Beyond Django

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Asynchronous microservices and python

Microservices

Small, lightweight sevices which provide a single logical function

Scalable

Separation of concerns

Rolling and partial updates

Decentralized ownership

Asynchronous Python

Python is bad at threading and asynchronous processing

Celery and similar service busses are heavyweight for many applications

I/O bound processes benefit from coroutines

Greenlets, tornado, gevent, etc.

Python 3.5/3.6 has a built-in, easy-to-use coroutine system (asyncio)

Falcon+aiohttp = Hug

Falcon is a fast and easy-to-use RESTful library

Aiohttp is an HTTP and Websockets library build on asyncio

Combine them together, add some syntactic sugar and you have hug

NoSQL?!

NoSQL is a broad collection vaguely related database technologies

Often faster, easier, and more flexible than traditional RDBMS for certain applications

RethinkDB is what MongoDB should have been

Native JSON storage

Schemaless

Very fast and very easy

Remodel is a simple ORM helper library for rethinkdb

What about the UI

Angular 2

Component based

@directives

Dependency injection

Typescript and LESS

LeafletJS

Testing

Resttest.py

YAML based test definitions

Benchmarks