CGS1100, Spring 2004: Study Guide for Exam 2

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Relevant Topics:

- 1. Reading Assignments for Units 9A and 10A
- 2. Additional contents covered in class (all slides, units 6A, 7A, 8A, 9A, 10A)

Make sure you UNDERSTAND the concepts covered! Don't just learn by heart the definitions etc. Ask in class if some concepts are unclear!

How to Prepare for the Exam:

- 1. Re-read your notes for chapters 7 10 (excluding MS-Excel)
- 2. Review the slides for units 6A, 7A, 8A, 9A, and 10A, and make sure you remember what they describe.
- 3. Make sure you understand the review questions shown below.

Self-Assessment:

Make sure you know the answers to the following questions. A huge portion of these questions will be part of the exam, either in the exact way listed below or similar questions!

- 1. What is a computer network?
- 2. What are the advantages of computer networks?
- 3. What are the components of a computer network and how do they interact?
- 4. There are two kinds of cables for computer networks; what is the difference?
- 5. Name the three types of network topologies!
- 6. What is the difference with regard to message forwarding among a ring, bus, and star network?
- 7. What is a file locking mechanism and why is it important to prevent write access by two users to the same file?
- 8. How does a modem work? How can it transmit data via a regular telephone network?
- 9. How does packet-based transmission work?
- 10. What does "routing" mean?
- 11. Does the sender know which path his message will take through the Internet?
- 12. Do all packets of a message take the same route?
- 13. What happens if parts of a message are delayed on their way? Will the recipient be able to assemble the message in the original order? Why?
- 14. The Internet has a military predecessor, the ARPANET. What was the advantage of its architecture with regard to reliability and availability? (Think of a military strike destroying one computer in the network)
- 15. What is the difference between the IP address and the domain name of a computer?
- 16. Is it possible to have multiple domain names for the same IP address?

- 17. Is it possible to have multiple IP addresses for the same domain name?
- 18. How does the translation from domain names to IP addresses work?
- 19. What happens to the IP address if a server is being moved to another location (e.g. to another part of the network)?
- 20. What is the difference between an Internet service protocol and a domain name? Name five common Internet service protocols.
- 21. What is the difference between the Internet and the World Wide Web?
- 22. What is the World Wide Web?
- 23. What is HTML and how is it part of the World Wide Web?
- 24. What does an Internet Browser do with regard to HTML and Web Pages?
- 25. What is a server?
- 26. What is a Web server?
- 27. When sending and retrieving e-mail, how do the two protocols SMTP and POP3 interact?
- 28. If you use Google to search for a page, why does the search term "*Peter Miller*" (in quotation marks) return different results as compared to *Peter Miller* without quotation marks?
- 29. Which pages will Google return if you search for FGCU -business?
- 30. Which are the three fundamental control structures that are used when writing a program? (Will be introduced on Tuesday)
- 31. Contents from http://visualbasic.about.com/library/courses/blecvbai0101.htm