#### DEPLOY YOUR FLASK OR DJANGO APP TO AWS LAMBDA WITH ZAPPA

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#### (I'M A ZAPPA CONTRIBUTOR, BUT I'M AN AMAZON CUSTOMER. THEY DON'T PAY ME.)

#### REALLY: DEPLOY SERVERLESS PYTHON WEB APPS

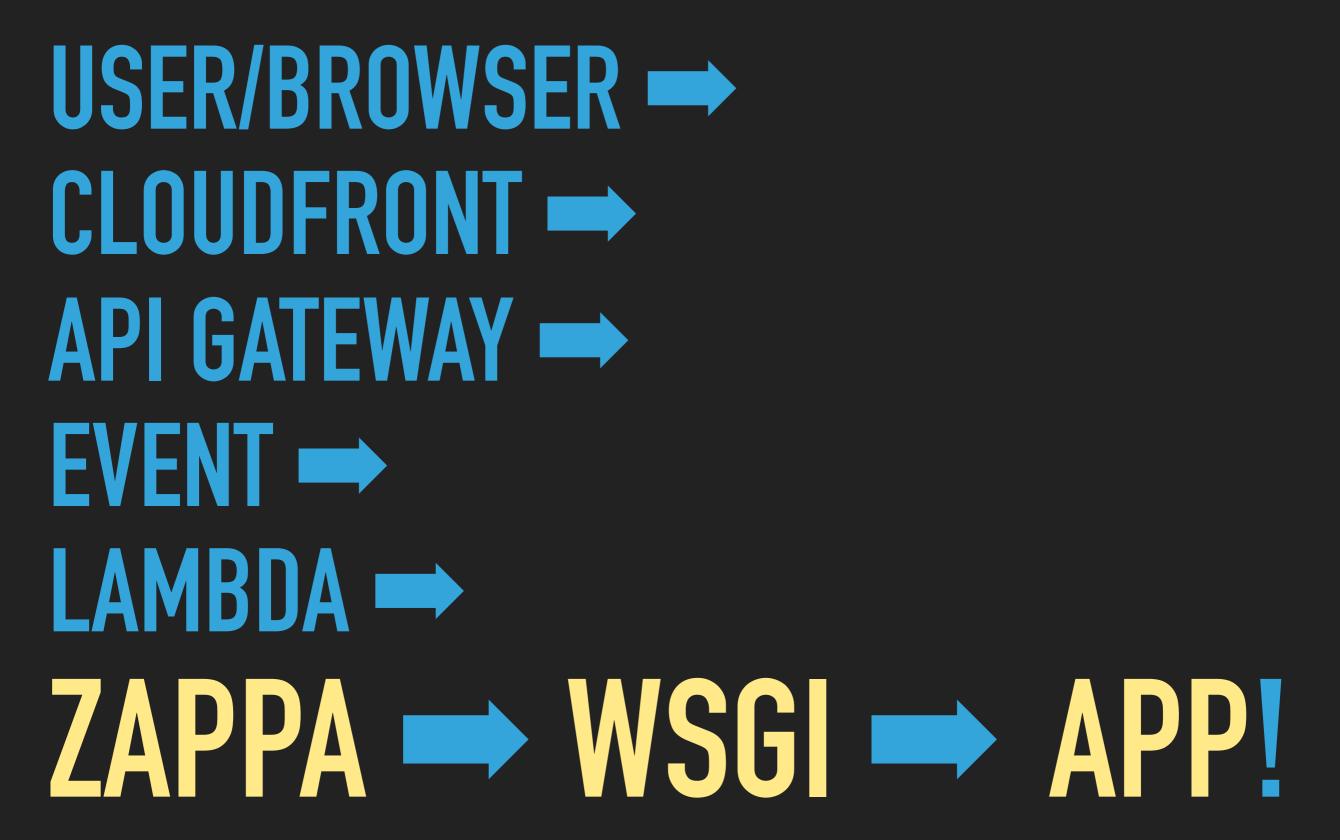
#### SERVERLESS?

### SERVERLESS NO PERMANENT SERVERS

### LAMBDA: RUN ARBITRARY EVENT-DRIVEN CODE

### GET HTTP(S) EVENTS FROM API GATEWAY

### HOW?



#### BUT WHY?

#### INEXPENSIVE\*:

# INEXPENSIVE: \$0.0001667/GB/S

## INEXPENSIVE: FREETIER

## CAPACITY PLANNING:

## DEFAULT CONCURRENCY: 3000 (IN US-EAST-1)

## OPS / ADMINISTRATION:

# OPS / ADMINISTRATION: ALL DEVOPS; NO\* BORING-OPS.

AMAZON TAKES CARE OF: OS PACKAGE UPDATES SECURITY PATCHING INSTANCE USER MANAGEMENT LOAD BALANCING AUTOSCALING FAILOVER.

### ZAPPA

### DEPLOY EXISTING PYTHON/WSGI APPS

ZAPPA TAKES CARE OF NON-APP AWS STUFF: IAM PROFILE S3 BUCKET **CLOUDWATCH API GATEWAY CUSTOM DOMAIN NAME** HTTPS CERTIFICATE...

ZAPPA TAKES CARE OF NON-CODE APP STUFF: PACKAGING THE VIRTUALENV ZIPPING UP THE CODE UPLOADING TO S3 CHANGING THE LAMBDA INVOCATION ATTACHING TO API GATEWAY SCHEDULING EVENTS...

### ZAPPA

#### HAVE AN ACTIVE VIRTUAL ENVIRONMENT

### GET ZAPPA pip install zappa

# USE AN EXISTING APP

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

```
@app.route('/')
def hello_world():
    return 'Hello, World!'
```

#### OR DJANGO:

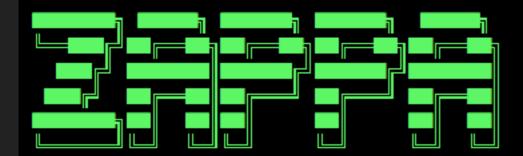
django-admin startproject funzone

### (AND ADJUST YOUR ALLOWED\_HOSTS)

#### GET A

zappa\_settings.json

#### ▶\$ zappa init



#### Welcome to Zappa!

Zappa is a system for running server-less Python web applications on AWS Lambda and AWS API Gateway.

This `init` command will help you create and configure your new Zappa deployment .

Let's get started!

Your Zappa configuration can support multiple production stages, like 'dev', 'st aging', and 'production'.

What do you want to call this environment (default 'dev'):

AWS Lambda and API Gateway are only available in certain regions. Let's check to make sure you have a profile set up in one that will work.

We couldn't find an AWS profile to use. Before using Zappa, you'll need to set o ne up. See here for more info: <a href="https://boto3.readthedocs.io/en/latest/guide/quickstart.html#configuration">https://boto3.readthedocs.io/en/latest/guide/quickstart.html#configuration</a>

Your Zappa deployments will need to be uploaded to a **private S3 bucket**. If you don't have a bucket yet, we'll create one for you too. What do you want call your bucket? (default 'zappa-jiyb6jz43'):

It looks like this is a Flask application.

What's the modular path to your app's function?

This will likely be something like 'your\_module.app'.

We discovered: app.app

Where is your app's function? (default 'app.app'):

```
You can optionally deploy to all available regions in order to provide fast glob
al service.
If you are using Zappa for the first time, you probably don't want to do this!
Would you like to deploy this application globally? (default 'n') [y/n/(p)rimary
7:
Okay, here's your zappa_settings.json:
    "dev": {
        "app_function": "app.app",
        "aws_region": null,
        "profile_name": null,
        "project_name": "zappatalk",
        "runtime": "python2.7",
        "s3_bucket": "zappa-jiyb6jz43"
4
Does this look okay? (default 'y') [y/n]: y
Done! Now you can deploy your Zappa application by executing:
        $ zappa deploy dev
After that, you can update your application code with:
        $ zappa update dev
To learn more, check out our project page on GitHub here: https://github.com/Mis
erlou/Zappa
and stop by our Slack channel here: https://slack.zappa.io
Enjoy!,
 ~ Team Zappa!
▶$
```

```
"dev": {
    "app_function": "app.app",
    "aws_region": null,
    "profile_name": null,
    "project_name": "zappatalk",
    "runtime": "python2.7",
    "s3_bucket": "zappa-jiyb6jz43"
```

# DEPLOY YOUR APP:



## WE DEPLOYED AN APP WITH ZAPPA!

### DO A RELEASE: zappa update

### TAIL THE LOG: zappa tail

OTHER ZAPPA EVENTS: CRON/SCHEDULE DYNAMODB CHANGES KINESIS STREAMS S3 UPLOADS/CHANGES SNS MESSAGES

#### OTHER ZAPPA FUNCTIONALITY: ROLLBACKS **ASYNC FANOUT** NON-WEB EVENT HANDLING AUTHORIZERS ENVIRONMENT MANAGEMENT

# THANKS! sean@seancoates.com @coates