

You have 120 minutes (2 hours) to complete this quiz. Time begins when you first look at any exam question and ends promptly 120 minutes later (the time spent reading these directions is not counted, and you need not start in the questions immediately after reading the instructions if you have not seen any questions).

Please record your answers in a Word file, in a text file, or on this exam. If you elect to write into a word file, you can simply edit into the exam. At the top of the first page of your answers, write your name, the date, and your actual start and end times (to the nearest minute).

You may use any information and software that existed before the start time you record.

You may NOT communicate with any other person during this quiz, either in person or using an electronic means. Note that this includes not sending questions to the professor or the TA by email.

The exam must be completed by Monday October 20, 2008 at 5:30 PM Eastern Daylight Time. Do not discuss this exam with anyone until after that time. Discussion of the exam that might be overheard by a person who has not yet completed it would constitute academic dishonesty.

You may send the exam by email to BOTH the TA and the professor, or (if you prefer to complete the exam on paper) you may bring a hardcopy to class on Monday evening. If you bring a hardcopy to class, it must be turned in before 5:30.

As strategies for completing the exam, keep the following in mind:

- If you find a question to be ambiguous, please explain your confusion along with your answer so that it can be considered during grading.
- You are more likely to get partial credit for an incorrect answer if you show your work.
- Be careful not to spend too much time on any one question. Plan ahead, and don't devote more time to a question than it is worth.

Score Summary (for use by grader)

Question	Possible points	Actual points
1	40	
2	20	
3	40	
TOTAL	100	

*** WRITE DOWN YOUR NAME, THE DATE, AND YOUR START TIME ***

During a visit to San Francisco ...

1. Short answers.
 - a. [10 points] While at lunch in a restaurant near your hotel, you happen to overhear that the folks at the table next to you are talking about TCP. State the purpose of TCP. (just the purpose, not how it works)
 - b. [10 points] The restaurant has free wireless Internet service, so you use it to call your mother on her birthday with Skype. You remember hearing that Skype uses lossy compression, but you can hear your mother just fine, as if she was in the room with you. Briefly (in a sentence or so) explain how lossy compression is different from lossless compression.
 - c. [10 points] There's a computer store right around the corner from your hotel that's running a sale on 50 ns RAM. If I buy some 50 ns RAM for my computer, how many times could that RAM be accessed (at maximum speed) in one second?
 - d. [10 points] After lunch, you take a boat to Alcatraz for a tour. By coincidence, the person next to you is an MLS student from San Jose State University, and they are studying for their midterm exam. They ask you to explain why some Web pages don't get found by Web search engines. Provide ONE reason why this might happen (if you provide more than one reason, only the first one will be graded).
2. [20 points] Someone you meet tells you a story about running into an old friend who works at a company called Twitter and attending a debate party there to watch people "microblogging" about the presidential debate in real time. You decide to see where Twitter's offices are, and sure enough they are in San Francisco. But, real estate is expensive in San Francisco, so perhaps their servers are somewhere else. Use Traceroute to determine where the Web server for twitter.com is.
3. *** THERE IS ANOTHER PAGE ***

3. [20 points] While in San Francisco, you plan to meet with an old friend who is starting a high-tech company that makes a mouse that can sense how tightly you are gripping it so that your computer can adapt its behavior to your mood when it detects that you are tense.

a. [20 points] Create an HTML Web page that will display the name of the product (“MouSense”) as part of the label that is displayed at the top of the Web browser window’s frame and that includes an itemized list of three reasons why someone might want to buy the product (your specific reasons will not be graded – I just want to see you make a itemized list). Your itemized list can be numbered, or you can use the same symbol to indicate each item. For example, it could look like this:

- It’s cheap
- It’s blue
- It’s from California

Don’t spend extra time making it look nice – only the correct placement of the name of the product and the itemized list are required. Copy the entire content of your HTML file into your answer.

b. [20 points] Use FTP to upload your Web page to your TerpConnect account so that it can be seen at <http://terpconnect.umd.edu/~youruserid/mouse.html> (where youruserid is your user name on TerpConnect). For full credit, your Web page must be available at exactly that URL.

*** WRITE DOWN YOUR END TIME ***