

COMP9331 Lab2

EXERCISE 3

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

- The status code is 200, phrase 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?

- The file was last modified at on the 23rd of September 2003.
- The response also contains a date header which is exactly the same as the date modified
- Means that the date/time the message was sent is also when it was last modified

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

- Connection is persistent
- This is inferred by looking at the connection field of both the request and response headers 'Connection' field which states Keep Alive.
- In HTTP, this refers to a persistent connection

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

- From the 'File data' field, we see there are 73 bytes returned

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

- From the 'Content-type' field, we see that the data is text and html.

EXERCISE 4

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?

- No, there is not 'IF-MODIFIED-SINCE' line in the first HTTP GET

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

- Yes, the last modified time was Tue, 23 September 2003, 05:35:00 GMT

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?

- Yes, both ‘IF-MODIFIED-SINCE’ and ‘IF-NONE-MATCH’ lines are in the second HTTP GET.
- ‘IF-MODIFIED-SINCE’ contains the time Tue, 23 September 2003, 05:35:00 GMT
- ‘IF-NONE-MATCH’ contains: "1bfef-173-8f4ae900"\r\n

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.

- The response of the second GET came with status code 304 and phrase ‘Not modified’
- The server did NOT return the contents of the file a second time
- This is because the server will only send back the resource if it is modified after a given date. Since our file was not modified, the request was returned with the status of ‘304 Not modified’
- This is useful as the person making the request does not have to continually download the same file if it wasn’t modified (i.e. it’s exactly the same as it was last time)

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?

- The value of the ETag field is "1bfef-173-8f4ae900"\r\n
- This value is exactly the same as the first response message
- The ETag acts as an identifier assigned by the server to a specific version of a resource. Therefore, if a version is not modified/changed, it is logical for the ETag to be the same