Internet Applications

Assignment 3 – Short Experiment with Serverless

Prof. Donal O'Mahony

2nd December, 2020 (Week 10)

This assignment follows on from Lab3 where you are asked to develop a Lambda function that can be invoked from any browser around the world coming in through AWS's API Gateway.

In this assignment, you will create such a function that will respond to requests like:

https://264ej4vqje.execute-api.us-east-1.amazonaws.com/default/myfirstfunc

The purpose of your function is to monitor how often it is called. Each request should be logged in a state variable as it come in. The response to the request should be a JSON object of the form

```
{ThisInvocation: "2020-12-02T12:50:42.456Z", TimeSinceLast: "20", TotalInvocationsOnThisContainer: "5", AverageGapBetweenInvocations: "20"}
```

The function should also respond to a URL of the form

https://264ej4vgje.execute-api.us-east-1.amazonaws.com/default/myfirstfunc?cmd=RESET

which should reset the state of the function and have it return something like:

```
{ThisInvocation: "2020-12-02T12:55:42.456Z"}
```

The assignment should be submitted through blackboard by Friday, $4^{\rm th}$ December at 20:00

Please capture the javascript code from the Cloud9 editor and submit it as a .PDF file. Also submit a screendump of the browser window interacting with it... also as a PDF.