

# How Does the Internet Work?



200 OK

301 Moved Permanently

302 Found

304 Not Modified

401 Unauthorized

403 Forbidden

404 Not Found

418 I'm a Teapot

500 Internal Server Error

...

HTTP/1.1 301 Moved Permanently

Content-Type: text/html

Location: <http://www.google.com/>

...

HTTP/1.1 301 Moved Permanently

Content-Type: text/html

**Location:** <http://www.google.com/>

...

```
curl -I google.com
```

```
curl google.com
```

DHCP

DHCP (Dynamic Host Configuration Protocol)

DNS



DNS (Domain Name System)

nslookup facebook.com

URL

URL (Uniform Resource Locator )

# World Wide Web (WWW)

- **An information space**
- **Documents and other web resources are identified by URLs**
- **Interlinked by hypertext links**
- **Accessible via the Internet.**

TCP

TCP (Transmission Control Protocol)

# TCP/IP



# TCP/IP

Application Layer Eg. WWW, FTP, IRC, Email, telnet, ...
Transport Layer Eg. TCP, UDP
Network Layer Eg. IP
Link Layer Eg. Ethernet, WiFi
Physical Layer Eg. Ethernet Cable, fiber-optics

22 SSH

53 DNS

80 HTTP

443 HTTPS

587 SMTP

...

