

# **ECE361 – Computer Networks**

## **Wireshark Lab 1: HTTP**

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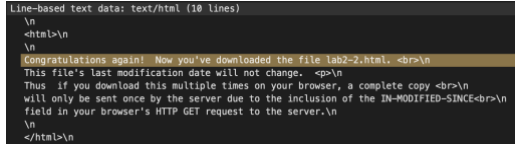
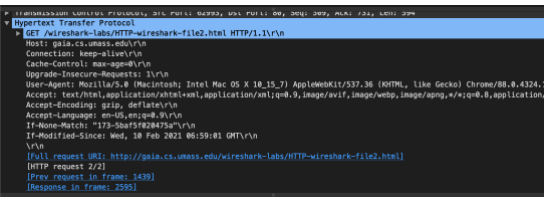
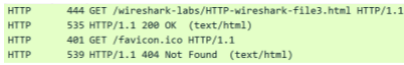
**Group Details:**

Student #: 1005242300

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**Mark:**

	Question	Answer				
1	Is your browser running HTTP version 1.0 or 1.1? What version of HTTP is the server running?	Both are running at 1.1  Request Version: HTTP/1.1				
2	What languages (if any) does your browser indicate that it can accept to the server?	Accept-Language: en-us				
3	What is the IP address of your computer? Of the gaia.cs.umass.edu server?	<table><tr><td>Computer</td><td>Server</td></tr><tr><td>Source 192.168.2.13</td><td>Destination 128.119.245.12</td></tr></table>	Computer	Server	Source 192.168.2.13	Destination 128.119.245.12
Computer	Server					
Source 192.168.2.13	Destination 128.119.245.12					
4	What is the status code returned from the server to your browser?	Status Code: 200				
5	When was the HTML file that you are retrieving last modified at the server?	Last-Modified: Wed, 10 Feb 2021 06:59:01 GMT\r\n				
6	How many bytes of content are being returned to your browser?	Content-Length: 128\r\n[Content length: 128]				
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, I do not see any headers within the data that are not displayed in the packet-listing window.				
8	Inspect the contents of the first HTTP GET request from your browser to the	No, I do not see an “IF-MODIFIED-SINCE” line in the HTTP GET.				

	server. Do you see an “IF-MODIFIED-SINCE” line in the HTTP GET?	
9	Inspect the contents of the server response. Did the server explicitly return the contents of the file? How can you tell?	<p>Yes</p> 
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?	<p>Yes</p> 
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.	<p>Answer:</p> <pre>Request Version: HTTP/1.1 Status Code: 304 [Status Code Description: Not Modified] Response Phrase: Not Modified</pre> <p>Explanation: The contents have not been changed. For this reason, we know there is no need for the server to return the contents again to us.</p>
12	How many HTTP GET request messages were sent by your browser?	<p>1</p> 
13	How many data-containing TCP segments were needed to carry the single HTTP response?	4
14	What is the status code and phrase associated with the response to the HTTP GET request?	<p>Status Code: 200 [Status Code Description: OK] Response Phrase: OK</p>
15	Are there any HTTP status lines in the transmitted data	No HTTP status lines in the transmitted data associated with a TCP-induced “Continuation”?

	associated with a TCPinduced “Continuation”?	
16	How many HTTP GET request messages were sent by your browser? To which Internet addresses were these GET requests sent?	3 Requests: <ul style="list-style-type: none"> <li>- Initial page address: 128.119.245.12</li> <li>- Pearson logo: 128.119.245.12</li> <li>- Pearson book: 178.79.137.164</li> </ul>
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.	<p>Answer: The browser downloaded the 2 images serially.</p> <p>Explanation: The 1<sup>st</sup> image was requested and sent before the 2<sup>nd</sup> image was even requested from the browser. If both images were requested and returned at the same time, this would indicate them running in parallel.</p>
18 (optional)	What is the server’s response (status code and phrase) in response to the initial HTTP GET message from your browser?	
19 (optional)	When your browser’s sends the HTTP GET message for the second time, what new field is included in the HTTP GET message?	