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Lab Questions

1. What is a server.

A server is a remote computer on a network. That provides a service to other external computers on a network called clients. A Example would be, your smart phone. It needs the cell phone towers to be able to make a phone call.

2. What is a client

A computer or a program on a computer. That relies on sending and receiving data to another computer on a network. Examples of this would be a web browser, Outlook email software.

3.A tag and element are similar, but they are not the same thing, in that a tag is the start or end of an element and an element is a compilation of the start tag, end tag and everything in between.

4.What tags must every webpage have?

<html></html>

<head></head>

<title></title>

<body></body>

1. What is a TCP/IP Packet?

Transmission control protocol, Internet control protocol. This is a data packet communication standard that allows a whole network to communicate between devises. Whether it is using a LAN or a WAN, this type of packet switching technology is called TCP/IP. The standard consist of many communication layers. The Application layer, Transport layer, the Internet layer, and the Network layer. These layers utilize different communication ports for network communications, a good example of everyday used application is. Your web browser it uses the application layer, which relies on the use the http protocol or smtp for checking websites or emails. This application communicates with transport layer by using a por like port 80 for http protocol. TCP protocol can exchange data with all sorts of applications that uses SMTP, HTTP, FTP, TCP, UDP. The transport layer is responsible braking down data up in to packets and putting a header on it. So it is able to be sent a reassembled at the receiving end. After packets are broken down they are sent to the internet layer. Which uses the Internet Protocol layer to attach origin and destination addresses. After that finally the data is then sent to the network layer which is broken down in to electrical impulses.

SHIEH, Alen, et al. “A Stateless Approach ToConnection-Oriented Protocols,PDF.” 2008.

“What Is a TCP/IP Packet?” *WhatIsMyIPAddress.com*, whatismyipaddress.com/tcp-ip. 178.59.137.139

2. What is an HTTP Request header?

HTTP is a pool protocol which is stateless, connectionless, can deliver any data. In this protocol the client is always communicating with a server. It consist of a start line header and body. The server and the client are always exchanging messages. Which can be interpreted as actions, images, and various types of content. a HTTP request contains a message header and optional message body with a Uniform Resource Identifier verb and with a HTTP version number. In this client server relationship these requests, and response message are sent back and forth with a verb telling the client or server do specific a action. If you break down HTTP message you see components that has titles like method this is a command that tells the server what to do E.g. GET or POST. Then there is URI is a set of readable characters and a way to locate something. Another component is the MIME type which is E.g. Image or file type. (SHIEH, G ̈UN SIRER, & Myers "A Stateless Approach toConnection-Oriented Protocols" 2008 1)

1. What is an HTTP Response header?

This is very similar to what I found in question 2 but this is what differs. In the response header the in the start line consist of name value pairs. The major parts are host host, accept and, accept language. In the response message there is no URI or method. It contains HTTP/version statutes code. It will contain if request succeeded or failed or, it may contain the famous 404: file not found code.

1. Compare and contrast, in good detail, what you saw when you looked at Inspect Element, View Source, and Curl in Part 2 above. Also run curl on <https://cit155.glitch.me/> and compare/contrast to the results you see there.

I see a response header and a response body header. Both messages have a date, and type of html version used. Inspect element gives you a full body break down of the website. Its has debuggers and performance optimizers that can be ran by your computer. Both of these programs give you a idea of how your web browsers works. Or how it may response and act. Never the less inspect element gives you so much more of a idea how your browser parses HTML or CSS. It allows you in real time to modify and save the code. Verses curl just gives you a basic lay out of the code and how your browser breaks it down. What you don’t see on inspect element you can with curl. Is a breakdown of the time and date language and last time the server was contacted with header information. I cant find for anything this data in inspect element.

Work Cited

SHIEH, Alen, et al. “A Stateless Approach ToConnection-Oriented Protocols,PDF.” 2008.