Download and install JMeter from https://jmeter.apache.org/ if you haven't already.

Familiarize yourself with JMeter by going through tutorials and videos available online.

Open JMeter and create a new Test Plan. Command : (sh jmeter)

Add a Thread Group to the Test Plan by right-clicking on the Test Plan and selecting Add -> Threads (Users) -> Thread Group.

Set the number of threads to 1, the loop count to 3, and the ramp-up period to 0.

Add an HTTP Request Defaults configuration element to the Thread Group by right-clicking on the Thread Group and selecting Add -> Config Element -> HTTP Request Defaults. Set the "Server Name or IP" field to www.stevens.edu.

Add a Cache Manager to the Thread Group by right-clicking on the Thread Group and selecting Add -> Config Element -> HTTP Cache Manager. This will help simulate the caching behavior of browsers.

Add an HTTP Header Manager to the Thread Group by right-clicking on the Thread Group and selecting Add -> Config Element -> HTTP Header Manager. Configure the headers to emulate the browser of your choice (e.g., User-Agent).

Add a Constant Timer to the Thread Group by right-clicking on the Thread Group and selecting Add -> Timer -> Constant Timer. Set the "Thread Delay" value to 30000 (30 seconds).

For each page in the sequence (Table 1), add an HTTP Request sampler to the Thread Group by right-clicking on the Thread Group and selecting Add -> Sampler -> HTTP Request. Configure each HTTP Request sampler with the appropriate URL and any required parameters for search actions (steps 3 and 4).

Add a View Results Tree listener to the Test Plan by right-clicking on the Test Plan and selecting Add -> Listener -> View Results Tree. This will help you see the results of each request.

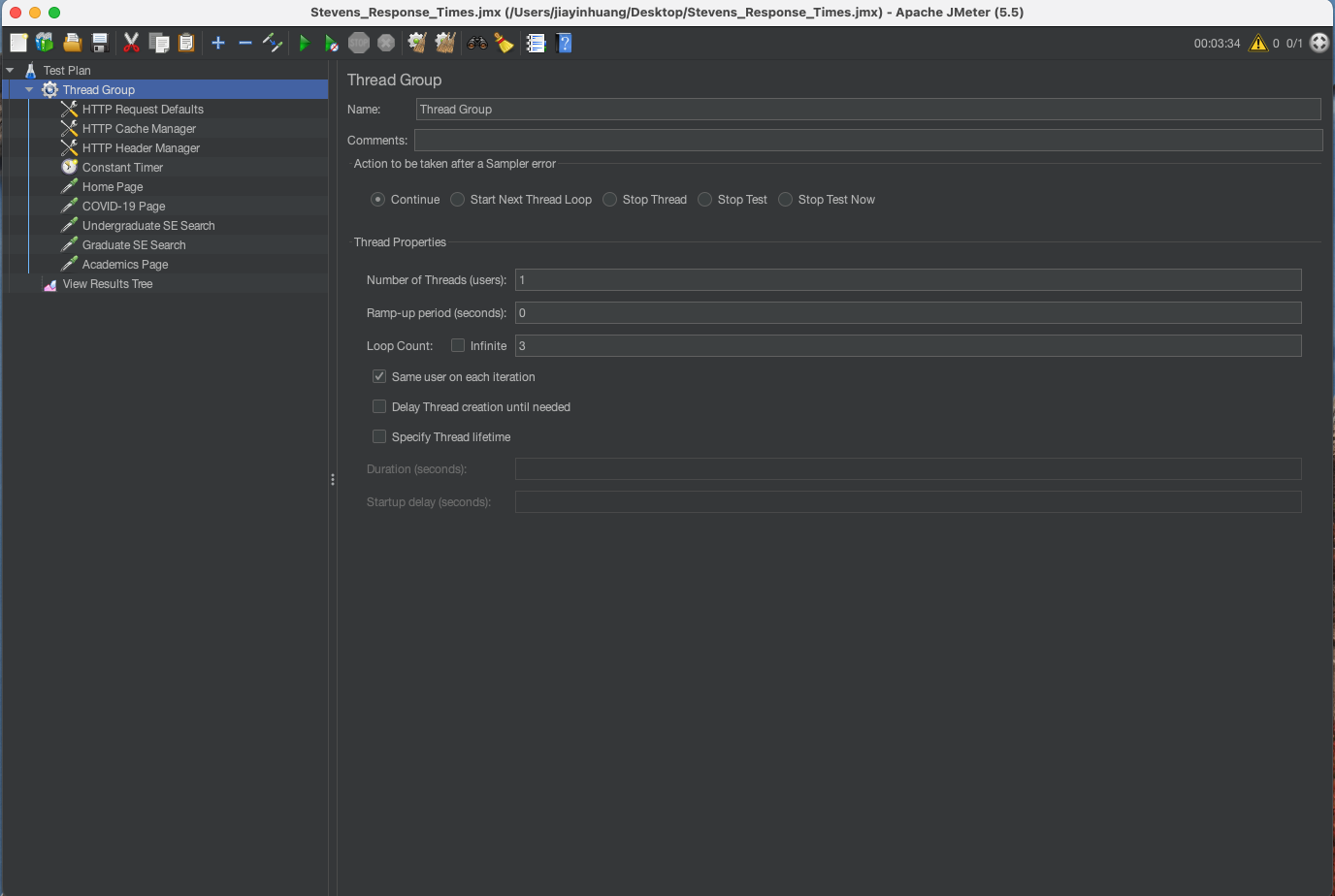
Save the Test Plan and run it by clicking the green "Play" button in the JMeter toolbar.

As the test runs, the View Results Tree will display the response times for each request. Record these response times for later analysis.

Once the test has completed, export the results to a CSV file by right-clicking on the View Results Tree and selecting "Save Table Data" or "Save As...".

Analyze the response times recorded in the CSV file, comparing the results for the first, second, and third runs, considering cache effects.

A screenshot of a computer

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Graphical user interface, text, application

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A screenshot of a computer

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