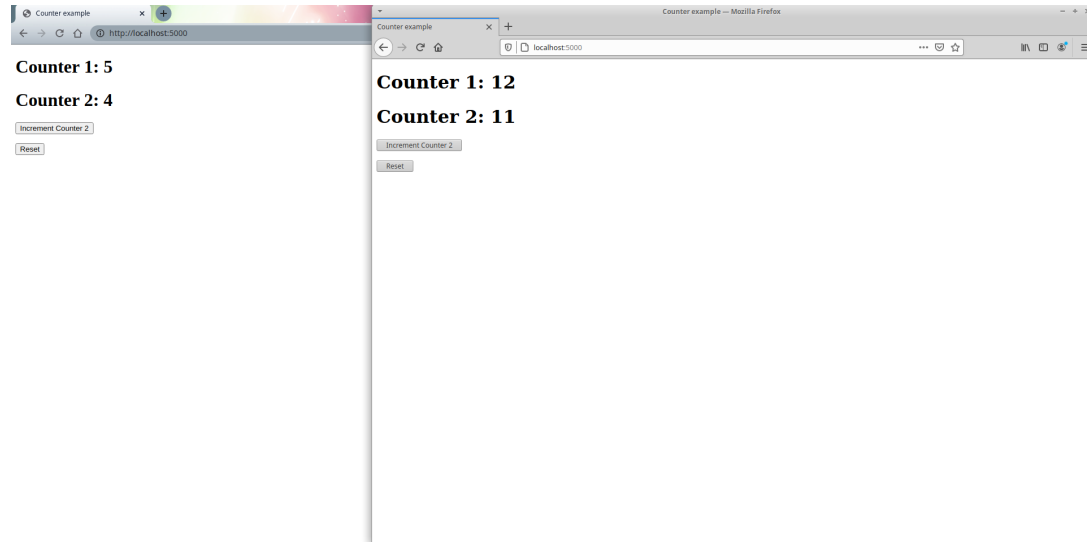


Tommy Huynh
Juheng Mo
Calvin Nguyen

Cpsc 449-01
March 23, 2021

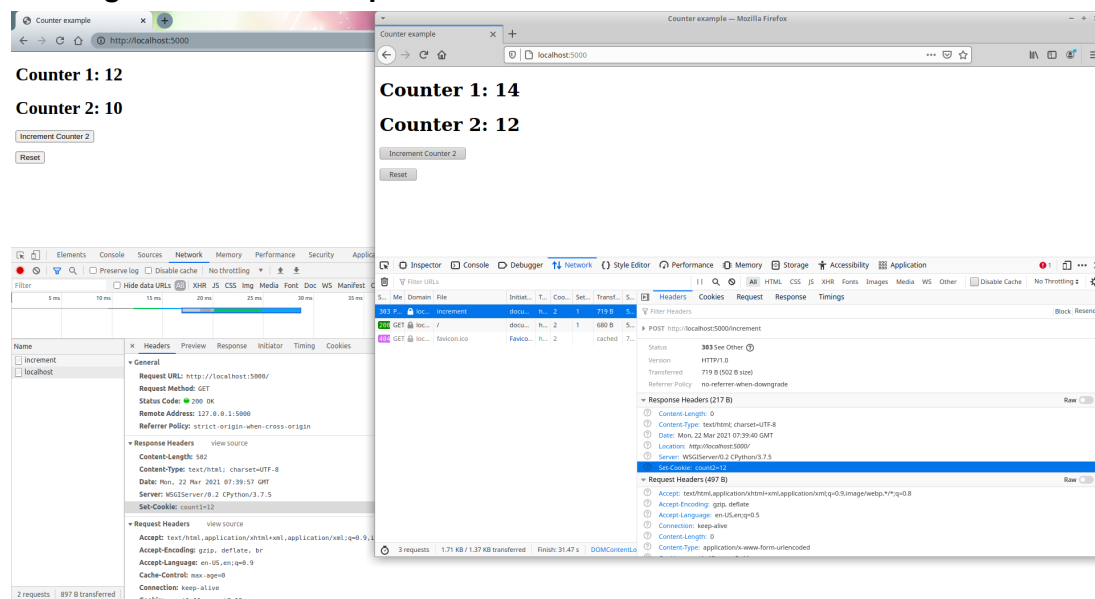
Project 3 Documentation

2. Starting the app on two different browsers

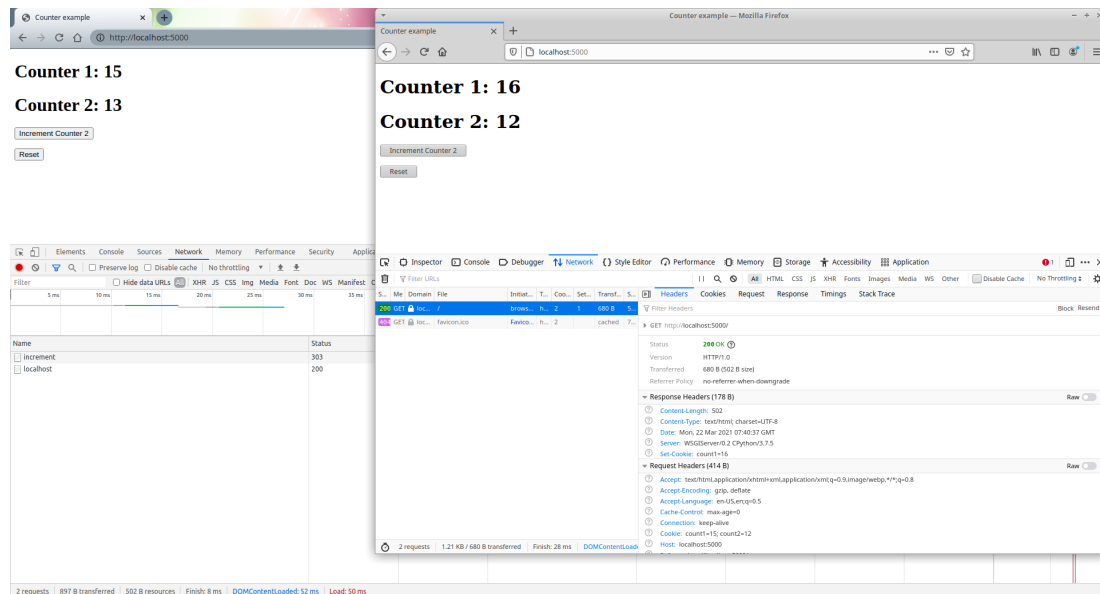


This shows the two browsers having counters that work independently from each other.

3. Using browser's developer tools



Initial response headers shown, with the counters having arbitrary numbers as an example. Response header in this example reflects the number in counter 2.



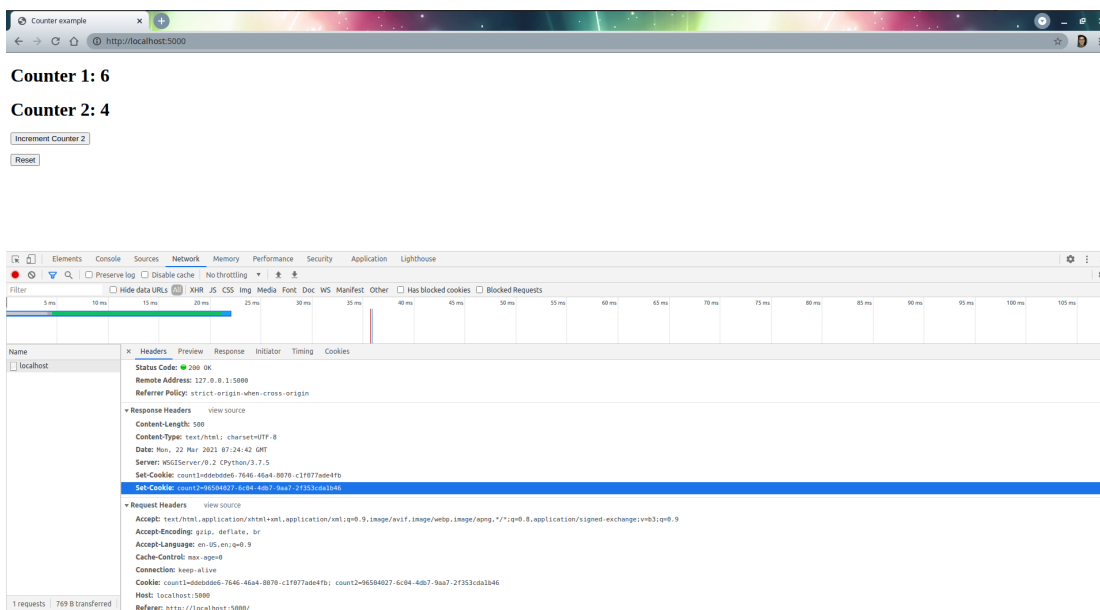
Response headers shown after refreshing the page and the increment button has been pressed. Numbers in the response headers have been updated and now reflect the current counter's number.

5. Writing the script dump.py

```
student@tuffix-vm:~/Back-End-Assignment-3$ ./dump.py http://localhost:5100
{'cpsc449': 'https://sites.google.com/view/cpsc449'}
{'github': 'https://github.com/ProfAvery'}
{'twitter': 'https://twitter.com/ProfAvery'}
```

This shows that the script was successful and creates the same output as the example given.

11. Using the browser's developer's tool for the group's code.

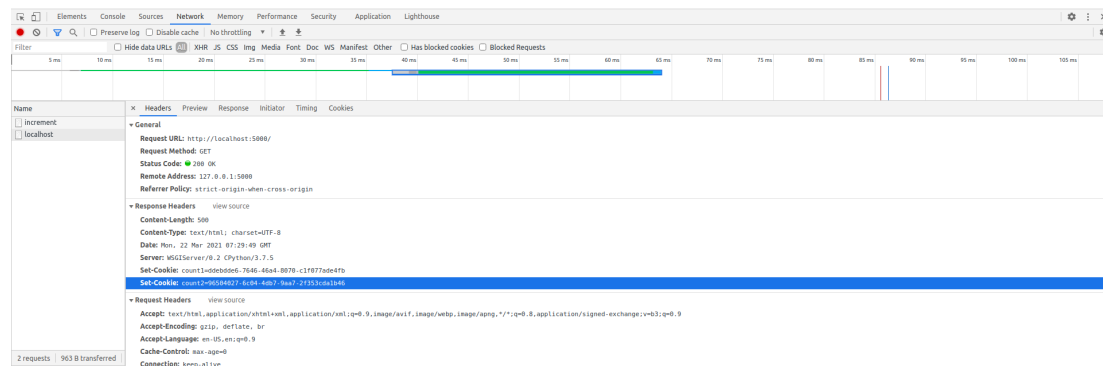


Initial session ID shown, ID should stay the same regardless of incrementing the counter or pressing the refresh button. Set-cookies in the response header in this examples shows the ID: 9650....



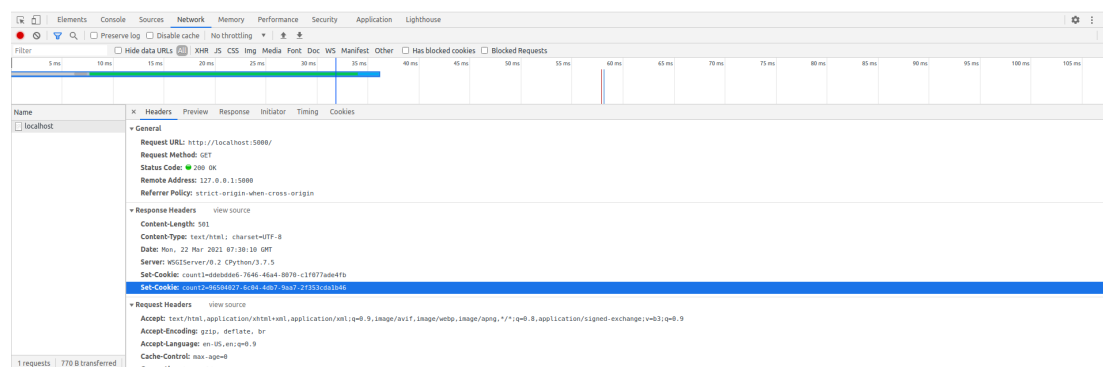
Counter 1: 9

Counter 2: 7



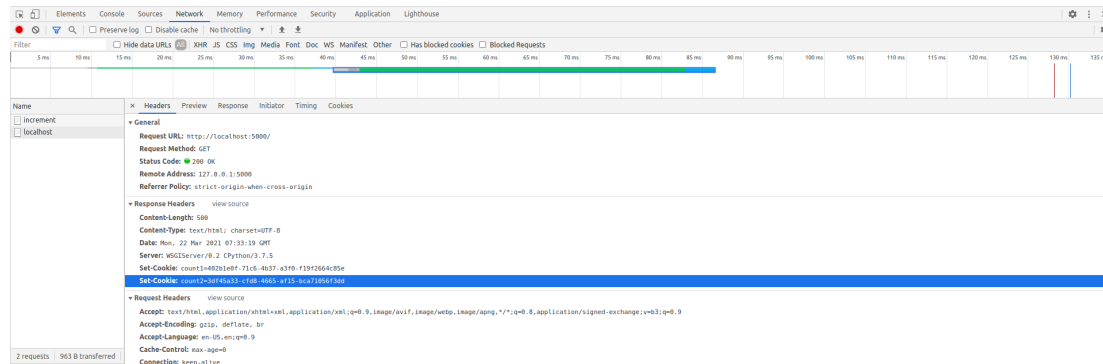
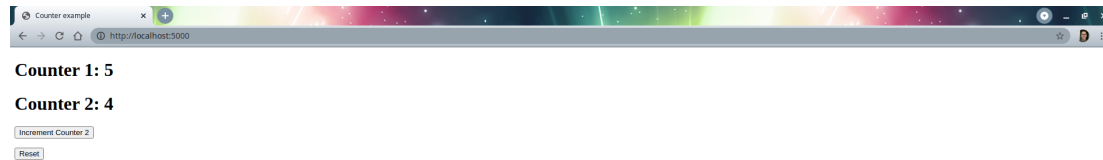
Counter 1: 11

Counter 2: 7

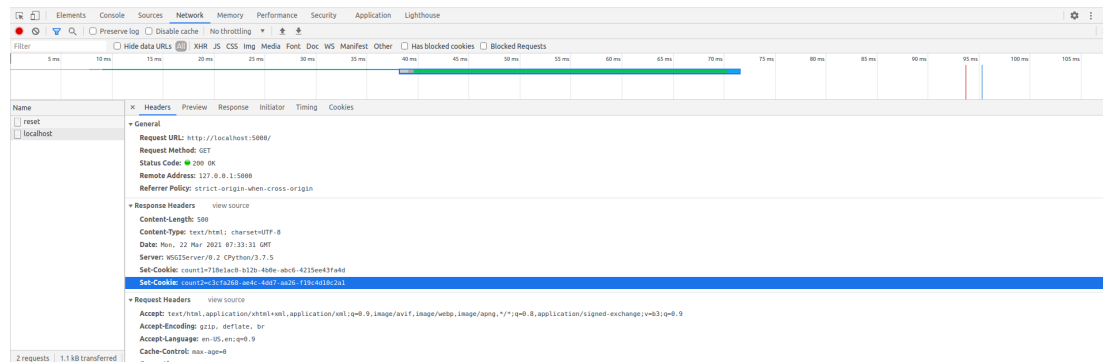
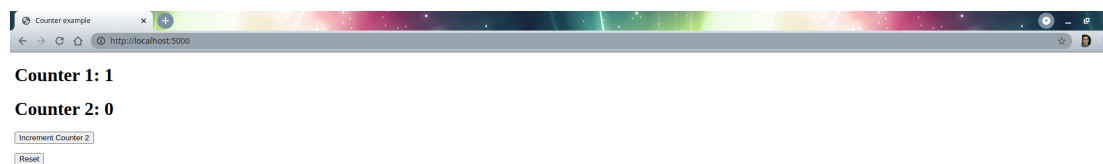


Two examples of the counters incremented and refreshed still exhibiting the same session ID in the set-cookies from the initial test.

12. Pressing the reset button to clear the cookies and generate a new session ID

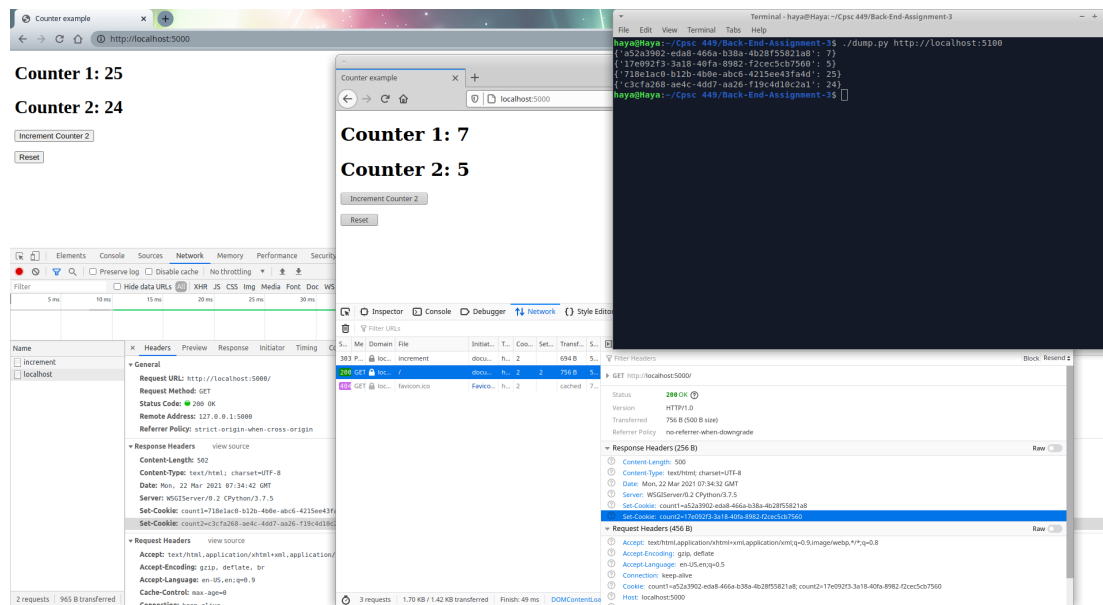


Initial session ID



The results of pressing the reset button on the webpage, showing that the request creates a new session ID as it clears out any previous session's cookies

13. Output of Dump.py showing it handling two active sessions.



Dump.py shows it is capable of detecting two sessions from two different browsers. Each browser still is capable of having counters working independently from each other. Each browser also has their own unique session ID.