ANÁLISIS DE PERFORMANCE – NODE SERVER

Se realizan pruebas de rendimiento a servidor en Node.
Se hacen requests a la ruta /info, comparando la performance con/sin console.log.

· Se realizan tests en Artillery (artillery quick -c 40 -n 20), corriendo el servidor en modo --prof.
Luego se procesan los resultados con --prof-process.

Resultados del proceso con console.log

```
[Summary]:
  ticks  total  nonlib    name
     7    0.3%  100.0%  JavaScript
     0    0.0%    0.0%  C++
     3    0.1%   42.9%  GC
  2590   99.7%          Shared libraries
```

Resultados del proceso sin console.log

```
[Summary]:
  ticks  total  nonlib    name
    11    0.3%  100.0%  JavaScript
     0    0.0%    0.0%  C++
    21    0.5%  190.9%  GC
  3901   99.7%          Shared libraries
```

· Se realizan tests en modo --inspect y se analizan desde chrome://inspect

Resultados del proceso con console.log

Self Time	Total Time	File
51.430,04ms	51.430,04ms	(idle)
489,70ms	489,70ms	> writeUtf8String
269,31ms	269,31ms	(garbage collector)
146,18ms	146,18ms	(program)
136,97ms	136,97ms	> writev
129,80ms	139,30ms	> writeBuffer
86,86ms	346,77ms	> deserializeObj... ...use/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/bson/lib/parser/deserializer.js:65
70,93ms	1.411,91ms	> initiali... ...rhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/passport/lib/middleware/initialize.js:51
64,57ms	113,72ms	> nextTick node:internal/process/task_queues:104
50,28ms	275,45ms	> cookiePars... ...VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/cookie-parser/index.js:44
45,21ms	253,07ms	> serializeIn... ...derhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/bson/lib/parser/serializer.js:553
42,65ms	42,65ms	> Long d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/bson/lib/long.js:59
42,64ms	2.372,98ms	> emit node:events:475
41,89ms	41,89ms	> asyncTaskScheduled
40,53ms	459,80ms	> comma... ...oderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/mongodb/lib/cmap/connection.js:251
39,73ms	8.079,12ms	> handle d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/express/lib/router/layer.js:86
38,84ms	7.550,24ms	> next d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/express/lib/router/index.js:177
36,57ms	403,67ms	> (anonymo... ...eJS/Entrega 8-16/backend-desafios-coder/node_modules/connect-mongo/build/main/lib/MongoStore.js:236
35,15ms	199,04ms	> session d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/express-session/index.js:179
33,61ms	191,93ms	> compression d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/compression/index.js:59
33,01ms	84,88ms	> hash d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/express-session/index.js:596

Resultados del proceso sin console.log

Self Time	Total Time	File
54.086,83ms	54.086,83ms	(idle)
373,75ms	373,75ms	> writeUtf8String
275,54ms	275,54ms	(garbage collector)
161,74ms	161,74ms	(program)
129,99ms	129,99ms	> writev
119,22ms	127,38ms	> writeBuffer
101,94ms	396,90ms	> deserializeObj... ...use/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/bson/lib/parser/deserializer.js:65
67,94ms	119,11ms	> nextTick node:internal/process/task_queues:104
66,08ms	1.327,69ms	> initiali... ...rhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/passport/lib/middleware/initialize.js:51
62,66ms	336,06ms	> serializeIn... ...derhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/bson/lib/parser/serializer.js:553
56,21ms	2.569,83ms	> emit node:events:475
49,56ms	529,99ms	> comma... ...oderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/mongodb/lib/cmap/connection.js:251
44,63ms	278,97ms	> cookiePars... ...VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/cookie-parser/index.js:44
43,78ms	43,78ms	> asyncTaskScheduled
40,20ms	40,20ms	> Long d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/bson/lib/long.js:59
39,31ms	7.409,50ms	> next d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/express/lib/router/index.js:177
38,01ms	436,38ms	> (anonymo... ...eJS/Entrega 8-16/backend-desafios-coder/node_modules/connect-mongo/build/main/lib/MongoStore.js:236
37,92ms	202,20ms	> compression d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/compression/index.js:59
35,32ms	7.950,70ms	> handle d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/express/lib/router/layer.js:86
35,07ms	86,03ms	> hash d:/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/express-session/index.js:596
32,39ms	52,02ms	> store.createSes... ...NodeJS/Entrega 8-16/backend-desafios-coder/node_modules/express-session/session/store.js:86
32,38ms	32,38ms	> Hash

· Se corre el server con 0x para realizar un gráfico de flama y se realizan tests con autocannon (desde código)

Resultados de los procesos con y sin console.log, corriendo en paralelo

```
Santi@SANTI MINGW64 /d/VS/Coderhouse/NodeJS/Entrega 8-16/backend-desafios-coder (master)
$ npm test

> backend-desafios-coder@1.0.0 test
> node benchmark.js

Running benchmarks in parallel...
Running 20s test @ http://localhost:8080/info
100 connections
```

Stat	2.5%	50%	97.5%	99%	Avg	Stdev	Max
Latency	742 ms	2004 ms	2914 ms	3018 ms	1957.63 ms	437.89 ms	3893 ms

Stat	1%	2.5%	50%	97.5%	Avg	Stdev	Min
Req/Sec	12	12	47	83	47.9	24.12	12
Bytes/Sec	5.67 kB	5.67 kB	22.2 kB	39.2 kB	22.6 kB	11.4 kB	5.67 kB

```
Req/Bytes counts sampled once per second.
# of samples: 20

0 2xx responses, 958 non 2xx responses
```
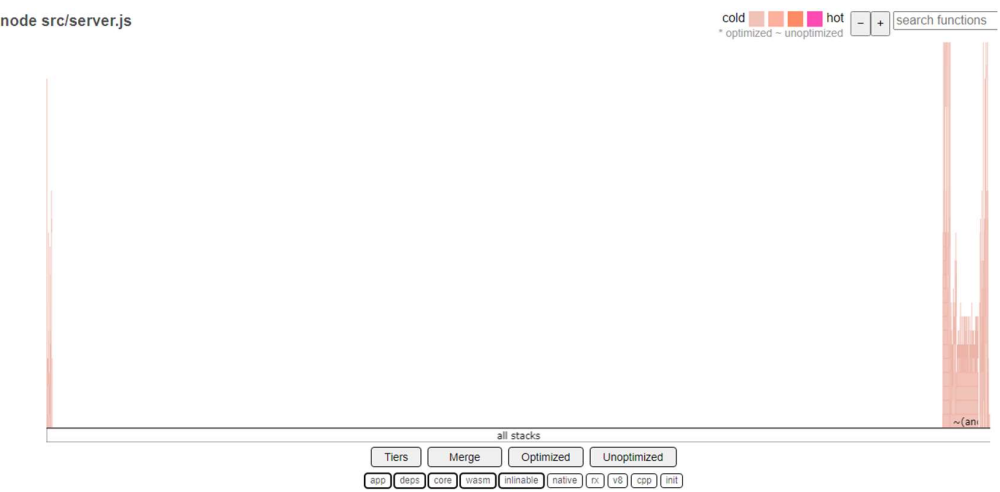
Req/Sec	0	0	35	83	44.65	26.35	11
Bytes/Sec	0 B	0 B	16.5 kB	39.2 kB	21.1 kB	12.4 kB	5.2 kB

```
Req/Bytes counts sampled once per second.
# of samples: 20

0 2xx responses, 893 non 2xx responses
993 requests in 20.17s, 421 kB read
```

Gráfico de flama

node src/server.js

Conclusión

Se puede observar que el proceso corriendo sin console.log es más rápido al responder que el proceso con console.log.
En la carpeta Performance se adjuntan todos los resultados.