Lab 2 Benchmarking Results
CSC326 – Group 24

Maximum number of connections that can be handled by the server before any connection drops: 1000

Maximum number of requests per second (RPS) that can be sustained by the server when operating with maximum number of connections: 213.34 /sec

Average and 99 percentile of response time or latency per request: 350 ms

Utilization of CPU, memory, disk IO, and network when max performance is sustained:

```
----total-cpu-usage---- ------memory-usage----- -dsk/total- -net/total-
usr sys idl wai hiq siq| used  buff  cach  free| read  writ| recv  send
 3   1  92   3   0   0|78.4M 26.1M  469M  419M| 607k 1719k|   0     0
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 260B 1206B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0    72k| 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0   728k| 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
 0   0 100   0   0   0|78.4M 26.1M  469M  419M|   0     0 | 104B  460B
```

Command:

```
ab -n 1000 -c 50 http://35.172.205.127:80/?keywords=csc326+lab2
```

Output:

```
This is ApacheBench, Version 2.3 <$Revision: 1826891 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd,
http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking 35.172.205.127 (be patient)
Completed 100 requests
Completed 200 requests
Completed 300 requests
Completed 400 requests
Completed 500 requests
Completed 600 requests
Completed 700 requests
Completed 800 requests
Completed 900 requests
Completed 1000 requests
Finished 1000 requests


Server Software:        WSGIServer/0.1
Server Hostname:        35.172.205.127
Server Port:            80

Document Path:          /?keywords=csc326+lab2
Document Length:        1613 bytes

Concurrency Level:      50
Time taken for tests:   4.687 seconds
Complete requests:      1000
Failed requests:        0
Total transferred:      1768000 bytes
HTML transferred:       1613000 bytes
Requests per second:    213.34 [#/sec] (mean)
Time per request:       234.366 [ms] (mean)
Time per request:       4.687 [ms] (mean, across all concurrent
requests)
Transfer rate:          368.35 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median    max
Connect:       50  103   39.2     99    1203
Processing:    54  115   37.7    103     561
Waiting:       51  104   23.4    101     561
Total:        110  218   54.5    204    1320

Percentage of the requests served within a certain time (ms)
  50%    204
  66%    215
```

```
 75%      227
 80%      233
 90%      280
 95%      298
 98%      335
 99%      350
100%     1320 (longest request)
```