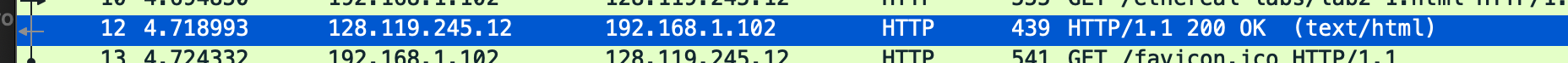
Written by z5223731

Exercise 3 Answer:

Question 1: What is the status code and phrase returned from the server to the client browser?

Answer: Status code is 200 and phrase returned from server is OK.



Question 2: When was the HTML file that the browser is retrieving last modified at the server? Does the response also contain a DATE header? How are these two fields different?

Answer:

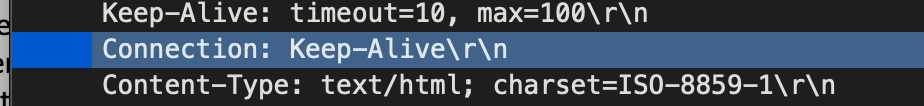
1. The date of last modified is Tue, 23 Sep 2003 05:29:00 GMT
2. Yes
3. The date header contains the date and time of the last message was generated but the Last-Modified header contains the date and time of the resource in the server was last modified.

Graphical user interface, text, application, chat or text message

Description automatically generated

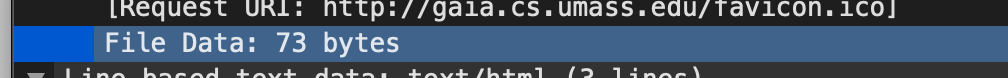
Question 3: Is the connection established between the browser and the server persistent or non-persistent? How can you infer this?

Answer: The connection is persistent due to the Connection field is Keep-Alive and also the default connection of HTTP 1.1 is persistent.



Question 4: How many bytes of content are being returned to the browser?

Answer: 73 bytes.



Question 5: What is the data contained inside the HTTP response packet?

Answer: “Congratulations. You've downloaded the file lab2-1.html!” or we can say text and html. Graphical user interface, text, application

Description automatically generated

Exercise 4 Answer:

Question 1: Inspect the contents of the first HTTP GET request from the browser to the server. Do you see an “IF-MODIFIED-SINCE” line in the HTTP GET?

Answer: Nope

Graphical user interface, text

Description automatically generated

Question 2: Does the response indicate the last time that the requested file was modified?

Answer: Yes, the time is Tue, 23 Sep 2003 05:35:00 GMT

A picture containing text

Description automatically generated

Question 3: Now inspect the contents of the second HTTP GET request from the browser to the server. Do you see an “IF-MODIFIED-SINCE:” and “IF-NONE-MATCH” lines in the HTTP GET? If so, what information is contained in these header lines?

Answer: Yes

If-Modified-Since: Tue, 23 Sep 2003 05:35:00 GMT

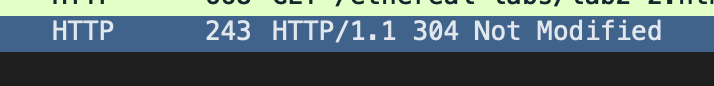
If-None-Match: "1bfef-173-8f4ae900"

Text

Description automatically generated

Question 4: 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.

Answer: Status code is 304 and phrase is Not Modified. The server doesn’t return the contents of the file because there is no Last-Modified field which indicate the time of resource in the server was modified.



Question 5: What is the value of the Etag field in the 2nd response message and how it is used? Has this value changed since the 1st response message was received?

Answer: The value of Etag in the 2nd response message is “1bfef-173-8f4ae900", Etag is a little bit similar to Last-Modified but Etag value is unique identifier generated and change every single time by the server if the cached content is modified, it is used for determining whether the cached content is up to date or not.

A picture containing graphical user interface, text

Description automatically generated