* Naming for web pages: URL (scheme, hostname, path, query)
  + Hypertext - people would care that the link always goes to somewhere
  + World wide web: what if we don’t care about whether hypertext link works or not
  + (This is totally unrelated to the lecture, but here is another interesting piece of essay from the early days: <https://www.jwz.org/doc/worse-is-better.html> )
  + Hypertext as the engine of application state (REST)
* HTTP: requests/responses
* 
* (<https://news.ycombinator.com/item?id=35744130>: <https://ma.ttias.be/theres-more-than-one-way-to-write-an-ip-address/> )
* `host` takes in a url and returns the 32-bit or 128-bit number as a user-space process
  + `host` gets the address of DNS server through DHCP service
  + DNS - distributed database with delegated authority
  + Top-level root name servers (198.41.0.4) delegate subdomains (e.g. com. Or edu.) to other name servers, and looking for the IP address given a URL would recursively follow this delegation relationship (e.g. edu. => mit.edu. => lamp.mid.edu.)
* `wireshark`
* IP-to-Ethernet
  + ISPs ask local authorities for ranges of IP addresses, and can assign IP address in these assigned ranges to its customers
  + It needs to in “ranges” to make routing feasible