render_template("thankyou.html")

if __name__ == "__main__":
    app.run(debug=True)
```

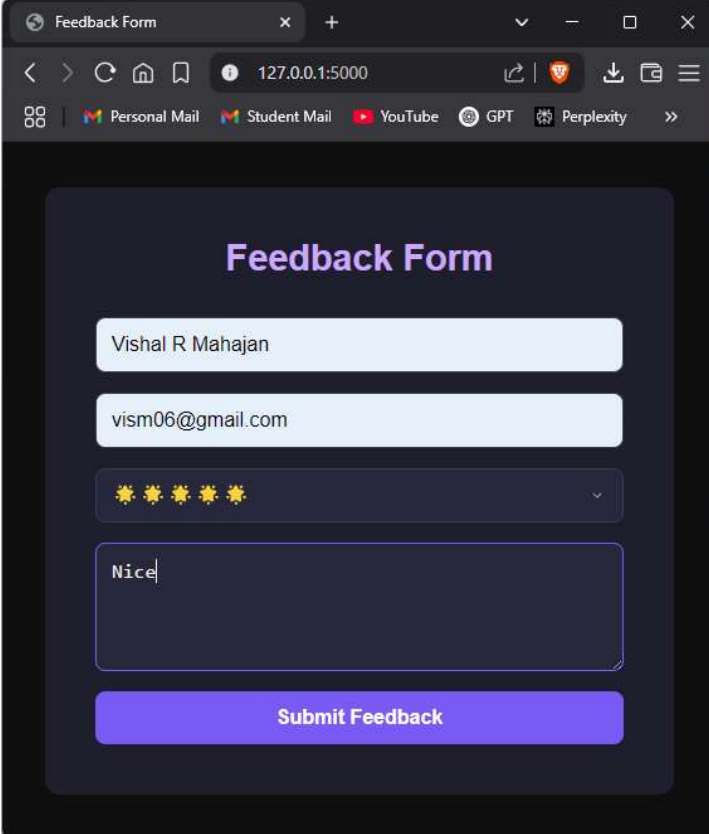
3. Index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Feedback Form</title>
    <link
      rel="stylesheet"
      href="{{ url_for('static', filename='style.css') }}"
    />
  </head>
  <body>
    <div class="container">
      <h2>Feedback Form</h2>
      <form method="POST" action="/">
        <input type="text" name="name" placeholder="Your
Name" required />
        <input type="email" name="email" placeholder="Your
Email" required />
        <select name="rating" required>
          <option value="" disabled selected>Rate
us</option>
          <option value="5">★★★★★</option>
          <option value="4">★★★★</option>
          <option value="3">★★★</option>
          <option value="2">★★</option>
          <option value="1">★</option>
        </select>
        <textarea
          name="message"
          placeholder="Your Message"
          rows="4"
          required
        ></textarea>
        <button type="submit">Submit Feedback</button>
      </form>
    </div>
  </body>
</html>
```

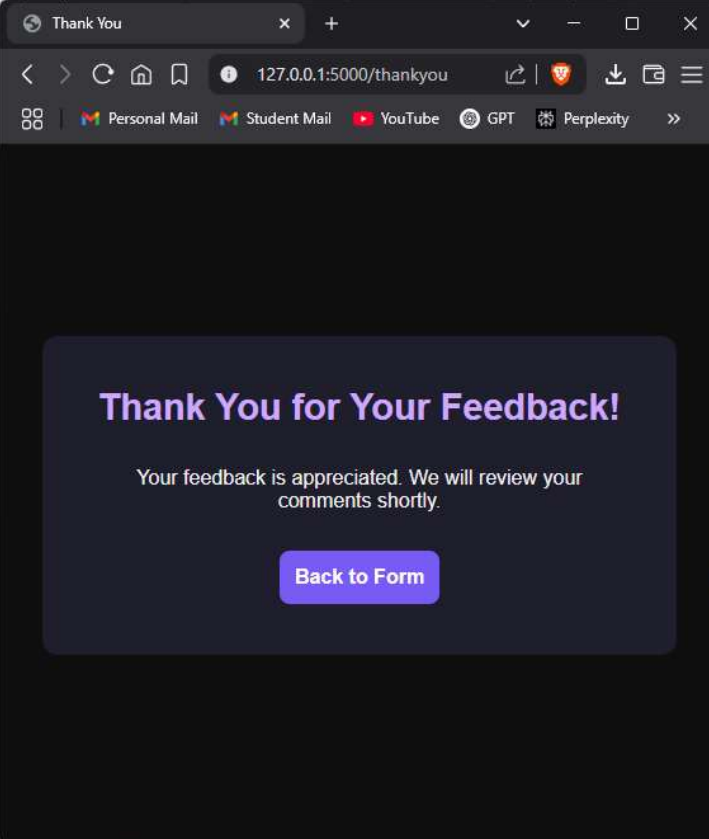
4. Thankyou.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Thank You</title>
    <link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}"
    />
  </head>
  <body>
    <div class="container">
      <h2>Thank You for Your Feedback!</h2>
      <p>Your feedback is appreciated. We will review your comments shortly.</p>
      <a href="/" class="btn">Back to Form</a>
    </div>
  </body>
</html>
```

Output:



The screenshot shows a web browser window with the title 'Feedback Form'. The address bar displays '127.0.0.1:5000'. The browser's bookmark bar includes 'Personal Mail', 'Student Mail', 'YouTube', 'GPT', and 'Perplexity'. The main content area features a dark-themed form with the title 'Feedback Form' in purple. The form includes a text input field with 'Vishal R Mahajan', an email input field with 'vism06@gmail.com', a star rating selector showing five yellow stars, a text area containing the word 'Nice', and a purple 'Submit Feedback' button.



The screenshot shows a web browser window with the title 'Thank You'. The address bar displays '127.0.0.1:5000/thankyou'. The browser's bookmark bar is the same as the previous screenshot. The main content area features a dark-themed page with the title 'Thank You for Your Feedback!' in purple. Below the title, a message reads: 'Your feedback is appreciated. We will review your comments shortly.' At the bottom, there is a purple 'Back to Form' button.