Micro Framework | Lightweight | Easy learning Curve | programmer adaptability

## Hello World Program

from flask import Flask

app = Flask(\_\_name\_\_)

@app.route('/')

**def** greet():

    return 'Hello Saranj'

So, what did that code do?

1. First, we imported the **[Flask](https://flask.palletsprojects.com/en/2.0.x/api/" \l "flask.Flask" \o "flask.Flask)** class. An instance of this class will be our WSGI (web server gateway interface) application.
2. Next, we create an instance of this class. The first argument is the name of the application’s module or package. \_\_name\_\_ is a convenient shortcut for this that is appropriate for most cases. This is needed so that Flask knows where to look for resources such as templates and static files.
3. We then use the **[route()](https://flask.palletsprojects.com/en/2.0.x/api/" \l "flask.Flask.route" \o "flask.Flask.route)** decorator to tell Flask what URL should trigger our function.
4. The function returns the message we want to display in the user’s browser. The default content type is HTML, so HTML in the string will be rendered by the browser.

As a shortcut, if the file is named app.py or wsgi.py, you don’t have to set the FLASK\_APP environment variable.

### Commands to run the program

For Linux, Mac, Linux Subsystem for Windows, Git Bash on Windows, etc.:

export FLASK\_APP=myapp #python main file name

export FLASK\_ENV=development

flask run

For Windows CMD, use set instead of export:

set FLASK\_ENV=development

For PowerShell, use $env:

$env:FLASK\_ENV = "development"

## Routing

|  |  |
| --- | --- |
| string | (default) accepts any text without a slash |
| int | accepts positive integers |
| float | accepts positive floating-point values |
| path | like string but also accepts slashes |
| uuid | accepts UUID strings |

@app.route**(**'/post/<int:post\_id>'**)**

@app.route**(**'/path/<path:subpath>'**)**

## Multiple Routing

@app.route('/')

@app.route('/home')

**def** greet():

    return render\_template('home.html')

## Static routing

@app.route('/')

**def** greet():

    return '<h1>Hello Users how are you?</h1>'

@app.route('/about')

**def** about\_page():

    return '<h1>Creator : Saranju Ji Bule</h1>'

## Dynamic Routing

@app.route('/about/<username>')

**def** about\_page(username):

    return **f**'<h1>About Section For : {username}</h1>'

## HTML code inside flask

1. Inside the main directory create a directory name- templates

*Note to use only templates as a name because it is predefined in flask*

1. Inside templates create html file
2. Import html file inside the main python file

@app.route('/')

**def** greet():

    return render\_template('home.html')

## Inserting CSS, JS, PNG inside flask

You need to have a 'static' folder setup (for css/js/png files).

Your directory structure for css should be like:

/app

- app\_runner.py

/services

- app.py

/templates

- mainpage.html

/static

/styles

- mainpage.css

Notice that your /styles directory should be under /static

Then, do this

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

*Normal css link (href) also work*

Flask will now look for the css file under static/styles/mainpage.css

# Retrieving data from a form

methods=[‘GET’]

U = request.args.get(‘u’)

methods=[‘POST’]

u = request.form[‘u’]