When we enter a website (HTTP), let’s say pracnet.net/simple.html. it takes you to the web page:

A white background with black and orange text

AI-generated content may be incorrect.

To see the code that made the website, right click on the web page and click view page source:

A screenshot of a computer code

AI-generated content may be incorrect.

This is the html used to render the web page. So what happened here is that the web browser (chrome) made a request to the web server (in this case pracnet.net) for the page simple.html. the web server responded with the html text (code), then the browser turned that code into what we see as the website.

How did our web browser get this HTML code? It did it by doing a HTTP request which is the messaging structure used to download HTML pages. We can replicate what the browser did using telnet

Firstly, we will open a terminal (Ubuntu Linux) and run the telnet command and make a request to the web server pracnet.net and do the request on port 80. Port 80 is the standard port you use for HTTP requests, meaning a web request that is not secure.

If we press enter, we can see that it connected to the websites IP address successfully:

A black screen with blue text

AI-generated content may be incorrect.

Now we can send the HTTP request, we send a GET request for the page simple.html, we will make the request using HTTP/1.1. we will use the Host parameter to say that the host is pracnet.net. This is the web server used to download the web page. then if we click enter twice, we will see the web server’s response:

A screenshot of a computer program

AI-generated content may be incorrect.

All of this text that appeared is not what I typed, its what the web server sent to my telnet connection

The HTTP response is:

A computer screen shot of a program

AI-generated content may be incorrect.

And the rest is the HTML code. It’s the same code when we clicked view page source. We just did what our browser chrome did using telnet using the GET request. This is all web browsers do, they send HTTP GET requests, get a web page, get HTML code, then render it.

We can’t replicate all network protocols using telnet, telnet sends everything using ASCII characters. The protocols which expect ASCII can be replicated using telnet, but protocols using binary or whatever else cannot be replicated using telnet.