

Web Development using Python!

What is World Wide Web?

- Invented in 1989
- By Tim Berners-Lee
- At CERN Lab
- Automated information-sharing



The first Website!

World Wide Web

The WorldWideWeb (W3) is a wide-area [hypermedia](#) information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an [executive summary](#) of the project, [Mailing lists](#) , [Policy](#) , November's [W3 news](#) , [Frequently Asked Questions](#) .

What's out there?

Pointers to the world's online information, [subjects](#) , [W3 servers](#), etc.

Help

on the browser you are using

Software Products

A list of W3 project components and their current state. (e.g. [Line Mode](#) ,X11 [Viola](#) , [NeXTStep](#) , [Servers](#) , [Tools](#) ,[Mail robot](#) , [Library](#))

Technical

Details of protocols, formats, program internals etc

Bibliography

Paper documentation on W3 and references.

People

A list of some people involved in the project.

History

A summary of the history of the project.

How can I help ?

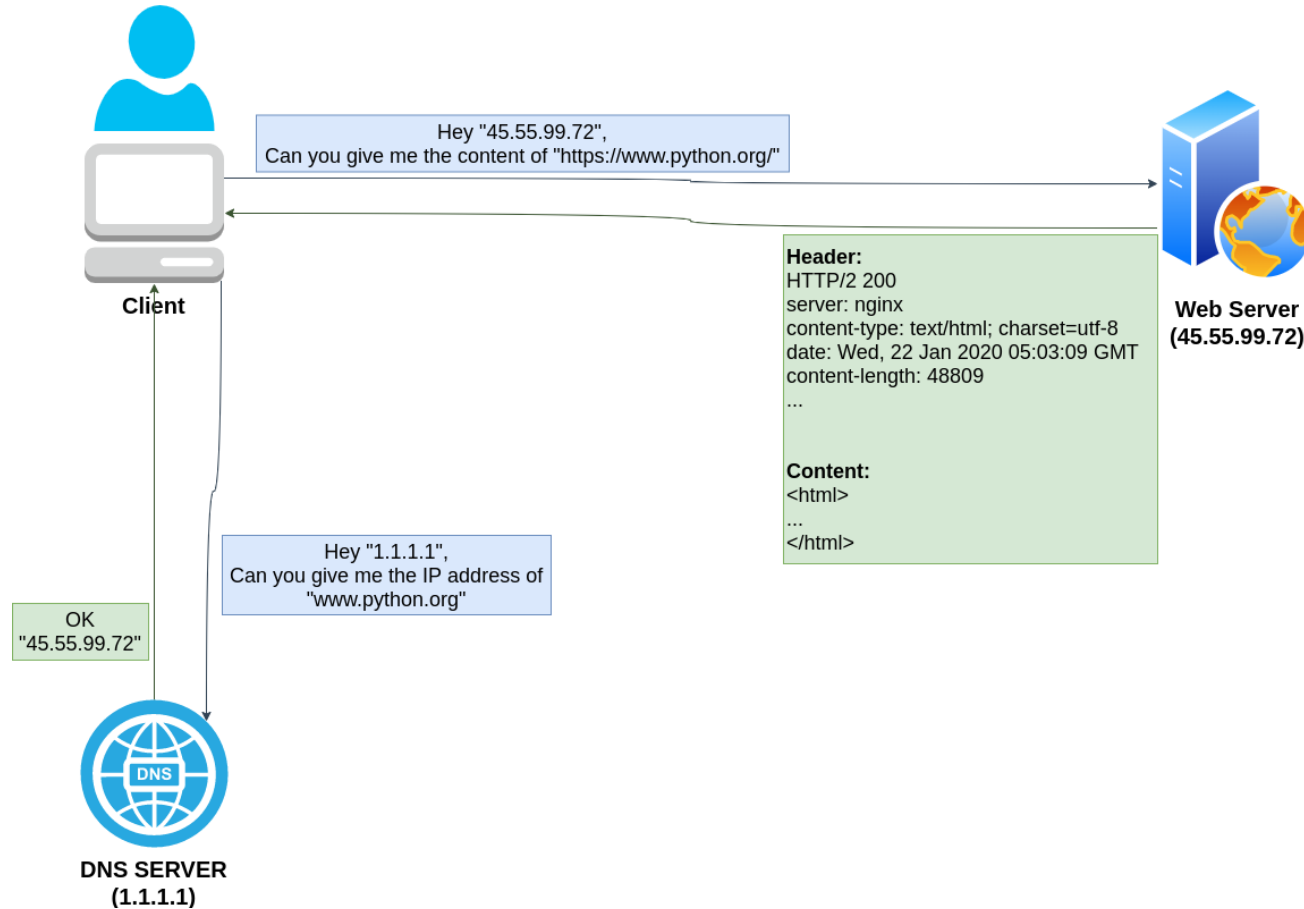
If you would like to support the web..

Getting code

Getting the code by [anonymous FTP](#) , etc.

<http://info.cern.ch/>

How Web works?



Why Python!?

javascript × 1935014

JavaScript (not to be confused with Java) is a high-level, dynamic, multi-paradigm, object-oriented, prototype-based, weakly-typed, and interpreted

893 asked today, 5077 this week

java × 1628133

Java (not to be confused with JavaScript, JScript or JS) is a general-purpose, platform-independent, statically typed, object-oriented programming

562 asked today, 3363 this week

c# × 1375407

a high level, statically typed, multi-paradigm programming language developed by Microsoft. C# code usually targets Microsoft's .NET family of tools

460 asked today, 2544 this week

python × 1331119

a multi-paradigm, dynamically typed, multipurpose programming language, designed to be quick (to learn, to use, and to understand), and to enforce a

1070 asked today, 6350 this week

php × 1328161

a widely used, high-level, dynamic, object-oriented and interpreted scripting language primarily designed for server-side web development.

428 asked today, 2160 this week

android × 1246370

Google's mobile operating system, used for programming or developing digital devices (Smartphones, Tablets, Automobiles, TVs, Wear,

398 asked today, 2354 this week

jquery × 974972

a Javascript library, consider also adding the Javascript tag. jQuery is a popular cross-browser JavaScript library that facilitates Document Object

162 asked today, 965 this week

html × 962693

the standard markup language used for structuring web pages and formatting content. HTML describes the structure of a website semantically along with

352 asked today, 1994 this week

c++ × 651438

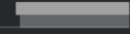
a general-purpose programming language. It was originally designed as an extension to C, and has a similar syntax, but is now a completely different

218 asked today, 1159 this week

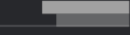
Python and Web Development



59%/51% **Data analysis**



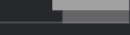
56%/54% Web development



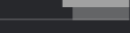
43%/36% DevOps / System administration / Writing automation scripts



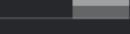
39%/32% Machine learning



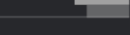
38%/33% Programming of web parsers / scrapers / crawlers



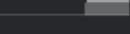
33%/28% Software testing / Writing automated tests



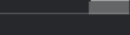
28%/28% Educational purposes



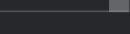
27%/21% Software prototyping



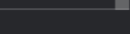
21%/22% Network programming



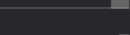
19%/20% Desktop development



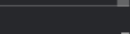
9%/10% Computer graphics



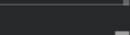
8%/7% Embedded development



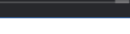
7%/9% Game development



5%/6% Mobile development



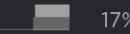
4%/3% Multimedia applications development



7%/7% Other



27%/26% **Web development**



17%/18% Data analysis



11%/9% Machine learning



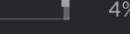
11%/9% DevOps / System administration / Writing automation scripts



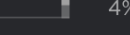
7%/9% Educational purposes



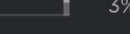
4%/6% Desktop development



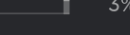
4%/3% Software prototyping



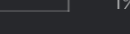
4%/4% Programming of web parsers / scrapers / crawlers



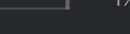
3%/3% Software testing / Writing automated tests



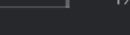
3%/3% Network programming



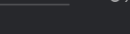
1%/1% Embedded development



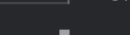
1%/2% Game development



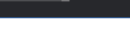
1%/2% Computer graphics



0%/0% Multimedia applications development

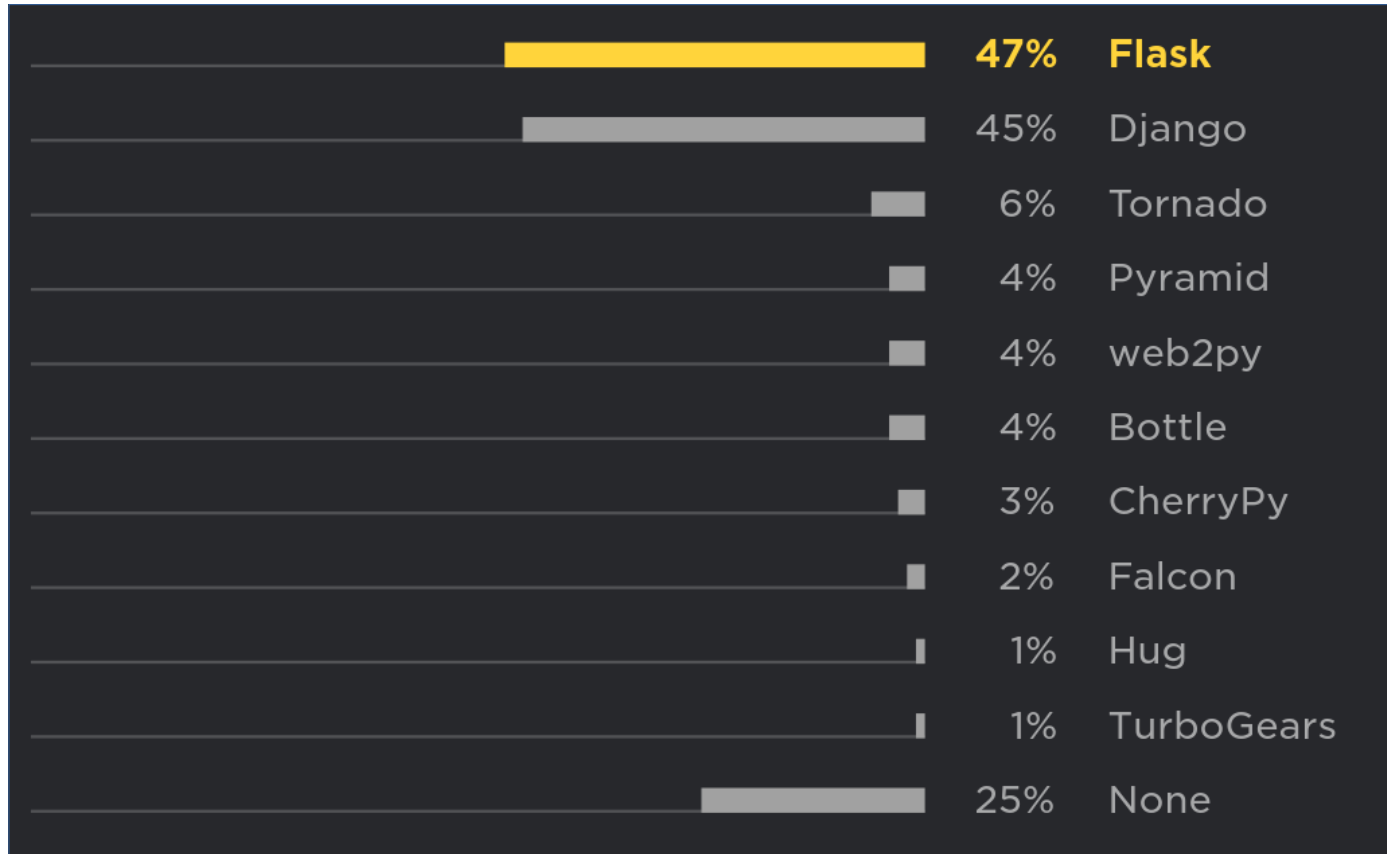


0%/1% Mobile development



5%/4% Other

Python's Web Frameworks



Flask




```
1 from flask import Flask
2
3 app = Flask(__name__)
4
5 @app.route("/")
6 def hello():
7     return "Hello World!"
```


Django

```
● ● ●  
  
# project/hello_world/views.py  
from django.http import HttpResponse  
  
def index(request):  
    return HttpResponse('Hello, World!')  
  
# project/hello_world/urls.py  
from django.contrib import admin  
from django.urls import path  
from my_app import views  
  
urlpatterns = [  
    path('', views.index, name="homepage")  
]
```


```
● ● ●  
  
# project/settings.py  
#...  
INSTALLED_APPS = [  
    'django.contrib.admin',  
    'django.contrib.auth',  
    'django.contrib.contenttypes',  
    'django.contrib.sessions',  
    'django.contrib.messages',  
    'django.contrib.staticfiles',  
    'hello_world' # New app added!  
]  
#...
```

Tornado



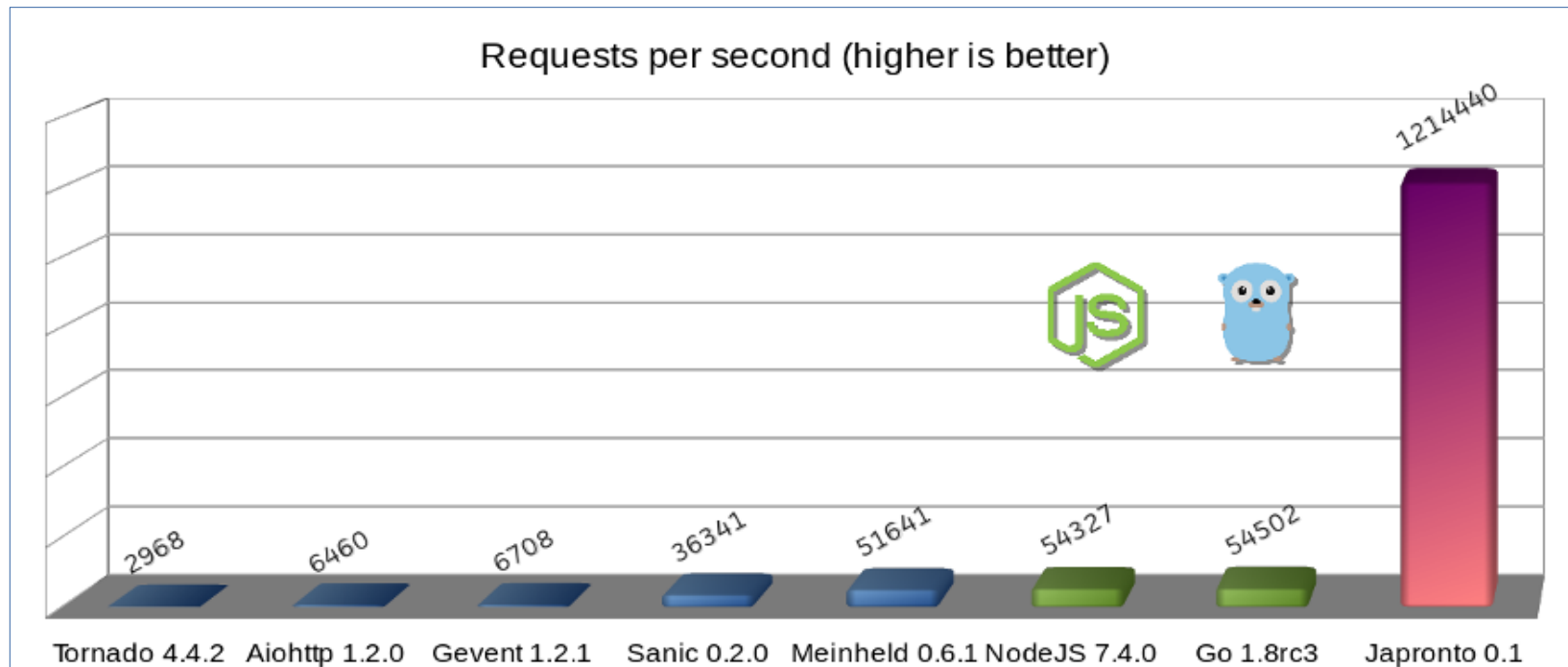
```
1 import tornado.httpserver
2 import tornado.ioloop
3 import tornado.web
4
5
6 class MainHandler(tornado.web.RequestHandler):
7     def get(self):
8         self.write("Hello World!")
9
10
11 application = tornado.web.Application([(r"/", MainHandler)])
12 http_server = tornado.httpserver.HTTPServer(application)
13 http_server.listen(8888)
14 tornado.ioloop.IOLoop.current().start()
```

Pyramid



```
1 from wsgiref.simple_server import make_server
2 from pyramid.config import Configurator
3 from pyramid.response import Response
4
5 def hello_world(request):
6     return Response('Hello World!')
7
8 with Configurator() as config:
9     config.add_route('hello', '/')
10    config.add_view(hello_world, route_name='hello')
11    app = config.make_wsgi_app()
12 server = make_server('0.0.0.0', 6543, app)
13 server.serve_forever()
```

Honorable Mention: Japronto



There is no “Best”

- Just start
- Python is Awesome
- Nothing is Perfect
- Choose based on the project.

References

- Wikipedia
- <https://home.cern/science/computing/birth-web>
- <https://stackoverflow.com/tags>
- <https://www.jetbrains.com/research/python-developers-survey-2018/>

Web development
with
Python is Fun!

Thanks.