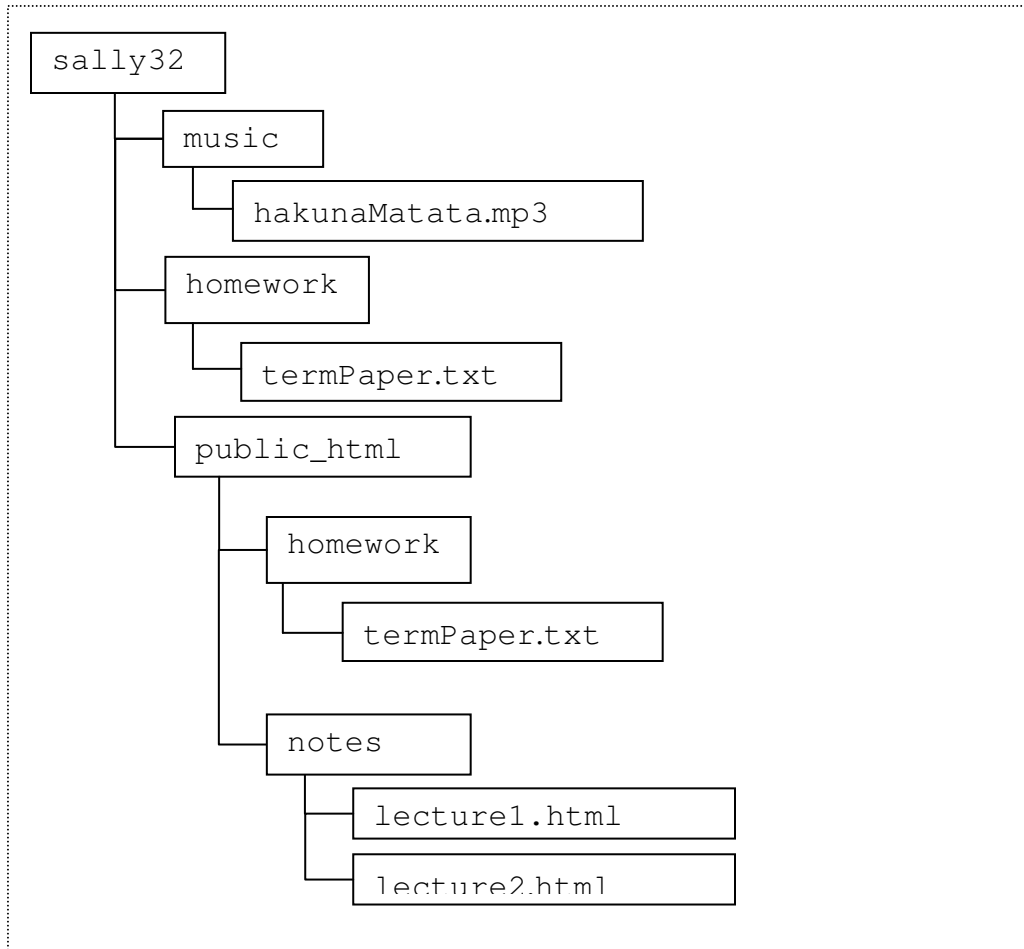


**CSE/INFO 100 Fluency with Information Technology**  
**Winter 2006**  
**Midterm 1 Review Questions**

Answers will be discussed in the Wednesday/Thursday section before the exam.

**Chapters 1, 2 & 3 (user interfaces, networking, file structure, and other basics)**

- 1) Give three examples of "consistent interfaces" in GUIs and illustrate them.
- 2) Given the letter sequence (or string): catggtacagtaatgtttatgtttattaaacac  
Give the placeholder rules for eliminating the "t" letters except if they are in a sequence of three, i.e. keep "ttt".
- 3) Le mot juste. Why is it important to learn the right computer terms, and to be able to use them correctly? If you can't use a term or don't know a term, what can you do?
- 4) How are abstraction and generalization important in IT? Define the terms and explain the connection. Give examples of abstraction & generalization.
- 5) Starting point is a folder containing folders F1 and F2  
Folder F1 contains folders F1A and F1B  
Folder F1A contains image1.jpg, project1.html and document1.doc  
Folder F1B contains image2.gif, image3.jpg, project2.html and folder F1Ba  
Folder F1Ba contains image4.gif.  
You are editing project1.html and want to have image4.gif in that document. What tag should you use?
- 6) I just started using a new application called ExampleApplication. I can't figure out how to create new documents, how to print, how to do anything. I'm very frustrated. What should I do?
- 7) Let's say Sally, whose UWNetID is sally32, logged onto [dante.u.washington.edu](http://dante.u.washington.edu). This is the directory hierarchy she sees on the remote computer:



What is the URL to display the lecture2.html file?

- 8) (Refer to above diagram) When you visit <http://students.washington.edu/sally32/homework/termPaper.txt>, which file are you accessing? Why?
- 9) (Refer to above diagram) Say you wanted a copy of Sally's "Hakuna Matata" song file. How could you access it?
- 10) Dissect this URL. What does each piece mean?  
<http://students.washington.edu/skane/fit100/hw2/test.html>
- 11) How are the terms "Internet" and "World Wide Web" different? What does it mean to be a WWW (web) server? What else could a server be doing, if they aren't a web server?

- 12) Name some important differences between the Mac and PC operating systems. How many can you come up with?
- 13) What is the meaning of the term "server"? How is a server different from your desktop computer?

#### Chapter 4 & 5 (HTML & Web Search)

- 14) You need to find information on Sir Isaac Newton. What would you do?
- try [www.newton.com](http://www.newton.com) or [www.isaacnewton.com](http://www.isaacnewton.com)
  - go to a search engine and type "Sir Isaac Newton"
  - go to a search engine and type Sir Isaac Newton
  - all of the above
  - none of the above
- 15) Search term fun:
- Write a query to find pages about Samuel Adams
  - Write a (better) query to find pages about Samuel Adams beer
  - Write a query to find pages about the historical Samuel Adams, but not about beer

16) Explain how the PageRank algorithm works.

17) Supposed we wrote the following HTML line in our web page:

```
Meta<b>data <i>is</i></b> &quot;data about data&quot;;.
```

What would be displayed in the browser upon opening the web page, assuming all other tags in the document are syntactically correct?

18) What are the following HTML tags used for:

```
head
body
title
a
ul
```

19) The HTML code on the next page is for a webpage called `cat.html`. Located in the same folder as `cat.html` are two other files: `Cat.jpg` and `Molly.jpg`. The line numbers on the right hand side are not part of the HTML page, they're just for reference. What errors can you find in this page?

```
1) <htm>
2)     <title>My Webpage</title>
3) </head>
4)
5)     <h1>Welcome to My Webpage</h1>
6)     <hr>
7)
8)     <p>Hello, my name is Molly. I am a very cute cat.
9)
10)    <body>
11)        <p></p>
12)
13)        <table border="1">
14)            <tr>
15)                <th>Weight</th>
16)                <th>Hair Color</th>
17)                <th>Eye Color</th>
18)            </tr>
19)            <tr>
20)                <td>12 lbs</td>
21)                <td>Black</td>
22)                <td>Green</td>
23)            </tr>
24)        </table>
25)
26)        <h2>Things I like</h2>
27)        <li>eating, in this order:
28)            <ol>
29)                <li>tuna
30)                <li>kitty treats
31)                <li>canned cat food
32)                <li>dry cat food
33)            <li>napping on the sofa
34)            <li>hiding under the bed
35)            <li>playing with my catnip mouse
36)
37)    </html>
```

## Chapter 7 (Debugging)

- 20) While working on a term paper late one night, Brian is appalled when he tries to indent his opening paragraph by hitting the tab key and the computer doesn't do anything! He decides that he should attempt to debug the problem (as all good FIT users should!). His first course of action will be to:
- Bang the keyboard repeatedly, beating the computer into submission to do his will.
  - Attempt to duplicate the error and verify it indeed is a problem
  - Isolate the working parts of the computer from the broken parts
  - Go straight to the conclusion that the monitor must be faulty and not displaying the indent
- 21) Brian created an awesome web page about guitars and he wants to put it up on his website. He saved the file as coolguitars.txt in TextPad and uploaded it to his website. He tried to load up his webpage by typing in the URL (<http://students.washington.edu/briango/fit100/coolguitars.txt>) but all of his neatly formatted code showed up instead! What part of his URL was incorrect (name the proper name of the incorrect segment!) and what should he do to fix it?
- 22) When coding his cool guitar website, should Brian code all of it at once and then try to load up his website to see if it works? Or should he code piece by piece and check the website in a browser in incremental steps? Name a reason why your choice is preferred and a reason why the other method shouldn't be chosen.

## Chapter 8 & 11 (Representing Information)

- 23) What decimal number does this binary 100011 convert to?
- 24) Illustrate adding 1 to 100011.
- 25) Explain what a "lossless compression technique" is.
- 26) Bytes are groups of bits. Which of the following choices represent a typical binary encoding of 4 bytes?
- 0101 1110 0100 1101
  - 486F 6D65 206F 6620
  - 10 01 10 00
  - 10011110 01111000 00010110 11101011
- 27) What is ASCII? (What does it represent, not simply what the acronym stands for.)