AWS LAMBDA:
FOCUS ON THE CODE,
NOT THE SERVERS

WHO LIKES AUTOMATION?

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WHAT IS A LAMBDA FUNCTION?

anonymous function (unnamed function)

LAMBAS, CALLBACKS, CLOSURES, OH MY!

Lambda functions must be anonymous

Callback functions are arguments to another function

Closures can access variables outside of their param list

LAMBDA.PY

```python
func = lambda x: x % 3
filtered = filter(func,
#filtered = [3,6]
```

BUT WHAT ABOUT AWS LAMBDA?

Components:

1. custom logic (.zip)
2. trigger function (configured in AWS)

LIFE OF A LAMBDA

1. event fires
2. container deployed to managed server
3. zip file downloaded & extracted
4. code executed
5. container torn down

BENEFITS:

no hardware to maintain

parallel event handling

focus on the code, not the hardware

POINTS OF CONSIDERATION:

environment at the mercy of Amazon

code does not execute in your own VPC

COST?

1 million function calls - $0.20

100ms of run time based on functions memory

COST EXAMPLE:

function runs for 1 second

512mb of memory

3 million function calls

cost: $18.34 /mo

WHAT CAN WE DO WITH AWS LAMBDA?

(it's all in the events)

Cloud Formation

Cloud Watch

Cognito

DynamoDb

Kinesis

S3

SES

SNS

SNS

EXTENDING AWS SERVICES

real time file processing with S3

error reporting with CloudWatch Logs

custom commands from CloudFormation

GLUING AWS SERVICES TOGETHER

push alerts with DyanmoDB & SNS

auto-scaling triggers with CloudWatch Events & AWS SDK

scheduled tasks with CloudWatch Events & AWS SDK

LAMBDA LIMITED TO AWS SERVICES?

CUSTOM EVENT TRIGGERS

Kinesis

API Gateway

API GATEWAY & LAMBDA

trigger Lambda functions over HTTP

map request object to Lambda arguments
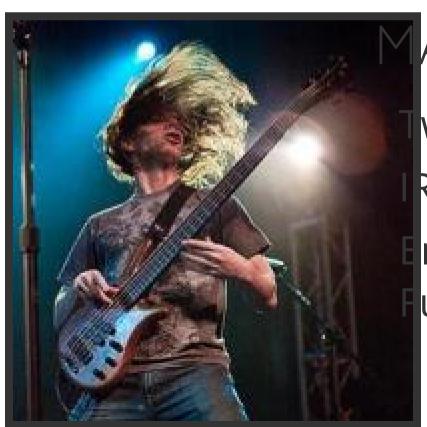
return result over HTTP

SERVERLESS APPLICATIONS

www.kanbandictionary.com

USE AWS LAMBDA TO:

replace task queues

house scheduled jobs

stand up simple HTTP interfaces

govern any inherently event driven task

QUESTIONS!?

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