

Python Flask web framework



Python World



- IBM.com
- Pinterest
- Patreon
- Brilliant
- Netflix
- Airbnb
- Reddit
- Mozilla
- Uber



- Object-relational mapper (ORM)



- MySQL Connector for Python



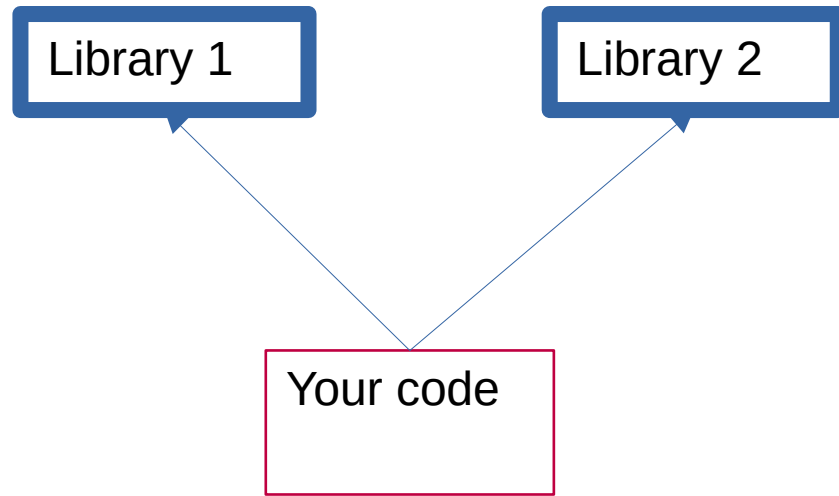
- pip3 packet manager
- pip3 list/install
- globale installation of packages

- pipenv as virtual packet manager
- pip3 install pipenv
- pipenv shell

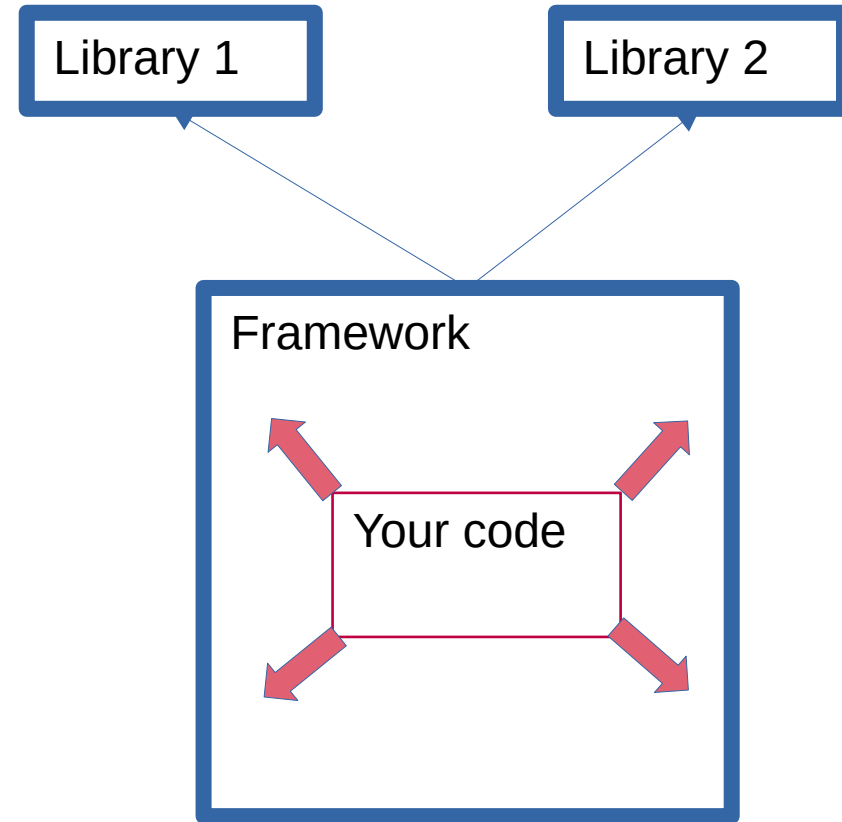


What are “frameworks” for?

No framework



With framework





- Created 2010 under BSD License
- Micro web framework
 - lightweight
 - only include what you need
- Routes
- Debugging
- Templates
- HTTP Methods (GET, POST)
- Safe Escaping to avoid injection
- Cookies
- Sessions
- Logging
- JSON Responding
- Extensions are easy to integrate

Installation:

- `pip3 install flask`
- `apt-get install python-flask`

Create a minimal Python program :

```
from flask import Flask

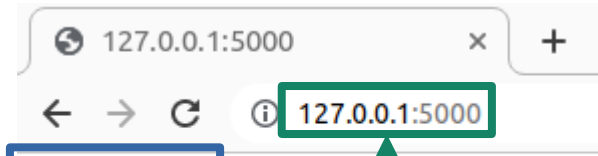
app = Flask(__name__)

@app.route("/")
def hello_world():
    return "<p>Hello, World!</p>"
```

saved as "hello.py"

Running a development webserver :

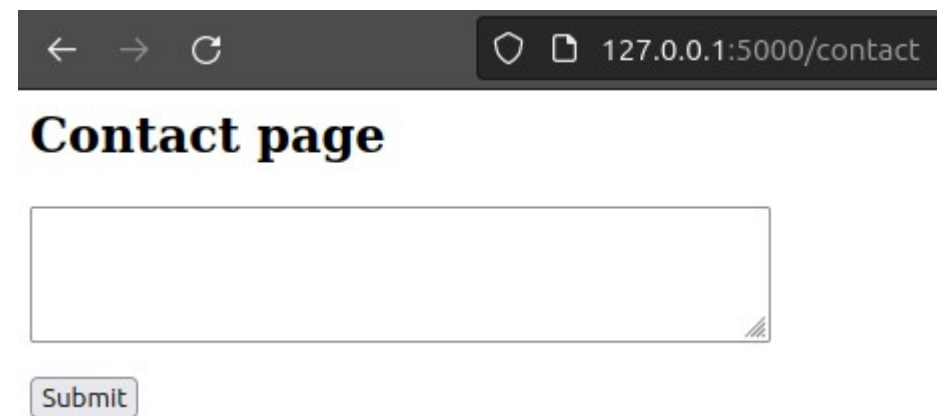
```
hp:$ flask --app hello run
* Serving Flask app 'hello'
* Debug mode: off
WARNING: This is a development server. Do not use
Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
```



```
@app.route("/")
def index():
    return "Start Page"
```

```
@app.route("/contact", methods=['GET', 'POST'])
def contact():
    return """<h2>Contact page</h2>
    <p><textarea rows="4" cols="50"></textarea></p>
    <p><input type="submit" value="Submit"></p>"""
```

```
@app.route("/hello/<name>")
def hello(name):
    return "Good morning <b>" + name + "</b>!"
```

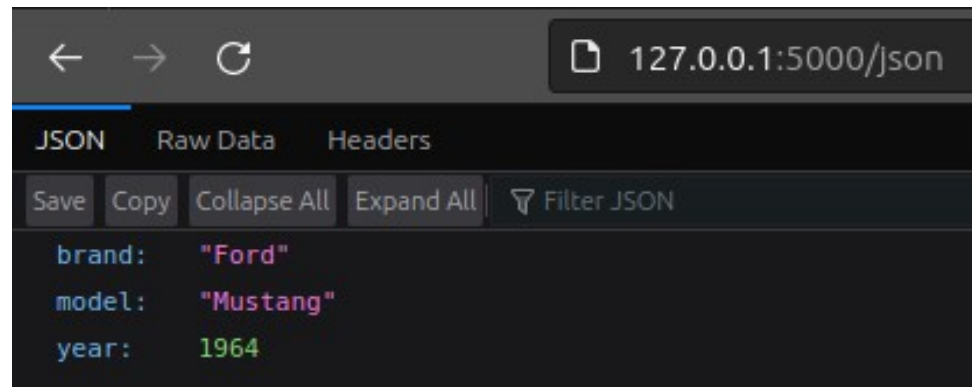


JSON Response (for REST APIs)

```
@app.route("/json")
def jsonExample():

    thisdict = {
        "brand": "Ford",
        "model": "Mustang",
        "year": 1964
    }

    return thisdict
```



HTTP Methods

```
@app.route("/contact", methods=['GET', 'POST'])
```

```
def contact():
```

```
    output = []
```

```
    if (request.method == 'POST'):
```

```
        text = request.form['text']
```

```
        output.append("<p>Length: <b>" + str(len(text)) + "</b></p>")
```

```
        output.append("<p>Reverse: <br /><b>" + text[::-1] + "</b></p>")
```

```
    return "\n".join(output)
```

```
else:
```

```
    return ""<h2>Contact page</h2>
```

```
    <form action="/contact" method="post">
```

```
    <p><textarea rows="4" cols="50" name="text"></textarea></p>
```

```
    <p><input type="submit" value="Submit"></p>
```

```
    </form>""
```



Length: **38**

Reverse:

?od ti seod tahW .txet llams a si sihT



Contact page

This is a small text. What does it do?

Submit

Last words

Whats missing:

- Templates
- Cookies + Sessions
- Escaping

Sources:

- [Flask Documentation](#)
- [Files on GitHub](#)