

**Skill 16.01 Exercise 1**

When you walked in, you were handed a slip of paper with an IP address on it. When instructed to do so, move around the room and try to complete an accurate list of IP addresses and names for all students in the room. You may only talk to one person at a time. Record these below,

Name	IP Address	Name	IP Address

Do you think the system we just simulated is an efficient way of collecting IP addresses? Are there any inefficiencies you observe? How could it be made better?

**Skill 16.02 Exercise 1**

Identify each part of the url below,

<https://www.cnn.com/business>

A B C D E

Identify each part of the url below,

<https://blog.hubspot.com>

A B C

**Skill 16.02 Exercise 2**

Navigate to <https://who.is/tools/> and type in a url. Note the name servers. What is the purpose of the name servers?

**Skill 16.03 Exercise 1**

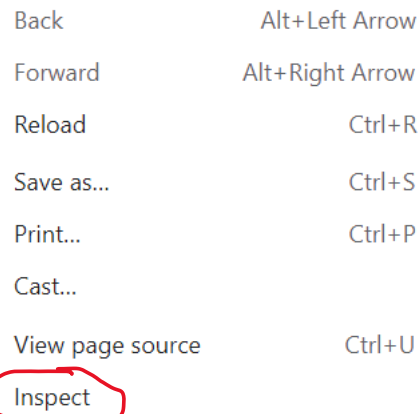
What does HTTP stand for?

**Skill 16.03 Exercise 2**

Navigate to your developer tools using the directions below

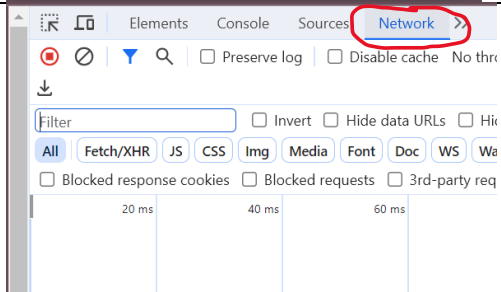
Open your browser to the Google Chrome landing page.

Right click on the page and select, *Inspect*



A screenshot of the Chrome context menu. The menu items are: Back (Alt+Left Arrow), Forward (Alt+Right Arrow), Reload (Ctrl+R), Save as... (Ctrl+S), Print... (Ctrl+P), Cast..., View page source (Ctrl+U), and Inspect. The 'Inspect' option is circled in red.

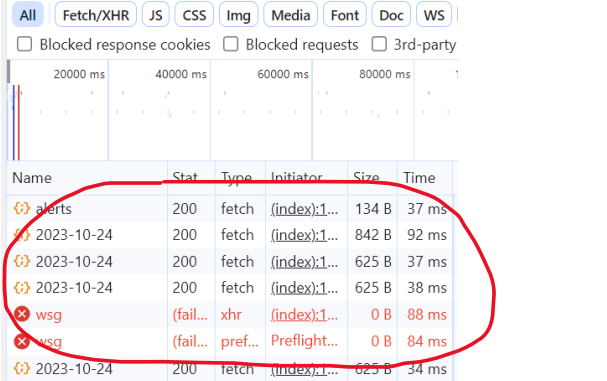
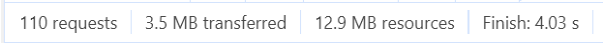

Select the Network tab



# AP Computer Science Principles

## Ticket Out the Door

### Set 16: Web Protocols

Navigate to a website and observe the traffic	 <table><thead><tr><th>Name</th><th>Stat</th><th>Type</th><th>Initiator</th><th>Size</th><th>Time</th></tr></thead><tbody><tr><td>alerts</td><td>200</td><td>fetch</td><td>(index):1...</td><td>134 B</td><td>37 ms</td></tr><tr><td>2023-10-24</td><td>200</td><td>fetch</td><td>(index):1...</td><td>842 B</td><td>92 ms</td></tr><tr><td>2023-10-24</td><td>200</td><td>fetch</td><td>(index):1...</td><td>625 B</td><td>37 ms</td></tr><tr><td>2023-10-24</td><td>200</td><td>fetch</td><td>(index):1...</td><td>625 B</td><td>38 ms</td></tr><tr><td>wsg</td><td>(fail...</td><td>xhr</td><td>(index):1...</td><td>0 B</td><td>88 ms</td></tr><tr><td>wsg</td><td>(fail...</td><td>pref...</td><td>Preflight...</td><td>0 B</td><td>84 ms</td></tr><tr><td>2023-10-24</td><td>200</td><td>fetch</td><td>(index):1...</td><td>625 B</td><td>34 ms</td></tr></tbody></table>	Name	Stat	Type	Initiator	Size	Time	alerts	200	fetch	(index):1...	134 B	37 ms	2023-10-24	200	fetch	(index):1...	842 B	92 ms	2023-10-24	200	fetch	(index):1...	625 B	37 ms	2023-10-24	200	fetch	(index):1...	625 B	38 ms	wsg	(fail...	xhr	(index):1...	0 B	88 ms	wsg	(fail...	pref...	Preflight...	0 B	84 ms	2023-10-24	200	fetch	(index):1...	625 B	34 ms
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Check out the bottom row and note the number of HTTP requests, the amount of data transferred, and the total time to load.	 <table><tr><td>110 requests</td><td>3.5 MB transferred</td><td>12.9 MB resources</td><td>Finish: 4.03 s</td></tr></table>	110 requests	3.5 MB transferred	12.9 MB resources	Finish: 4.03 s																																												
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Check out the top row. Toggle through the types of data that was sent... JS, CSS, Img, Media, etc.	 <p><span>All</span> <span>Fetch/XHR</span> <span>JS</span> <span>CSS</span> <span>Img</span> <span>Media</span> <span>Font</span></p>																																																
Indicate the website you navigated to below. For the website you selected indicate, <ul style="list-style-type: none"><li>• How long the site took to load</li><li>• How much data was transferred</li><li>• The types of data you received</li></ul>																																																	