Gabriel Emerson

ELEC 5220 - Lab 2

9/9/21

Questions

All Answers can be seen in Figure 1 for Questions 1-5.

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

My browser is running HTTP version 1.1, and the server is also running HTTP version 1.1.

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

Accepts language: en-US

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

My IP is 192.168.1.100 and the server is 128.119.245.12

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

HTTP/1.1 200 OK

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

Length of this packet is 432.

All Answers can be seen in Figures 2&3 for Questions 6-8.

6. 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?

There was only one GET message sent by the browser. It was packet number 45.

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

It is packet number 55 shown in figure 3.

8. What is the status code and phrase in the response?
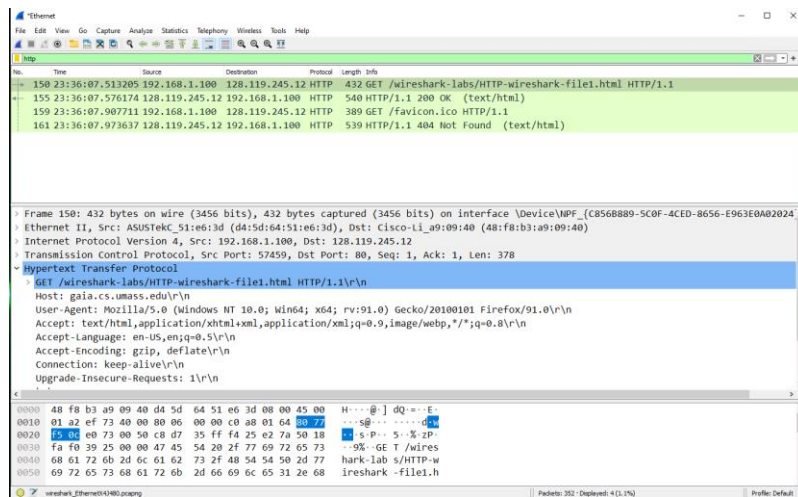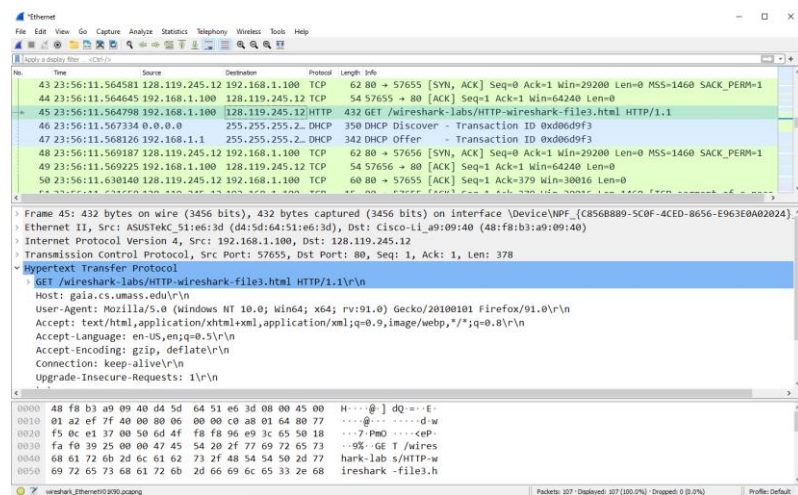
HTTP/1.1 200 OK
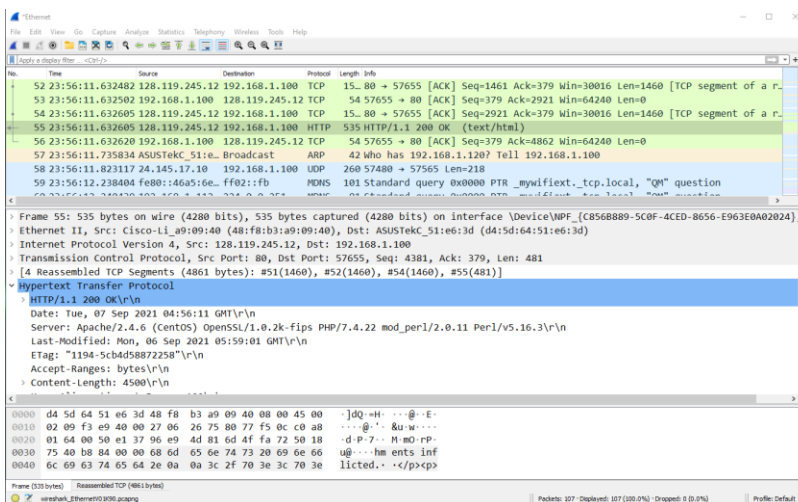
Figure 1

Figure 2

Figure 3

Answer to Question 9 can be found in Figure 4.

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

Three GET messages were sent and 2 were sent to the same destination of 128.119.245.12, while one was sent to 178.79.137.164.
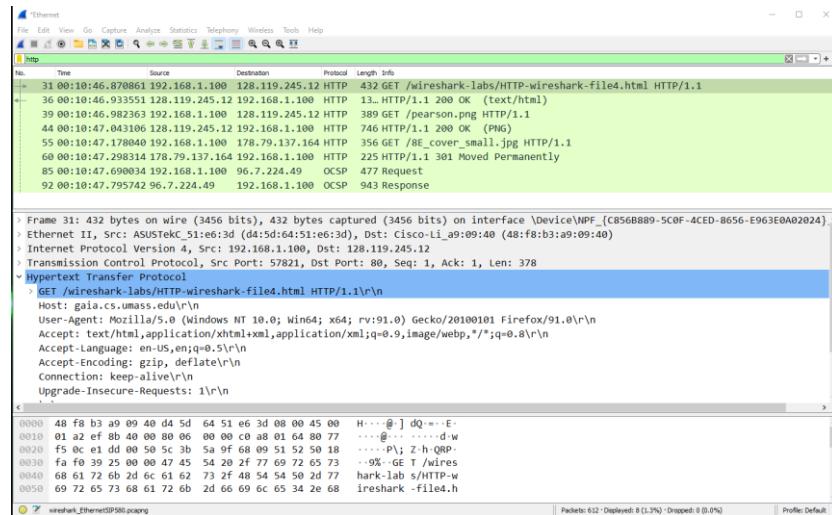

Figure 4

Answers to Questions 10 and 11 can be found in Figure 5.

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

The initial response is: HTTP/1.1 401 Unauthorized.

11. 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 an authorization field. This is done because we had to send the server a username and password, in order to get authorized to receive the page.
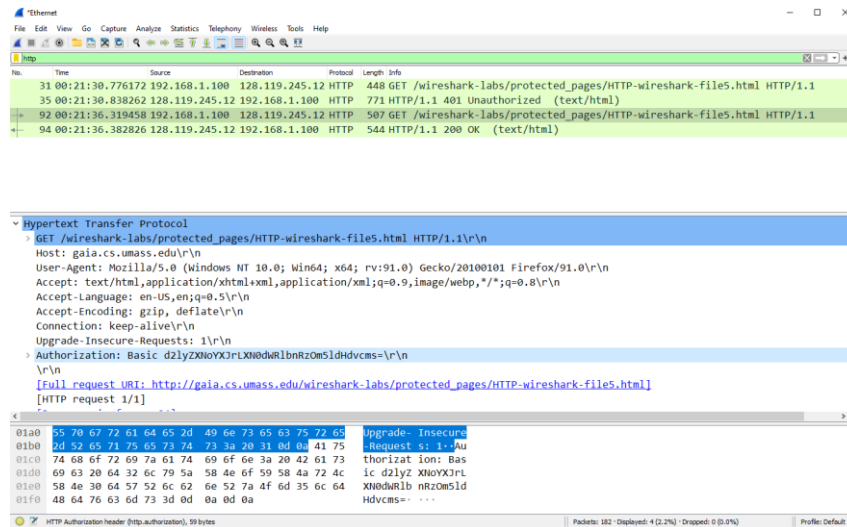
Figure 5

Figures 6 and 7 demonstrate using the provided link to decode the Base64 string back into ASCII characters

Figure 6

The Form.SizeLimit is 10000000bytes. Please, do not post more data using this form.
Source data from the Base64 string:

```
:network
```

Type (or copy-paste) some text to a textbox bellow. The text can be a Base64 string to decode or any string to encode to a Base64.

```
Om51dHdvcms=
```

or select a file to convert to a Base64 string.

Browse... No file selected.   Convert the source data

What to do with the source data:
○ **encode** the source data **to a Base64** string (base64 encoding)
    Maximum characters per line: 76
◉ **decode** the data **from a Base64** string (base64 decoding)

Base64 p

Figure 7