Week3 Lecture1.md 10/4/2020

## Application Layer (DNS, P2P, Video Streaming and CDN)

## DNS

Humans can be identified by many ways, our names, our social security numbers, driver's license number etc. Just like how humans can be identified in many ways, so can Internet Hosts. (Hostname e.g. = www.yahoo.com).

- Hostnames provide little information about the location of the host.
- Hosts are also identified by so-called IP addresses, as routers do not understand the hostname string.
- A DNS (domain name system), is essentially a directory service which translates host names into IP addresses.
- It is implemented in a hierarchy of many name servers
- Application-Layer protocol: Hosts, name servers communicate to resolve names
- As end users we don't directly interact with DNS, but all the applications that we use, do.