

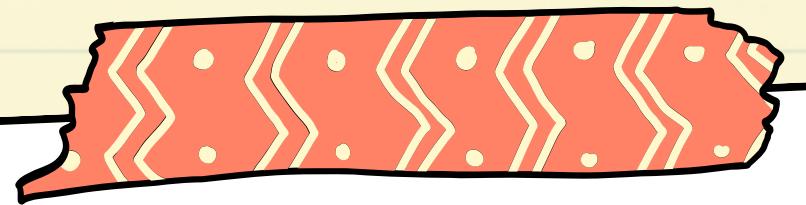
Foundation-AWS Lambda

- Lambda Console
- Lambda Version
- Lambda Alias
- Lambda Layers
- Lambda Event
- Lambda Context
- Lambda Logging and Error
- Lambda Function with Zip File

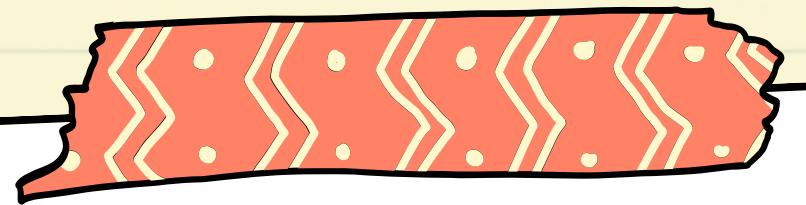


- Hands-on Boto3 and S3
- Hands-on Policies for Specific Events
- Hands-on S3 Event and Triggering
- Hands-on Deploying Lambda via AWS CLI
- Hands-on Testing Lambda Triggering
- Project Resize Image On the Fly
- Project Processing CSV to DynamoDB
- AWS Lambda Limit
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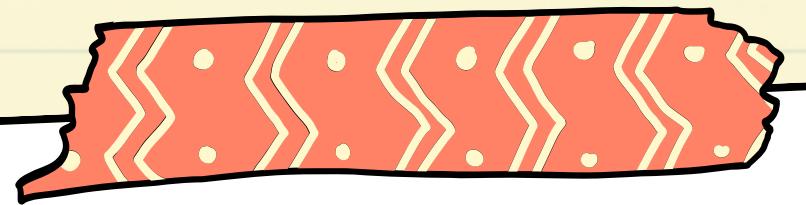
Lambda Console



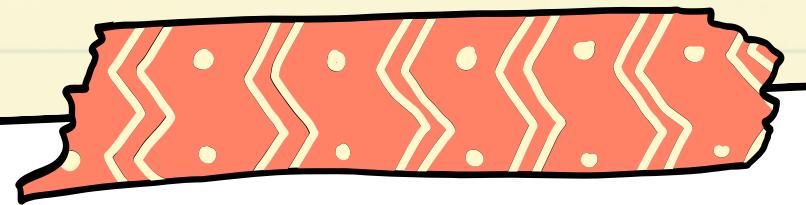
Lambda Version



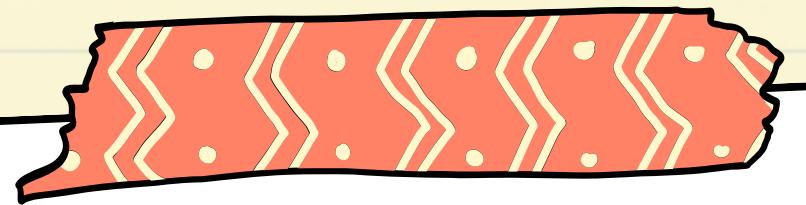
Lambda Alias



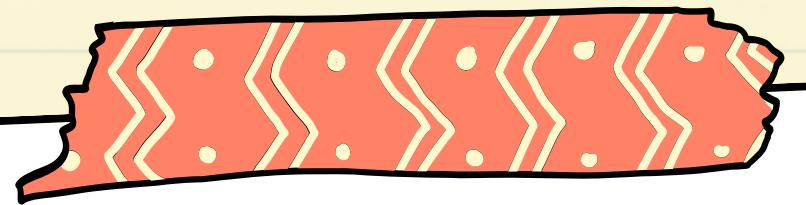
Lambda Layers

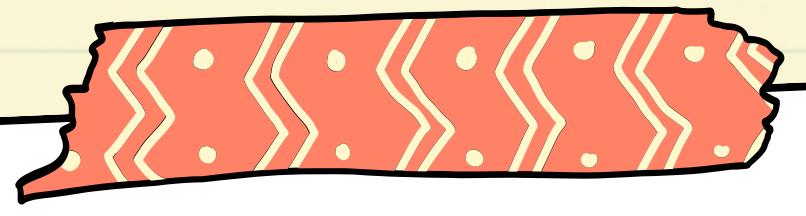


Lambda Event



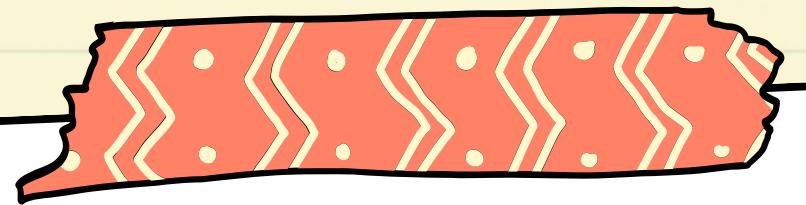
Lambda Context





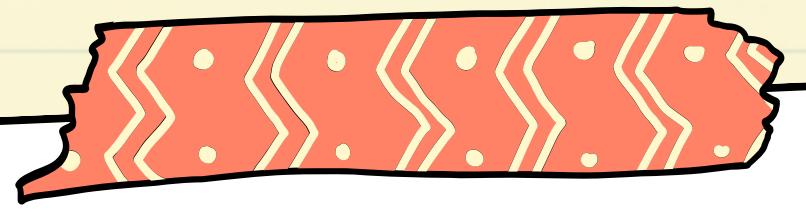
Lambda Logging and Error





Lambda Function with Zip File

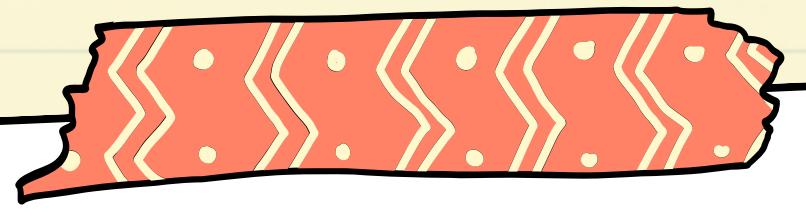




Hands-on Boto3 and S3

- CREATE BUCKET
- UPLOAD TO BUCKET
- DELETE OBJECT
- LIST OBJECT
- LIST BUCKET
- SELECT NEEDED FILE

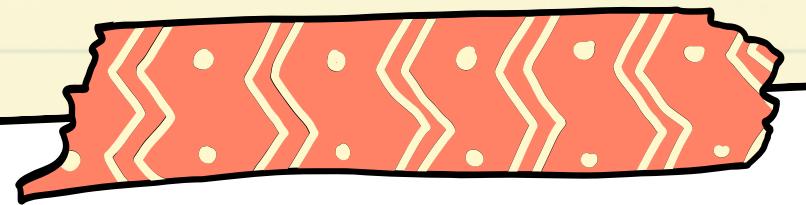




Hands-on Policies for Specific Events

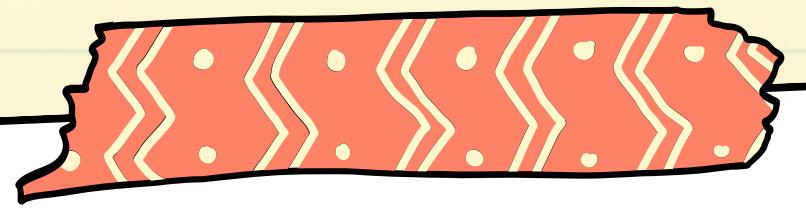
CLOUDWATCH LOGS
S3
DYNAMODB





Hands-on S3 Event and Triggering

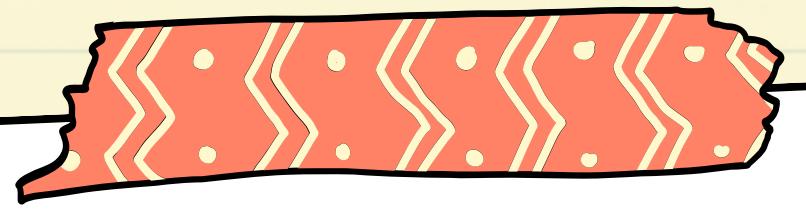




Hands-on Deploying Lambda via AWS CLI

```
AWS LAMBDA UPDATE-FUNCTION-CODE  
--FUNCTION-NAME "YOUR LAMBDA NAME"  
--S3-BUCKET "BUCKET NAME"  
--S3-KEY "KEYNAME"
```



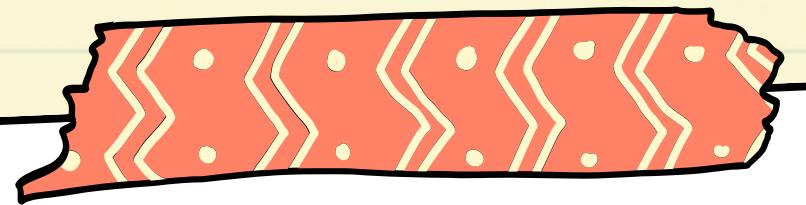


Hands-on Testing

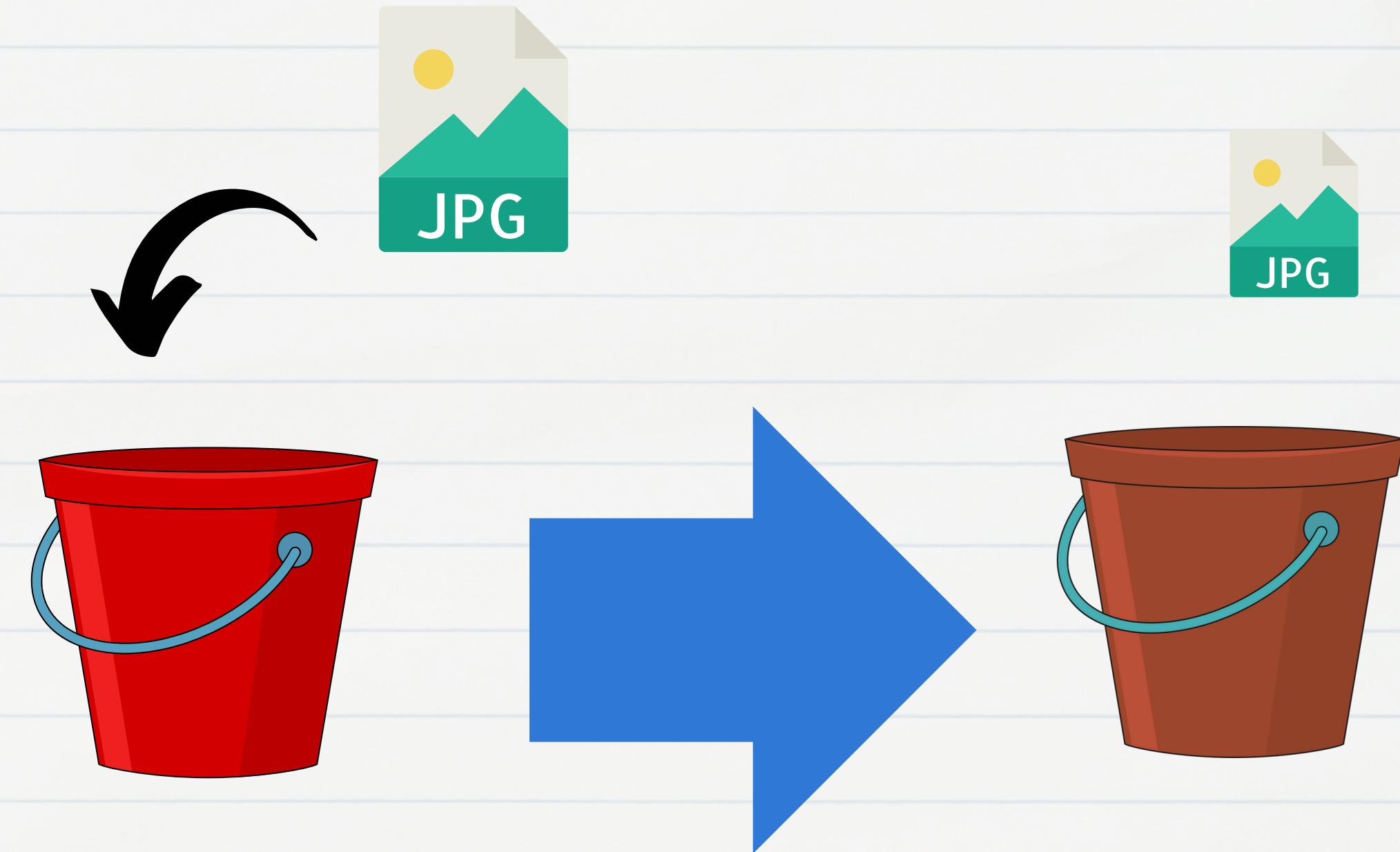
Lambda Triggering



Project Resize Image On the Fly

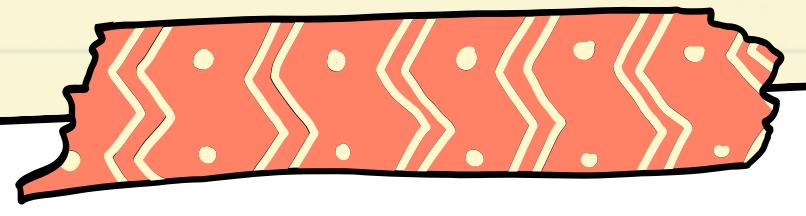


PROJECT RESIZE IMAGE ON THE FLY



rawimagedata-id1234a

processimagedata-id1234a

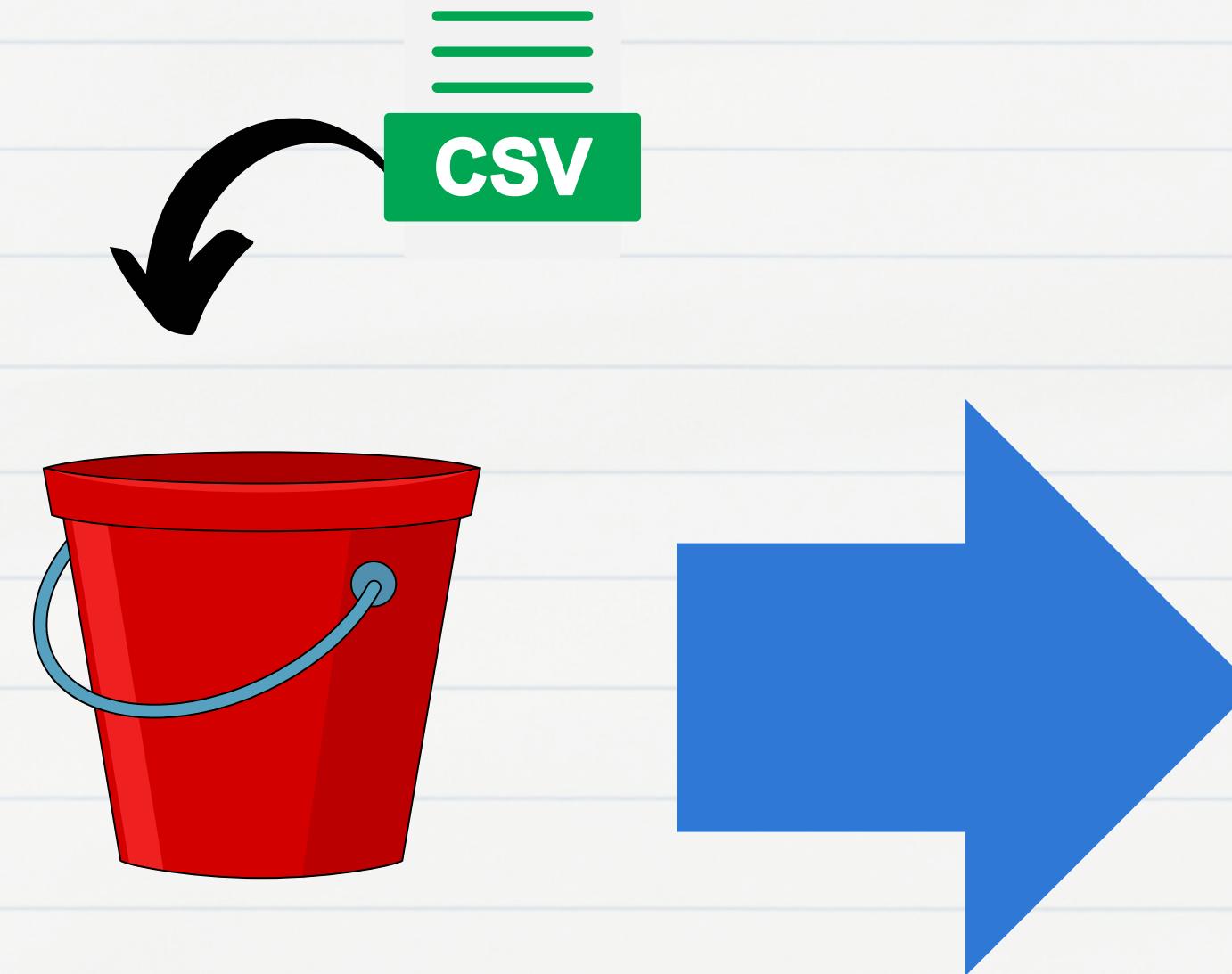


Project Processing

CSV to DynamoDB



PROJECT PROCESSING CSV TO DYNAMODB



csvhandledata-id1234

DynamoDB

AWS Lambda Limit



AWS LAMBDA LIMIT

Memory Size : 128 MB to 3008 MB in 64 MB Increment

Ephemeral Disk Capacity : 512 MB

Time out : 15 Mins

Payload size “size of load/request” : 6MB for Syncronous and 128KB for Asynchronus Invocation

Deployment package size : 50MB when compress and 250MB when uncompressed 3 MB for Online

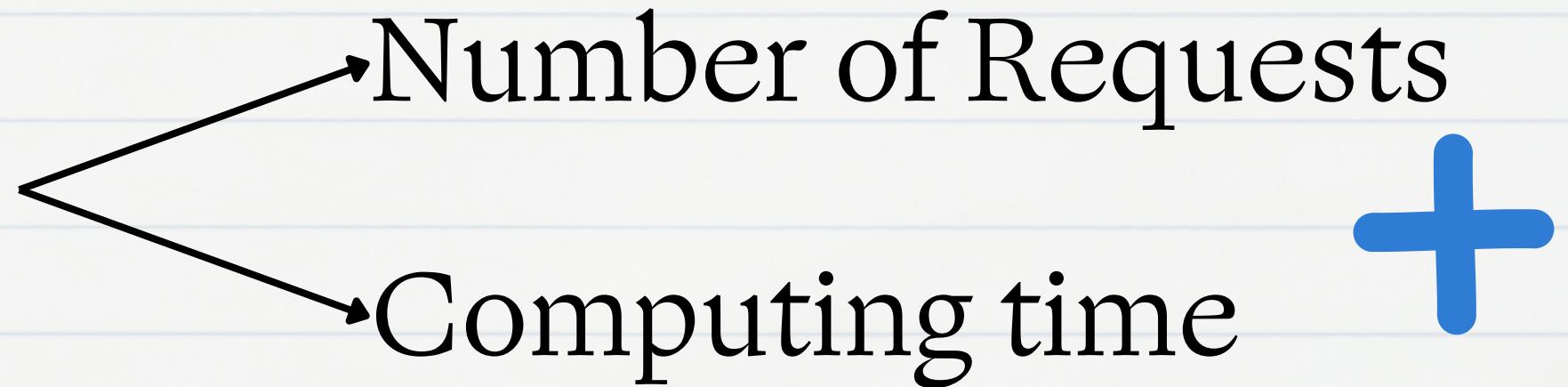
Total Package Size within Region : 75 GB

Concurrency : 1000 Executions

AWS Lambda Pricing



AWS LAMBDA PRICING



Free Tier 12 Months

Number of Requests

1,000,000 request/mo

Computing time

400,000 GB-Second/mo

Beyond that

Number of Requests

\$0.2 per million requests

Computing time

\$0.00001667 per GB-Second

EXAMPLE

Function 1: has 128 memory, execute 2 million times in a month, running 200ms each time

Function 2: has 512 memory, execute 3 million times in a month, running 300ms each time

Total Billing Requests = $2\text{ m} + 3\text{m} - 1\text{m} = 4\text{ million}$

Request Charge = $4\text{m} \times \$0.2 = \0.8

Compute Seconds for Function 1 = $2\text{m} * 0.2\text{ sec} = 0.4\text{ million seconds}$

Compute Seconds for Function 2 = $3\text{m} * 0.3\text{ sec} = 0.9\text{ million seconds}$

GB-Seconds for Function1 = $(128/1024)\text{GB} \times 0.4\text{ million seconds} = 50,000\text{ GB-Seconds}$

GB-Seconds for Function2 = $(512/1024)\text{GB} \times 0.9\text{ million seconds} = 450,000\text{GB-Seconds}$

Compute-Usage = $50,000 + 450,000 - 400,000 = 100,000\text{ GB-Seconds}$

Compute Charges = $100,000 * \$0.00001667 = \1.67

Total Charge = $\$0.8 + \$1.67 = \$2.47$