

ED526 - Final Exam Review

Final Exam Topics

There will be one exam - a final exam. This exam will be online and you can take the exam once you log into LIVE. This final exam will last 45 min. Each question will be in multiple choice format. The exam will have 30 3-point questions. The total points possible for the exam is 90.

The exam will be administered during the last week of the course.

You can take a Sample Final Exam to get an idea of what the testing system is like. The Sample Exam is located in the Final Exam Folder of the Course Content. It is a 5-question, multiple-choice exam that you can take at any time, and it will give the correct answers. However, in the Final Exam, for security reasons the answers will not be displayed and scores will be posted to your Grades after the due date expires.



Internet History

- ARPANet is the network created at the Advanced Research Projects Agency in the 1960's upon which the Internet is based and was financed by the Dept. of Defense
- IP (Internet Protocol) is the fundamental protocol upon which the Internet is based. It deals with how packets are addressed and sent out to their destination
- TCP (Transmission Control Protocol) handles the way messages are broken up into packets and sent out to the destination where they are put back together
- TCP/IP (Transmission Control Protocol/Internet Protocol) is the basic communication language or protocol of the Internet and this standard is not privately owned.

E-Mail

- One of the original 3 Internet apps along with telnet and ftp
- Pine is a popular text-based mail app for Unix
- Outlook is a popular GUI (Graphical User Interface) mail app for Mac and Windows
- Eudora is a popular GUI mail app for Mac and Windows
- Know what carbon copy and blind carbon copy are used for
- Signatures
- Smilies (also smileys) or emoticons (icons of emotion)
- Email address (username@mailServerAddress)
- Recipients do not have to be logged in for you to send them mail (unlike chat)
- POP (post office protocol) is a popular protocol for READING mail
- SMTP (simple mail transfer protocol) is a popular protocol for SENDING mail

- IMAP (Internet mail access protocol) is a newer mail protocol gaining ground that has many improvements over POP
- FTP is the file transfer protocol and is used for transferring (upload and download) files over the Internet.

Chat

- Each user MUST be connected (unlike email)
- AOL Instant Messenger (AIM) is the most popular chat client
- The unix "talk" program was the original chat app

Mailing Lists

- Mailing lists are Internet resources that allow you to subscribe to a group and obtain postings (usually on a daily basis) through electronic mail
- No special applications needed; just an email client
- A SUBSCRIBE email message gets you onto the list
- An UNSUBSCRIBE email message gets you off the list
- Mail inbox can get swamped for an active mailing list
- Listserv's are programs to automate mailing lists
- You send a subscription request to the list's administrative address
- you send a posting to the list's posting address

Newsgroups

- Internet resource similar to mailing lists in terms of content, but are different in structure
- Newsgroups do not require email like mailing lists do
- A newsgroup "reader" is used to access and read newsgroups
- Threads are groups of related articles generally with the same subject line
- Named using a hierarchical structure (like alt.rec.radio)

World Wide Web

- The WWW is a hypertext based system for finding and accessing Internet resources
- HTTP (hypertext transfer protocol) is the protocol used to transport data through the world wide web
- Tim Berners-Lee is considered the inventor of the WWW
- Much of work on thw WWW was done by Berners-Lee at CERN in 1989 CERN is the European Particle Physics Lab in Geneva, Switzerland

General Internet

- The Gopher system developed at Univ. of Minnesota was a text-based unix app that predated the world wide web
- Lynx is a text-based web browser for unix
- JPEG, PNG, and GIF are most popular image formats for the Internet

- PNG (Portable Network Graphic) format is becoming popular on web and supports billions of colors
- JPEG stands for Joint Photographic Experts Group and this format supports millions of colors
- GIF stands for Graphics Interchange Format and only supports 256 colors
- A "modem" is a modulator-demodulator device for connecting online
- 56K modems are popular at home for users who still use "dial-up" Internet (approx. 56000 bits/second)
- Broadband modems are used for high-speed cable and DSL broadband Internet access
- Modem speed is given in units of "bits per second" or "bps". So a 56K bps modem transfers data at 56000 bits per second.
- A Uniform Resource Locator (URL) is used to address Internet resources
- A URL has the form: *protocol://address* (for example: **http://www.wilkes.edu** here, the protocol is http. Or **ftp://ftp.microsoft.com** here, the protocol is ftp)
- Telnet is a unix program is used to remotely login to another computer on the Internet
- Netscape used to be the most popular Internet browser on the market but MS Internet Explorer is now the #1 browser. Firefox is gaining ground and is currently the #2 browser (as of Spring 2008)
- SeaMonkey is a free, open source, and cross-platform Internet suite that is the continuation of the former Mozilla Application Suite. Based on the same source code as the Mozilla Application Suite, SeaMonkey consists of a Navigator which is a descendant of the Netscape family; a Mail and Newsgroups client program, and an HTML editor called **Composer**.
- The I.P. (Internet Protocol) defines an Internet address to be of the form a.b.c.d where a, b, c, and d are integers each between 0 and 255. Examples of valid IP addresses are 146.94.1.2 and 29.248.65.101. Examples of invalid address are 3.205.7.290 (the last part is greater than 255) and 29.71.12 (only 3 parts), and 146.94,1.2 (contains a comma; should be a period between each part)
- The Domain Name System (also known as DNS) is a distributed database system that translates computer names into numeric Internet addresses and vice-versa. For example, the computer wilkes1.wilkes.edu has a numeric IP address of 146.94.1.2. If you type wilkes1.wilkes.edu into a browser, DNS will convert it to 146.94.1.2.
- As its name implies, DNS sets up a hierarchical structure of "domains". There were 6 original "top-level" domains. They are **edu** (education), **com** (commercial sites), **org** (non-profit organizations), **net** (networks), **gov** (government), and **mil** (military). So a site such as jupiter.mathcs.wilkes.edu implies that there is a computer called "jupiter" in the "mathcs" subdomain of the "wilkes" subdomain of the top-level "edu" domain. As you look at the named address from right-to-left, you get more specific, eventually leading to the name of the computer.

Web Development

- HyperText Markup Language (HTML) is used to create world wide web pages
- Web files are just text files that are "marked up" with HTML
- The marking up is done with "tags"
- The general format for a tag is <tagName {optional parameters}>
- Example tags are: <H2>, , <P>, and <TABLE>

- Clickable Image Maps are a mechanism for defining "hotspots" on an image. When a hotspot is clicked on by a user, a action occurs, such as linking to another page.

Multimedia

- Use the EMBED tag to place multimedia files on a web page such as WAVE sounds, QuickTime movies, and AVI movies
- EMBED tag options exist to control whether to show a controller, play automatically when the webpage opens, set width & height, among others.

Scripting

- JavaScript and VBScript allow you to write short program segments to augment HTML web pages. The scripts are "client-side" and reside in the web page.
- Java is a full blown cross-platform programming language that can be used to develop stand-alone applications. Java code segments can also be packaged as an "**applet**" to be placed into web pages. Many sites exist with applets that can be downloaded and used free of charge.

Web Literacy

- Wikipedia can be a valid part of the search process if: students use the vast array of cited documents at the end of each Wikipedia article and students cross-reference the information they find with other sources. Wikipedia should never be used as the primary element and sole component of the research process.
- Knowing the affiliation of an owner with a group can offer clues about a website's specific agenda.
- A ~ and a % sign in a URL can help a visitor to a website identify a personal website.
- Companies purchase search key words to create more business and to get their site to the top of your results list.
- Truncating a URL can help you to navigate through a website, help you to find the home page of a website and can provide more information about a website.
- RSS allows you to subscribe to feeds from other sites through an aggregator.

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