Application Layer

* communications protocol used to access resources

Tim-Berners Lee

* jointly developed WBC IETF
* HTTP
* HTTP 0.9 (1991)
* HTTP 1.0 (RFC 1945, 1996)
* HTTP 1.1 (RFC 2068, JAN 1997), (RFC 2617, JUN 1997), (RFC 7230-7235, JUN 2014)
* HTTP 2 (RFC 7540, MAY 2015)
  + patterned after SPDY

Fundamental Characteristics

* runs on top of TCP/IP, using TCP port 80 by default
* TCP port 443 for HTTPS (HTTP over SSL/TLS)
* based on a client-server architecture

Clients (useragents)

* web browsers
* web crawlers/spiders
* user tools and apps

Servers

* proxy
* gateway
* tunnels
* origin

HTTP

* plain text

HTTPS

* encrypted

Combination of IP and Port is called Socket.