

Assignment4 Jmeter

- Install JMeter

```
brew update  
brew install jmeter
```

- how to run Jmeter GUI

```
jmeter
```

- create test plan

Right-click the Test Plan node and select Add > Threads (Users) > Thread Group.



The screenshot shows the 'Thread Group' configuration window in JMeter. It has a dark theme. The 'Name' field is set to 'Thread Group'. The 'Comments' field is empty. Under 'Action to be taken after a Sampler error', the 'Continue' radio button is selected. The 'Thread Properties' section includes: 'Number of Threads (users)' set to 128, 'Ramp-up period (seconds)' set to 10, 'Loop Count' with an unchecked 'Infinite' checkbox and a value of 500, and a checked 'Same user on each iteration' checkbox.

Right-click on the Thread Group, select Add > Config Element > HTTP Request Defaults.

change this into our actual serverName/IP and port number.

HTTP Request Defaults

Name: HTTP Request Defaults

Comments:

Basic Advanced

Web Server

Protocol [http]: Server Name or IP: localhost Port Number: 8080

HTTP Request

Path: Content encoding:

Parameters Body Data

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?
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Right-click on the Thread Group, select Add > Sampler > HTTP Request.

- FYI, our database populate procedure will use below params:
 - ResortID: constant 1
 - SeasonID: constant 2
 - DayID: {1,2,3}
 - keep the number of skiers and lift rides as default values for first 3 assignments: let's say number of skiers to be 100k, the number of lift rides to be 200k while skierID will random from [1,100k]
- Our load testing APIs:
 - GET/skiers/{resortID}/seasons/{seasonID}/days/{dayID}/skiers/{skierID}
get the total vertical for the skier for the specified ski day

Write below into the path:

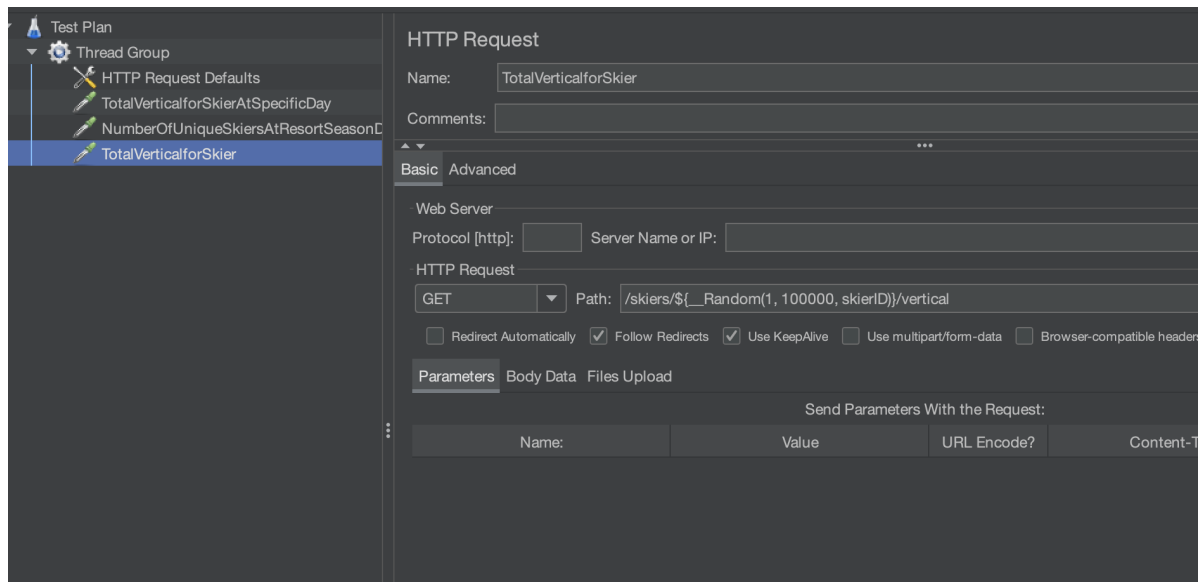
/skiers/1/seasons/2024/days/\${__Random(1, 3, dayID)}/skiers/\${__Random(1, 100000, skierID)}

- GET/resorts/{resortID}/seasons/{seasonID}/day/{dayID}/skiers get number of unique skiers at resort/season/day

/resorts/1/seasons/2024/day/\${__Random(1, 3, dayID)}/

- GET/skiers/{skierID}/vertical get the total vertical for the skier for specified seasons at the specified resort

/skiers/\${__Random(1, 100000, skierID)}/vertical

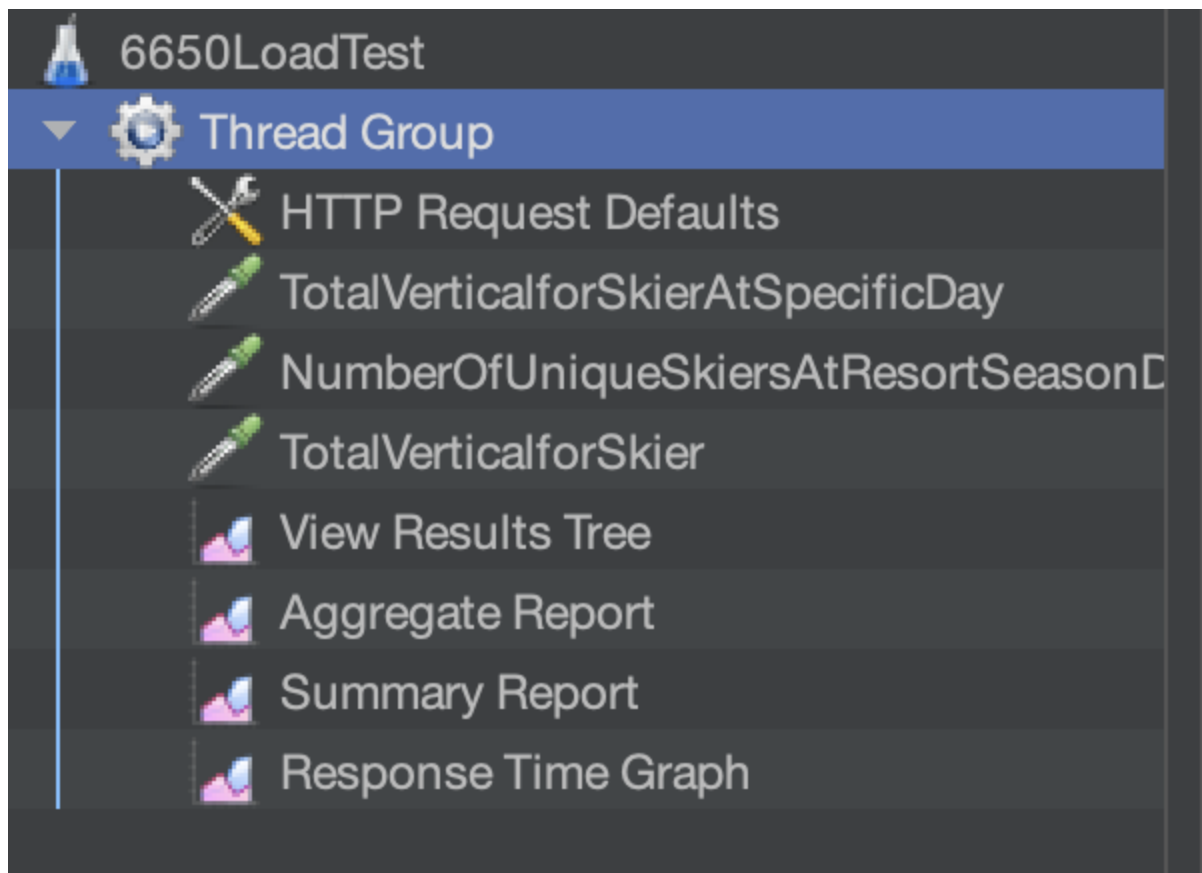


- Add Listener

Right-click on the Thread Group, select Add > Listener > View Results Tree to inspect individual request/response details.

Add Add > Listener > Aggregate Report to see aggregate statistics including average, median, 90th percentile (p90), etc.

Add Add > Listener > Summary Report and Add > Listener > Response Times Over Time to track response times and other statistics during the test.



- how to run
 - run in the GUI click the green button
 - run in the CLI

```
jmeter -n -t your_test_plan.jmx -l test_results.jtl -e -o /p
```