

CS118 Spring 2014

Lecture 2C

Chapter 2: Application layer

- 2.1 Principles of network applications
- 2.2 Web and HTTP
- 2.3 FTP
- 2.4 Electronic Mail
 - SMTP, POP3, IMAP
- **2.5 DNS**
- 2.6 P2P file sharing
- 2.7 Socket programming with TCP
- 2.8 Socket programming with UDP
- 2.9 Building a Web server

DNS: Domain Name System

People:

- many identifiers: SSN, name, passport #
- Many “addresses”: street, phone #'s, GPS coord, etc.

Internet hosts, routers:

- “name”, e.g., `ww.yahoo.com` - used by humans, routers, name servers
- IP address (32 bit) - used for addressing datagrams

Q: map between name and IP addresses? (address/name translation)

- note: core Internet function, implemented as application-layer protocol
- complexity at network’s “edge”