

Flask Micro Framework

Mohammad Reza Kamalifard

@itmard

What is a Web Application Framework?

- URL Routing
- Request and Response Objects
- Template Engine
- Development Web Server
- Database Object Relational Mapper
- Form Validation

Why Python?

- Python is an easy to learn
- Powerful
- Clean syntax and code readability
- Open Source
- Cross-platform
- Rich set of libraries
- Large Number of open source tools

Python web frameworks

- Django
- Flask
- Werkzeug
- Tornado
- Pyramid
- Bottle

Flask

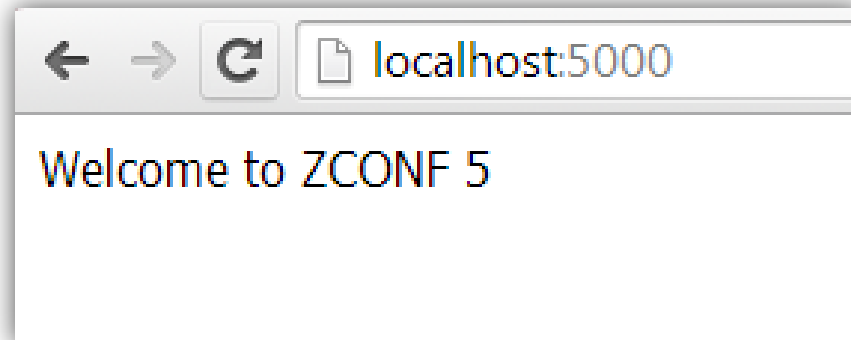
- Micro Framework
- Simple but extensible core
- Werkzeug WSGI toolkit
- Jinja2 template engine
- Provides a simple template for web development
- No ORM
- No Form validation
- Supports extensions

Simple Web Application with Flask

```
from flask import Flask
app = Flask(__name__)

@app.route("/")
def hello():
    return "Welcome to ZCONF 5"

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



Features

- Built in development server and debugger
- Integrated unit testing support
- RESTful request dispatching
- Uses Jinja2 templating
- Support for secure cookies (client side sessions)
- 100% WSGI 1.0 compliant
- Unicode based
- Extensively documented

Flask Routing

- Modern web applications have beautiful URLs
- Routing using decorators
- `route()` decorator is used to bind a function to a URL
- Make certain parts of the URL dynamic
- Attach multiple rules to a function

```
@app.route('/')  
def index():  
    return 'Index Page'
```

```
@app.route('/hello/')  
def hello():  
    return 'Hello World'
```


Variable Rules

- <variable_name>

```
@app.route('/user/<username>')  
def show_user_profile(username):  
    return 'User %s' % username
```

- <converter:variable_name>

```
@app.route('/post/<int:post_id>')  
def show_post(post_id):  
    return 'Post %d' % post_id
```



Copyright 2014 **Mohammad Reza Kamalifard**
All rights reserved.

This work is licensed under the Creative Commons Attribution-NoDerivs 3.0 Unported License.

To view a copy of this license, visit

<http://creativecommons.org/licenses/by-nd/3.0/>