

# TEST DOCUMENT

COMPSCI-677

LAB 2 - PYGMY.COM

## Overview

- All the tests are written in python scripts within their respective sub-directories
- A central 'run\_client.sh' bash script calls all the test python scripts sequentially
- The tests spin up a varying number of clients - with each client creating its own respective output file of the format 'client\_<client\_number>\_output.txt' and 'client\_<client\_number>\_metrics.txt' for each test within its own sub - directory on the local machine
- All the clients run a fixed number of requests (varying across tests) which are randomly generated from the available services (search/lookup/buy)

There are 5 tests included within the test directory titled test\_1 through test\_5:

Test 1:

- Spins up a single client, picks a set number of requests and generates them randomly, and saves its output and metrics to file

Test 2:

- Uses python multithreading to spin up 2 clients simultaneously, each executing independently and saving their outputs to file

Test 3:

- Uses python multithreading to spin up 5 clients simultaneously, each executing independently and saving their outputs to file

Test 4:

- Spins up a single client, runs 1000 sequential requests and generates them randomly, and saves its output and metrics to file

Test 5:

- Uses python multithreading to spin up 2 clients simultaneously, each running 1000 sequential requests independently and saving their outputs to file

## Directions to run

- The tests themselves can be executed individually or all together by executing `run_client.sh` on their local machines
- Additionally, graders can execute `run_pygmy.sh` on their local machines - which is the master script that handles remote login into all the edlab machines, spinning up of all the servers on each machine and execution of all tests (i.e, calling `run_client.sh`) through a single command