An Introduction to AWS Lambda

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Malwarebytes

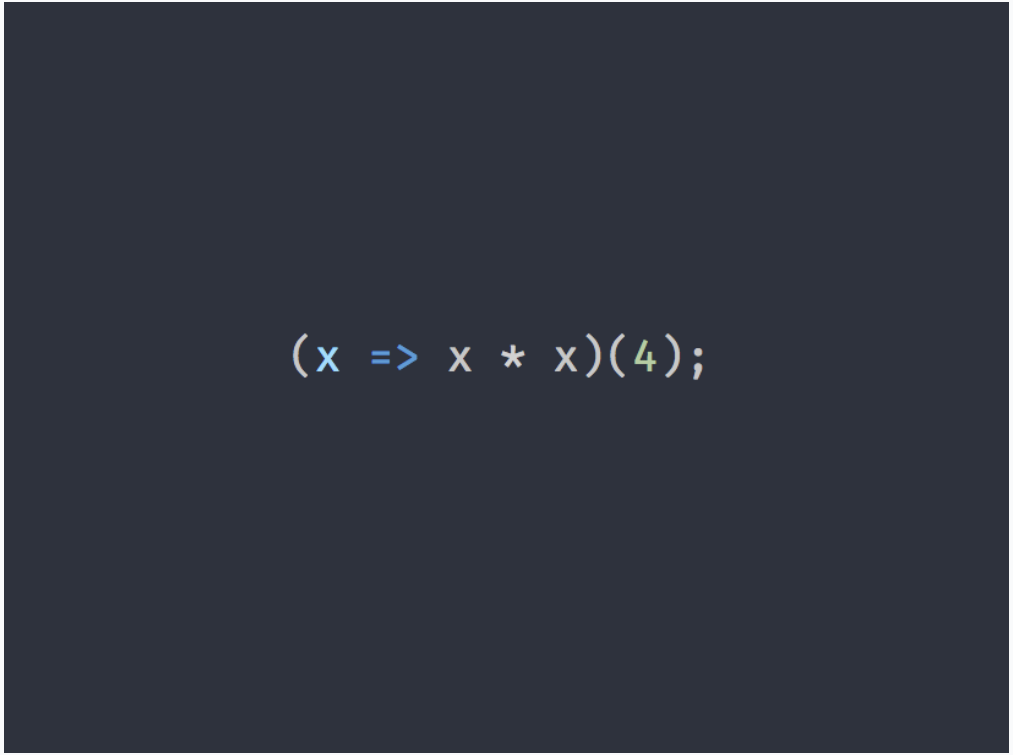
What is Lambda?

AWS Lambda is an event-driven, serverless computing platform.

Amazon manages the servers for you so you can just concentrate on writing good code!

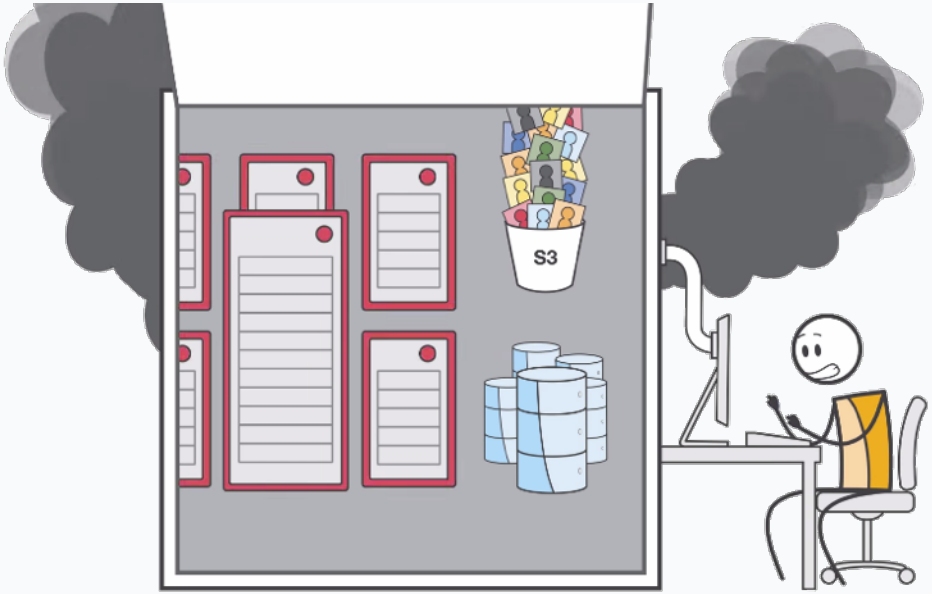
Origin

The name “Lambda” comes from “Lambda Function”, the concept of an anonymous computing function, which is not bound to an identity.



Why Lambda?

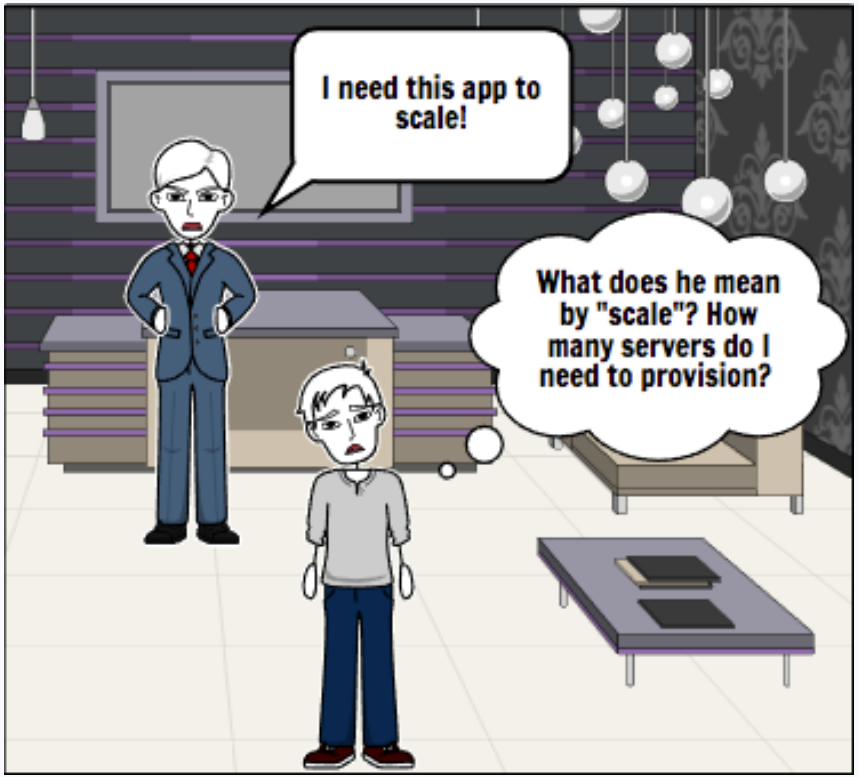
Developer Happiness



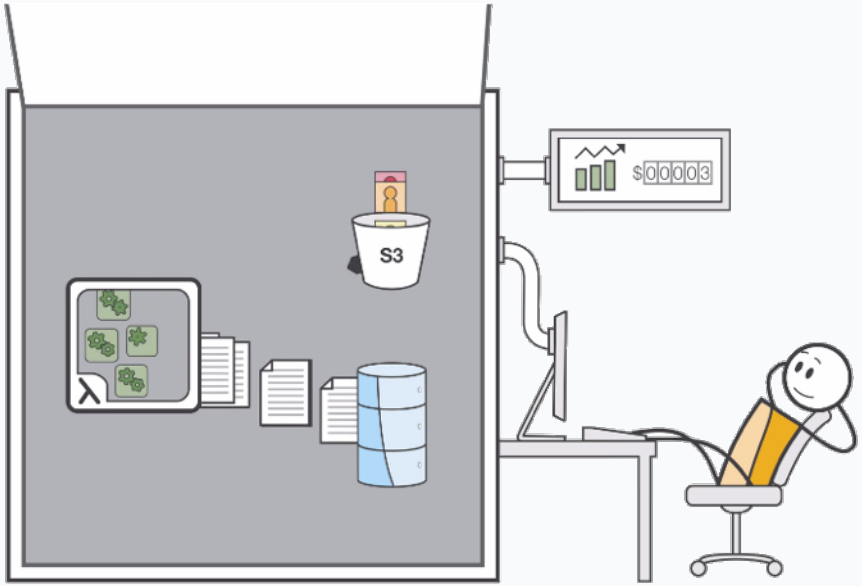
“…premature optimization is the root of all evil…”

Donald Knuth

Minimum Viable Product



Cost and Freedom



How Can I Use It??

Pick a Language!

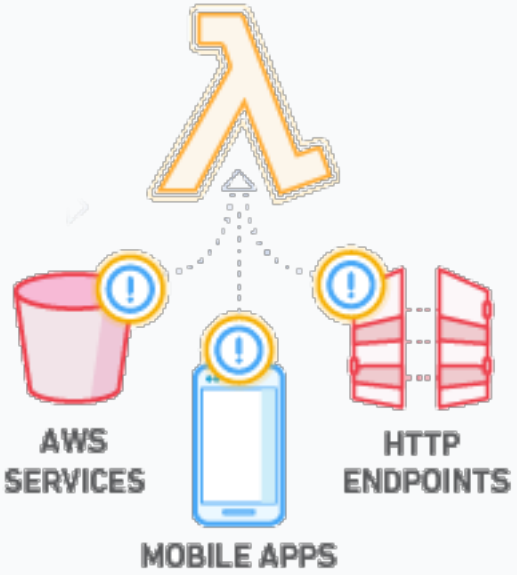
Pick a Usage!

- Cron jobs
- Restful API backend 😴
- Mobile backend
- Image processing (e.g. create profile picture thumbnails)
- Build logic around your email responses
- Process analytic data
- Respond to NoSQL database updates (notify yourself when Elvis adds himself to your site!)
- Alexa skill
- Internet of Things Backend
- Text your users
- Continue ad infinitum (almost)

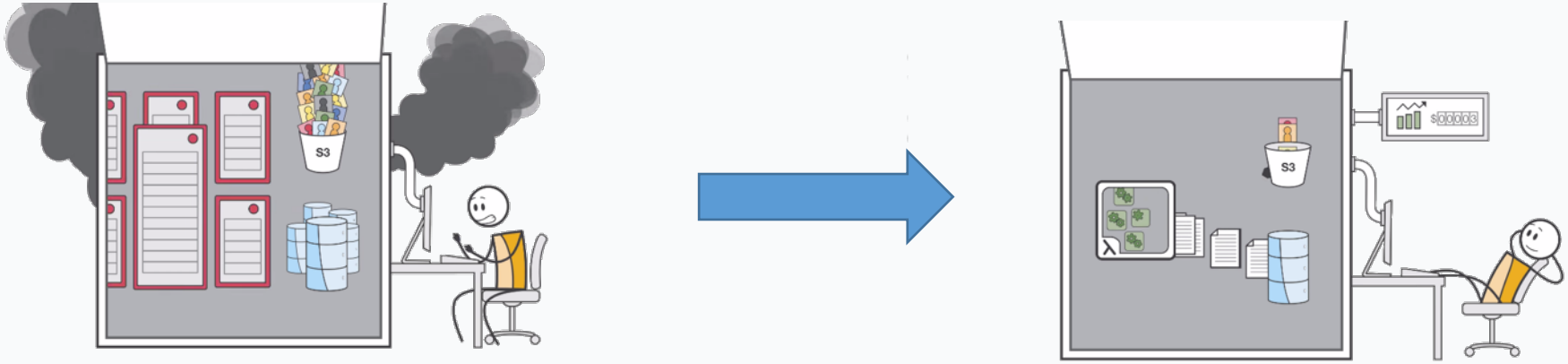
A Quick Example

```
'use strict';
const dynamo = require('dynamodb-doc').DynamoDB();

exports.handler = (event, context, callback) => {

  const done = (err, res) => callback(null, {
    statusCode: err ? '400' : '200',
    body: err ? err.message : JSON.stringify(res),
    headers: { 'Content-Type': 'application/json' },
  });

  if (event.httpMethod === 'DELETE') {
    dynamo.deleteItem(JSON.parse(event.body), done);
  } else if (event.httpMethod === 'GET') {
    dynamo.scan({ TableName: event.queryStringParameters.TableName }, done);
  } else if (event.httpMethod === 'POST') {
    dynamo.putItem(JSON.parse(event.body), done);
  } else if (event.httpMethod === 'PUT') {
    dynamo.updateItem(JSON.parse(event.body), done);
  } else {
    done(new Error(`Unsupported method "${event.httpMethod}"`));
  }
};
```

AWS Lambda is Event Driven



The Goal



Thank You