


Python_Activity48

Flask Activity: Build Your First Web App

 Title: *"Hello Flask – My First Web App"*

Objectives:

By the end of this activity, students will:

- Successfully install Flask
 - Understand the basics of routing (`@app.route`)
 - Render an HTML page using Flask templates
 - Handle basic form input
-

Instructions:

Part 1: Installation (Individual or Group)

Ask students to:

1. Open a terminal or command prompt
2. Create a new project folder:

```
mkdir flask_hello_app
cd flask_hello_app
```

3. Create a virtual environment and activate it:

```
python -m venv venv
# Windows
venv\Scripts\activate
# macOS/Linux
source venv/bin/activate
```

4. Install Flask:

```
pip install flask
```

5. Create a file named `app.py`

Part 2: Create a Basic Web App

In `app.py`, have them paste this code:

Code block

```
1  from flask import Flask, render_template, request
2
3  app = Flask(__name__)
4
5  @app.route('/')
6  def home():
7      return render_template('index.html')
8
9  @app.route('/greet', methods=['POST'])
10 def greet():
11     name = request.form['name']
12     return f"<h2>Hello, {name}! Welcome to Flask 🚀</h2>"
13
14 if __name__ == '__main__':
15     app.run(debug=True)
```

Part 3: Create an HTML Form

Create a folder called `templates` and inside it, a file `index.html`:

Code block

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Flask Hello</title>
5  </head>
6  <body>
7      <h1>Welcome to Your First Flask App!</h1>
8      <form method="POST" action="/greet">
9          <label>Enter your name:</label>
```

```
10     <input type="text" name="name">
11     <button type="submit">Submit</button>
12 </form>
13 </body>
14 </html>
```

► Part 4: Run the App

Back in the terminal:

```
python app.py
```

Go to: <http://127.0.0.1:5000>

Deliverables:

Students must:

- Show the working app (via screenshot or live demo)
- Submit:
 - Folder: Kyamson_Activity48
 - `app.py`
 - `index.html`

Wrap-up Reflection (Comment your answer):

1. What does `@app.route` do?
2. What happens when you submit the form?
3. What is a template in Flask?