

ANNOUNCEMENTS

- ✖ Instructor: Nelson Padua-Perez (nelson@cs.umd.edu).
- ✖ Class Web Site:
<http://www.cs.umd.edu/class/spring2008/cmssc198N/>
- ✖ No posting of code in the forum.
- ✖ Make sure you have access to your wam accounts.
- ✖ Check class announcements daily.

COURSE OBJECTIVES

- ✖ Introduce computer programming principles
 - + Basic computer programming language constructs.
 - + How to design procedural solutions to problems.
- ✖ Overview web design concepts/technologies
 - + HTML
 - + CSS
 - + JavaScript
 - + Authoring Tools
- ✖ We assume no previous programming experience.

COURSE WEB PAGE

- ✖ Let's go through the different sections.
- ✖ Please read syllabus.
- ✖ If you have conflict with the final let us know ASAP.
- ✖ Significant amount of material not provided via posted slides.
- ✖ Feel free to bring your laptop.

FUNDAMENTALS: NETWORKING

× Definition

- + Set of computers using common **protocols** to communicate over connecting media.

× History

- + 1969 ARPANET
- + 1986 NSFnet
- + 1995 Internet
- + <http://sysctl.org/rootzmap/e-map.jpg>

FUNDAMENTALS: DATA TRANSFER

- ✖ How is data transferred in the internet?
- ✖ Using Packet Switching
- ✖ Let's see an example
- ✖ http://www.pbs.org/opb/nerds2.0.1/geek_glossary/packet_switching_flash.html

FUNDAMENTALS: CLIENT/SERVER

- ✖ Client and server are two terms frequently used
- ✖ Client/Server Model
- ✖ Client/Server model when talking about software
- ✖ Client/Server model when talking about hardware

FUNDAMENTALS: THE WEB

- ✗ What is the Web ?
 - + Collection of sites.
 - + Conceptual organization of many distinct resources.
- ✗ Internet and World Wide Web do not refer to the same entity.
- ✗ Tim Berners-Lee – Defined the structure associated with the world wide web (he is the father of the web).
- ✗ The following article defined was written by Berners-Lee in 1991defining the web model

<http://groups.google.com/group/alt.hypertext/msg/395f282a67a1916c>

FUNDAMENTALS: IP ADDRESSES

- ✗ IP Address - Unique address for machine on internet.
 - + Get from ISP when connecting to internet.
 - + Allows network to find your machine.
- ✗ Format
 - + 32-bit unsigned integer → 128.8.128.8
- ✗ Domain Name
 - + Text name corresponding to the numeric IP address.
 - + Example: wikipedia.org
- ✗ Name and address for local machine
 - + localhost
 - + 127.0.0.1
- ✗ Running out of 32-bit IP addresses

FUNDAMENTALS: WEB SERVER

- ✖ Web Server –
 - + computer program that delivers (serves up) web pages.
 - + It is like a person that is in charge of a warehouse
- ✖ Four popular Web Server Programs
 - + Apache - <http://www.apache.org/>
 - + IIS – Internet Information Services
 - + Sun Java System Web Server
- ✖ Web server statistics
 - + <http://survey.netcraft.com/Reports/0612/>
- ✖ Some web server statistics (by domain)
 - + <http://survey.netcraft.com/Reports/0612/bydomain/com/>
 - + <http://survey.netcraft.com/Reports/0612/bydomain/mil/>