**ANSWERS FOR THE PROJECT**

**ANSWER FOR QUESTION ONE**

**1. Is your browser running HTTP version 1.0 or 1.1? What version of HTTP is the server running?**

HTTP /1.1 and the version of the HTTP that the server is running is HTTP/1.1

**2. What languages (if any) does your browser indicate that it can accept to the server**?

* Accept-Language: en-US,en;q=0.9\r\n=which is the English-US Language

**3. What is** **the IP address of your computer? Of the gaia.cs.umass.edu server**?

* My IP Address is 192.168.105.33
* gaia.cs.umass.edu server ip address is 128.119.245.12

**4. What is the status code returned from the server to your browser?**

* 200 OK

**5. When was the HTML file that you are retrieving last modified at the server?**

* Last-Modified: Fri, 29 Mar 2024 05:59:01 GMT\r\n

**6. How many bytes of content are being returned to your browser?**

* 209 bytes of content are being returned

**7. By inspecting the raw data in the packet content window, do you see any headers within the data that are not displayed in the packet-listing window? If so, name one.**

* No Header that is in their

**ANSWER FOR QUESTION TWO**

**8. Inspect the contents of the first HTTP GET request from your browser to the server. Do you see an “IF-MODIFIED-SINCE” line in the HTTP GET?**

* No there is not “IF-MODIFIED-SINCE” line in the HTTP GET Message

**9. Inspect the contents of the server response. Did the server explicitly return the contents of the file? How can you tell?**

* The server did explicitly return the contents of the file.Wireshark includes a section titles “Line-Based Text Data ” which shows what the server sent back to my browser which is specifically what the website showed when I brought it up on my browser

**10. Now inspect the contents of the second HTTP GET request from your browser to the server. Do you see an “IF-MODIFIED-SINCE:” line in the HTTP GET? If so, what information follows the “IF-MODIFIED-SINCE:” header?**

* Yes, in the second HTTP message an  **IF-MODIFIED-SINCE** line is included. The information that follows is the date and time that is last accessed the webpage

**11. What is the HTTP status code and phrase returned from the server in response to this second HTTP GET? Did the server explicitly return the contents of the file? Explain.**

* The server did not return the contents of the file because the browser cimply retrieved the contents from its cache it would have returned the contents of the file, instead It simply told my browser to retrieve the old file from the cached memory

**ANSWER FOR QUESTION THREE**

**12. How many HTTP GET request messages did your browser send? Which packet number in the trace contains the GET message for the Bill or Rights?**

* My Broswer sent 2 HTTP GET request to the server The packet that contained the GET message was packet number 47 and 52

**13. Which packet number in the trace contains the status code and phrase associated with the response to the HTTP GET request?**

* The packet that contains the status code and phrase which the server sent in response to the GET message was the packet number 52

**14. What is the status code and phrase in the response?**

* The code and phrase in the response was 200 OK

**15. How many data-containing TCP segments were needed to carry the single HTTP response and the text of the Bill of Rights?**

* The data was sent in 4 TCP segments to the browser,then reassembled

**ANSWERS FOR QUESTION FOUR**

**16. How many HTTP GET request messages did your browser send? To which Internet addresses were these GET requests sent?**

* My Broswer sent 3 http GET message requests. One each to each for each of the following: Initial Page, The Pearson Logo and the image of the 8th edition book

**17. Can you tell whether your browser downloaded the two images serially, or whether they were downloaded from the two web sites in parallel? Explain.**

* The broswer downloaded the two images in serially. I believe this to be the case bacause the first image was requested and sent before the second image was requested from the browser. Had they been running parallel, both files would have been requested then would have returned in the same time period. In this case however, the second image was only requested after the first image come back.
* **ANSWERS FOR QUESTION FIVE**

**18. What is the server’s response (status code and phrase) in response to the initial HTTP GET message from your browser?**

* Packet 151 in the trace contains the first GET and packet 196 contains the REPLY. The server’s response is 196 is:Authorization required shown in the screenshot I sent

**19. When your browser’s sends the HTTP GET message for the second time, what new field is included in the HTTP GET message?**

* The new field is Authorization: Basic d2lyZXNoYXJrLXN0dWRlbnRzOm5ldHdvcms=\r\n