Stephen Lee, Armando Lopez, Scott Clary
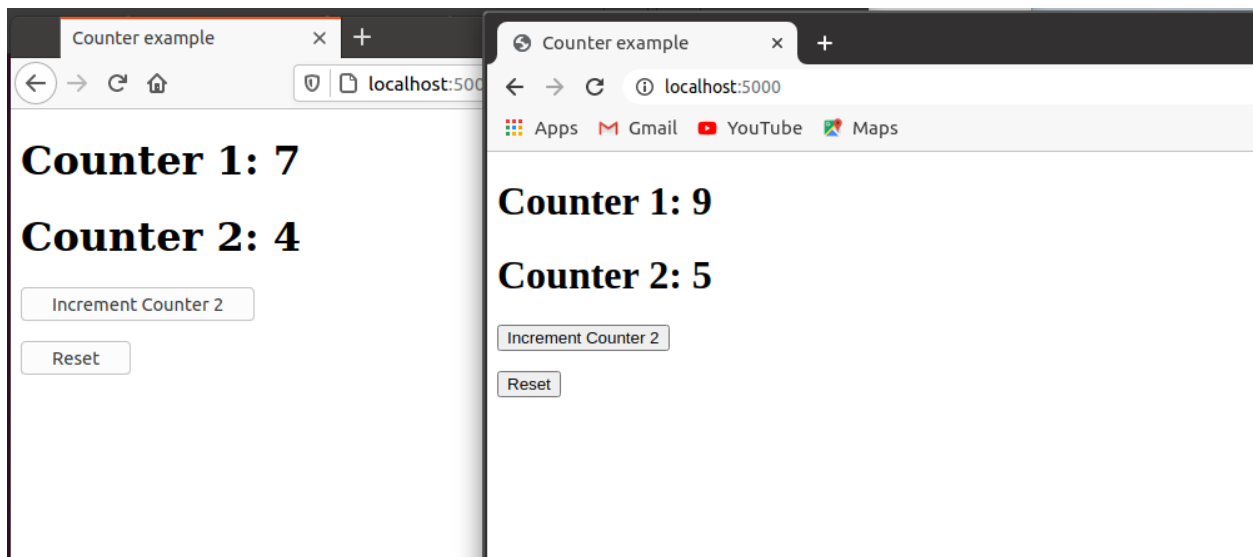
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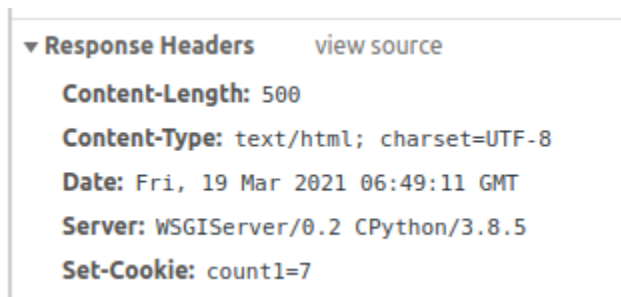Project 3: Cookies

Screenshots

Step 2:

Screenshot of two different browsers: left is Firefox and right is Chrome. Refreshes increments Counter 1 and button increments counter 2. Counters are separate in each browser.

Step 3:

Screenshot of Set-Cookie: response headers. Values change when refreshed or clicked.

First two pictures are from Chrome developers tools. There are two different response headers for each cookie: count1 and count2.

After refreshed is clicked, count1 is incremented from 7 to 8.

After Increment Counter 2 button is clicked, count2 is incremented, then reroutes to localhost, which increments count1.

You can also notice the Date (specifically the time) also changes.

Step 11:

Testing Project by repeating step 3. Check Set-Cookie response headers.
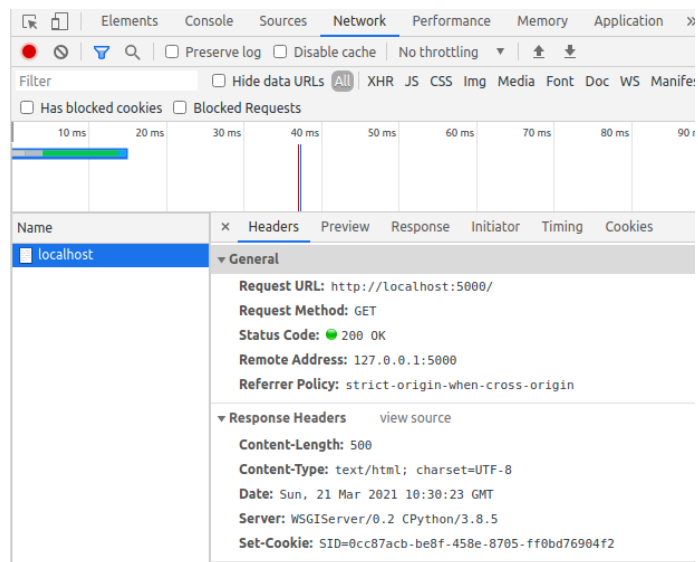
Set-Cookie only has SID (session id)
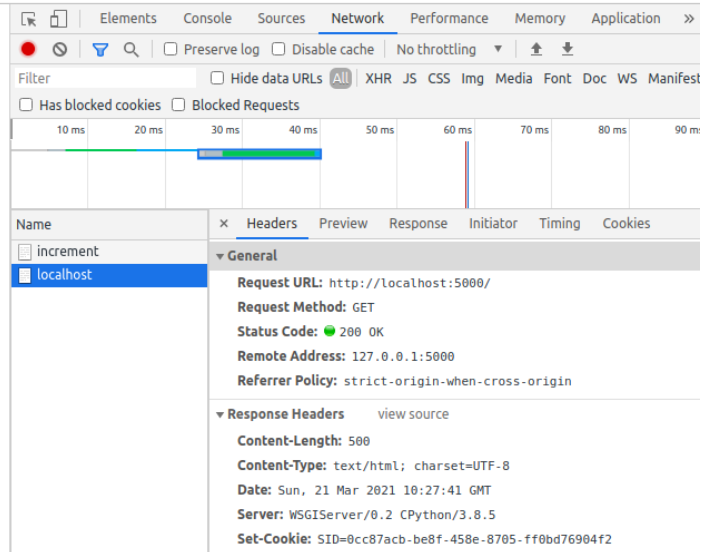
Clicking refresh button increments counter 1 (name: localhost) and set-cookie remains the same.
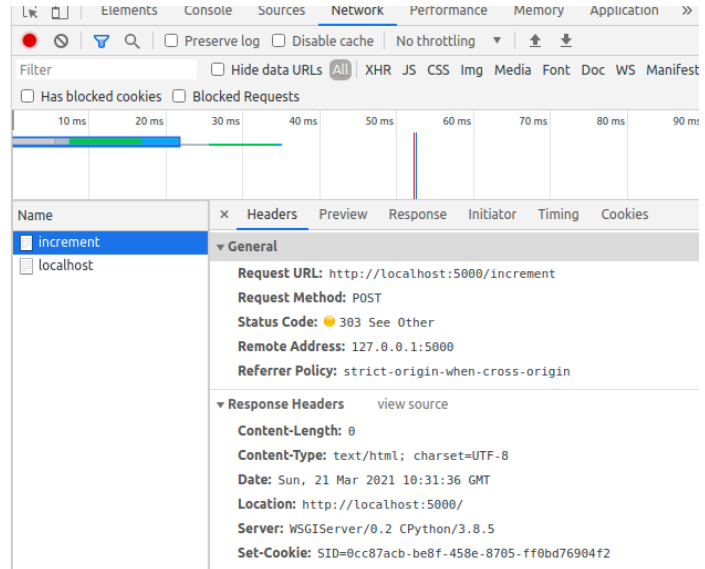

Clicking Increment Counter 2 button increments counter2 (name: increment). It then reroutes to localhost, which increments counter 1. Set-Cookie still doesn't change.

Counter 1: 9

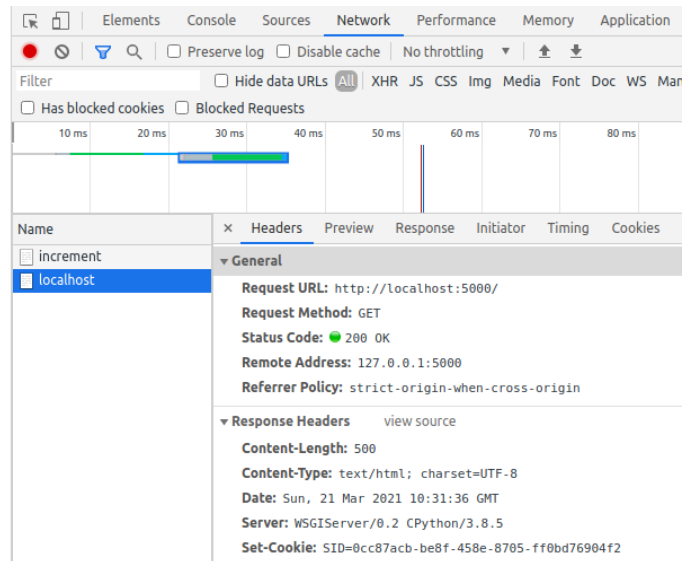**Counter 2: 5**

Increment Counter 2

Reset

| Elements | Console | Sources | **Network** | Performance | Memory | Application | » |

● ⊘ | ▽ 🔍 | ☐ Preserve log ☐ Disable cache | No throttling ▾ | ⬆ ⬇

Filter | ☐ Hide data URLs [All] XHR JS CSS Img Media Font Doc WS Manifest
☐ Has blocked cookies ☐ Blocked Requests

10 ms   20 ms   30 ms   40 ms   50 ms   60 ms   70 ms   80 ms   90 ms

Name | × **Headers** Preview Response Initiator Timing Cookies
☐ increment | ▾ **General**
☐ localhost |

    Request URL: http://localhost:5000/increment
    Request Method: POST
    Status Code: 🟡 303 See Other
    Remote Address: 127.0.0.1:5000
    Referrer Policy: strict-origin-when-cross-origin

    ▾ **Response Headers**   view source
    Content-Length: 0
    Content-Type: text/html; charset=UTF-8
    Date: Sun, 21 Mar 2021 10:31:36 GMT
    Location: http://localhost:5000/
    Server: WSGIServer/0.2 CPython/3.8.5
    Set-Cookie: SID=0cc87acb-be8f-458e-8705-ff0bd76904f2

Counter 1: 9

Counter 2: 5

Increment Counter 2

Reset

| Elements | Console | Sources | **Network** | Performance | Memory | Application |

● ⊘ | ▽ 🔍 | ☐ Preserve log ☐ Disable cache | No throttling ▾ | ⬆ ⬇

Filter | ☐ Hide data URLs [All] XHR JS CSS Img Media Font Doc WS Man
☐ Has blocked cookies ☐ Blocked Requests

10 ms   20 ms   30 ms   40 ms   50 ms   60 ms   70 ms   80 ms

Name | × **Headers** Preview Response Initiator Timing Cookies
☐ increment | ▾ **General**
☐ localhost |

    Request URL: http://localhost:5000/
    Request Method: GET
    Status Code: 🟢 200 OK
    Remote Address: 127.0.0.1:5000
    Referrer Policy: strict-origin-when-cross-origin

    ▾ **Response Headers**   view source
    Content-Length: 500
    Content-Type: text/html; charset=UTF-8
    Date: Sun, 21 Mar 2021 10:31:36 GMT
    Server: WSGIServer/0.2 CPython/3.8.5
    Set-Cookie: SID=0cc87acb-be8f-458e-8705-ff0bd76904f2

Also notice the Date (specifically the time) also updates and changes.

Step 12:

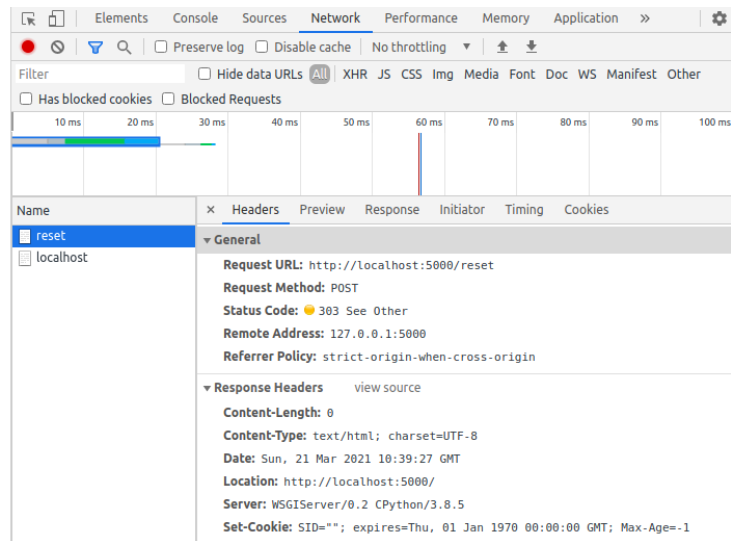Checking the Set-Cookie values when reset button is clicked.

Set-Cookie still only has SID. It is cleared and empty. The values for counter 1 and 2 are also cleared. At this point, the values for counter 1 and 2 are not 0. They actually do not exist. Screenshot shows 0 because after reset, it reroutes to localhost, which will create counter 1 and 2 and set their values to 0.
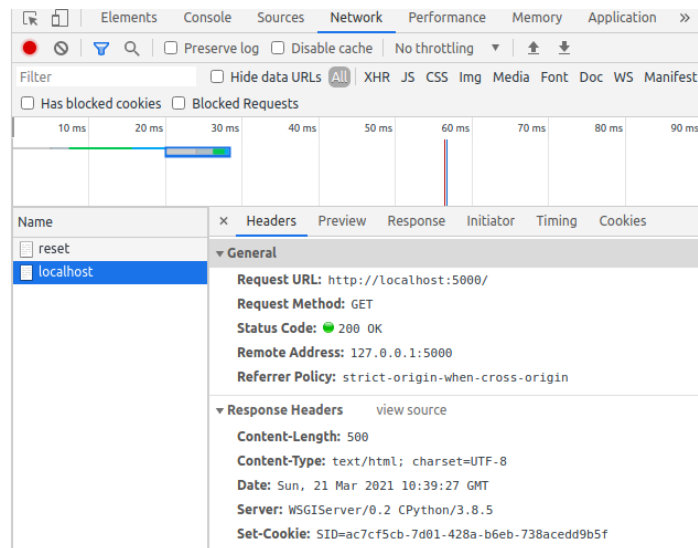

After clearing, it then reroutes back to localhost, which will see that SID is empty so create a new SID value.

SID is different from the first session.

Step 13:

Screenshot of dump.py for two separate sessions on two different browsers (I used Chrome and Firefox).

Chrome on left and Firefox on right. Dump.py output shows below. The values are stored as key-value pair. The key is the SID and the value is the SDATA in the format of a dictionary, containing count1 and count2.

The sessions are separate and the values are also separate.