**The result of using Apache Benchmarking Tools on CSC326-Group5’s server running on AWS T1.Micro:**

To decide the maximum number of connections before connections drop, send requests with different concurrency levels and get the maximum concurrency level that successfully transmits all packets.

*ab -n 500 -c 500 -r* [*http://ec2-34-233-27-14.compute-1.amazonaws.com/?keywords=nix+tony*](http://ec2-34-233-27-14.compute-1.amazonaws.com/?keywords=nix+tony)

Result: Fail, Too many files open

*ab -n 250 -c 250 -r* [*http://ec2-34-233-27-14.compute-1.amazonaws.com/?keywords=nix+tony*](http://ec2-34-233-27-14.compute-1.amazonaws.com/?keywords=nix+tony)

Result: Success

*ab -n 251 -c 251 -r* [*http://ec2-34-233-27-14.compute-1.amazonaws.com/?keywords=nix+tony*](http://ec2-34-233-27-14.compute-1.amazonaws.com/?keywords=nix+tony)

Result: Fail, Too many files open

* **Therefore, the maximum number of connection is 250**

A total of 250 requests were sent, with a concurrency level 250 (250 connections)

*ab -n 250 -c 250 -r -S* [*http://ec2-34-233-27-14.compute-1.amazonaws.com/?keywords=nix+tony*](http://ec2-34-233-27-14.compute-1.amazonaws.com/?keywords=nix+tony)

* **According to the result below, the average PRS is 66.31 requests/sec,**
* **max PRS = 1 [request]/longest request time(3.767s) = 0.3 requests/sec**
* **Average response time: 15.08ms**
* **99 percentile response time: 3766ms**
* **Utilization of CPU: gotten from stats:**

Maximum Utilization of CPU:48%

Memory: Used 245M, Buffer 51.6M, Cache 278M, Free 14.4M

Disk IO: Read 0, Write 1992K

Network: Receive 166K, send 831K

**Appendix:**

**AB Benchmarking:**

Server Software: WSGIServer/0.1

Server Hostname: ec2-34-233-27-14.compute-1.amazonaws.com

Server Port: 80

Document Path: /?keywords=nix+tony

Document Length: 3953 bytes

Concurrency Level: 250

Time taken for tests: 3.770 seconds

Complete requests: 250

Failed requests: 24

(Connect: 0, Receive: 12, Length: 12, Exceptions: 0)

Total transferred: 1004360 bytes

HTML transferred: 940814 bytes

Requests per second: 66.31 [#/sec] (mean)

Time per request: 3769.896 [ms] (mean)

Time per request: 15.080 [ms] (mean, across all concurrent requests)

Transfer rate: 260.17 [Kbytes/sec] received

Connection Times (ms)

min avg max

Connect: 28 55 91

Processing: 78 939 3728

Waiting: 0 760 2298

Total: 107 994 3767

Percentage of the requests served within a certain time (ms)

50% 838

66% 989

75% 1401

80% 1460

90% 2287

95% 2339

98% 3744

99% 3766

100% 3767 (longest request)

**Dstat info:**

****