

Python web 开发吐槽

@飞龙V5



关于飞龙

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- 更多：<http://feilong.me/about>

吐槽议题

- 为什么要吐槽？
- 吐槽 Python web 开发 (Tornado)
- 吐槽 Python web framework
- 集体吐槽...

为什么要吐槽？

- 爱之深
- 恨之切
- 改进 !!!

吐槽议题

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Ruby web 开发现状



Python web 开发现状



<http://wiki.python.org/moin/webframeworks>

Tornado web server or

- Tornado ~~这货不是web框架~~ ~~framework?~~
- 这货是一个 Non-blocking web server
- 这货是一堆 web 开发工具集
- 这货勉强能算一个类 web.py 的微框架

WSGI VS Asynchronous

- 魚和熊掌不可兼得
 - PEP333 & PEP3333
 - asynchronous
 - tornado.auth
 - tornado.httpclient
 - middleware
 - tornado.wsgi.WSGIApplication

asynchronous callback

```
class MessageUpdatesHandler(BaseHandler, MessageMixin):  
    @tornado.web.authenticated  
    @tornado.web.asynchronous  
    def post(self):  
        cursor = self.get_argument("cursor", None)  
        self.wait_for_messages(self.async_callback(self.on_new_messages),  
                             cursor=cursor)  
  
    def on_new_messages(self, messages):  
        # Closed client connection  
        if self.request.connection.stream.closed():  
            return  
        self.finish(dict(messages=messages))
```

同步方式实现异步

```
def main(config):
    db = Database(**config)
    stmt_drop = "DROP TABLE IF EXISTS names"
    db.execute(stmt_drop)

    stmt_create = """
CREATE TABLE names (
    id TINYINT UNSIGNED NOT NULL AUTO_INCREMENT,
    name VARCHAR(30) DEFAULT '' NOT NULL,
    info TEXT DEFAULT '',
    age TINYINT UNSIGNED DEFAULT '30',
    PRIMARY KEY (id)
)"""
    db.execute(stmt_create)

    info = "abc"
    names = (('Geert', info), ('Jan', info), ('Michel', info))
    stmt_insert = "INSERT INTO names (name,info) VALUES (%s,%s)"
    db.executemany(stmt_insert, names)

    stmt_select = "SELECT id, name, info, age FROM names ORDER BY id"
    print db.query(stmt_select)

    db.close()
```

实验项目：<https://bitbucket.org/felixx/bullet>

Tornado 数据库操作

- database.py – SQL 裸奔
 - https://bitbucket.org/alexander_lee/flunt-sql-
- ORM – SQLAlchemy
- Pymongo – 裸奔、MongoEngine、MongoKit

Tornado 文档？

- <http://www.tornadoweb.org> 被墙
- 文档可有可无，长期只有两页文档 (v2.0 有所改善)
- 官网镜像和中文文档
<http://www.tornadoweb.cn>

Tornado 版本

- v0.1 2009/09/10
- v0.2 2009/09/28
- v1.0 2010/7/28
- v1.1 2010/09/28
- v1.2 2011/02/23
- v2.0 2011/06/25
- Bug... ...

tornado.contrib?

- Cache
- Session
- Feed
- Sitemap
- Auth(CN)
- Route <http://tornadogists.org/838422/>
- ...

Breeze 项目？

- 简化 Tornado 开发成本
- 提供通用的第三分库
- 项目模板 & 命令支持
- <https://bitbucket.org/breezemind/breeze>

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Django

- 系统紧耦合 All in one
 - ORM
 - Template
 - Form
 - Session
 - Cache
 - Auth
 - Admin
 - i18N
 - GEO
 - ...

Django

- Django ORM VS SQLAlchemy
 - <http://jmoiron.net/blog/about-sqlalchemy-an>
 - <http://www.quora.com/Which-is-better-and-w>
- Django Template VS Mako VS Jinja2
 - <http://lucumr.pocoo.org/2008/1/1/python-tem>
 - <http://stackoverflow.com/questions/1324238>

Django

- 性能

```
Python 2.6.2 on a 3GHz Intel Core 2
```

Kid template	696.89 ms
Kid template + cElementTree	649.88 ms
Genshi template + tag builder	431.01 ms
Genshi tag builder	389.39 ms
Django template	352.68 ms
Genshi template	266.35 ms
ElementTree	180.06 ms
cElementTree	107.85 ms
StringIO	41.48 ms
Jinja 2	36.38 ms
Cheetah template	34.66 ms
Mako Template	29.06 ms
Spitfire template	21.80 ms
Tenjin	18.39 ms
Spitfire template -01	11.86 ms
cStringIO	5.80 ms
Spitfire template -03	4.91 ms
Spitfire template -02	4.82 ms
generator concat	4.06 ms
list concat	3.99 ms
generator concat optimized	2.84 ms
list concat optimized	2.62 ms

Pylons&Pyramid

- 松散自由 & 过多依赖
- Pylons 1.0 不再开发
- Pyramid 尚未得到实用考验
- 大 PylonsProject 才刚刚起步

更多关于 Web framework

- <http://feilong.me/2011/01/talk-about-pyt>
- <http://wiki.woodpecker.org.cn/moin/ObpL>
- <http://wiki.python.org/moin/WebFramework>

集体吐槽

- 集体吐槽时间...

资源汇总

- <http://feilong.me/2011/01/talk-about-python-web-frames/>
- <http://wiki.woodpecker.org.cn/moin/ObpLovelyPython>
- <http://wiki.python.org/moin/WebFrameworks>
- <http://www.tornadoweb.cn>
- <http://tornado.poweredsites.org>
- <http://tornadogists.org>
- <https://bitbucket.org/felixx/bullet>
- <http://scotdoyle.com/python-epoll-howto.html>