

CMPSCI 120
Fall 2015
Midterm Exam #1
Friday, October 7, 2016
Professor William T. Verts
Solution Key

- <1> 20 Points – Answer any 20 of the following questions. Answer more for extra credit. Blank answers will be ignored. Correct answers gain 1 point. Incorrect answers lose one-half point (but the total will not go below zero). For example, if you answer all 25 questions, and get 15 correct but the other 10 are incorrect, the final score for this question will be $15 - (10/2) = 10$.

128	What is the <u>decimal</u> value of the <u>green</u> part of the Salmon color?
Yellow	Approximately what color is shown on screen by #FFD700 ?
Yes	Is color #3399FF a browser safe color?
Fuchsia	Magenta has color #FF00FF. What is the other name for this color?
#FF8000	What is the HTML <u>color code</u> for red=255, green=128, blue=0?
Yes	Are SlateGray and SlateGrey the same color?
Tomato	What is the closest color name to #FF604A ?
10	A point-to-point network with 5 computers has how many links?
Token Ring	Which type of network passes around a “magic cookie”?
False	T/F: Wi-Fi 802.11g is interoperable with 802.11b at the faster speed.
True	T/F: A router contains a computer for directing network traffic.
False	T/F: A hub can hide a local network behind a single IP address.
False	T/F: 128.119.346.57 is a valid IPv4 address.
DNS	What maps URLs onto IP addresses?
Classful	What type of network addressing preceded CIDR?
128	How many individual machines are allowed in a /25 network?
True	T/F: IPv6 has many more potential addresses than IPv4.
<INS>	What HTML tag replaced the deprecated <U> tag?
&divide; &#247;	Show a method of coding the division ÷ symbol into a Web page. Accept either answer.
False	T/F: The Web came before the Internet.
False	T/F: The “C” in .css refers to Cascade dishwashing detergent.
.de	What is the country code for Germany?
False/No	T/F: Is the .gb (Great Britain) top-level domain still in common use?
True/Yes	T/F: URLs can refer to many file types (.html, .css, .txt, etc.)
Yourself	Who is the easiest person in the world to fool?

<2> 15 Points – Here is an IPv4 address, in binary, using *classful addressing*.

11000000.00001111.11110000.11110000

A. What is the class represented?

Class C

B. What is the network identifier (in binary)?

00000.00001111.11110000

C. What is the machine identifier (in binary)?

11110000

<3> 15 Points – Write an HTML fragment (not a complete Web page) that links to **www.batman.org** when you click on the image named **Bat.jpg** (the image file is in the same folder as the referring document).

```
<A HREF="http://www.batman.org/">
  <IMG SRC="Bat.jpg">
</A>
```

- <4> 20 Points – Complete the following Web page to load in a style sheet called `MyStyles.css`, override that style sheet by setting the `BODY` background color to cyan, and have all `H1` headings be centered, and finally override everything by setting the color of the second `H2` in the Web page to blue.

```
<HTML>
  <HEAD>
    </TITLE>My Web Page</TITLE>

    <LINK REL="stylesheet"

      TYPE="text/css"

      HREF="MyStyles.css">

    <STYLE TYPE="text/css">

      BODY {background-color:cyan}

      H1    {text-align:center}
    </STYLE>
  </HEAD>

  <BODY>
    <H1>Welcome</H1>

    <H2>Introduction</H2>
    ...
    <H2 STYLE="color:blue">Main Premise</H2>
    ...
    <H2>Conclusion</H2>
    ...
  </BODY>
</HTML>
```

- <5> 10 Points – Mark up the following text so that the word **my** is underlined, the phrase **COMPSCI 120** is in bold, and the word ***really*** is both bold and italic. Put a horizontal rule between the sentence and the copyright line, and insert the copyright symbol © just before the 2016.

<BODY>

This is <INS>my</INS> fancy Web page

for my COMPSCI 120 class.

It contains lots of <I>really</I>

neat content.

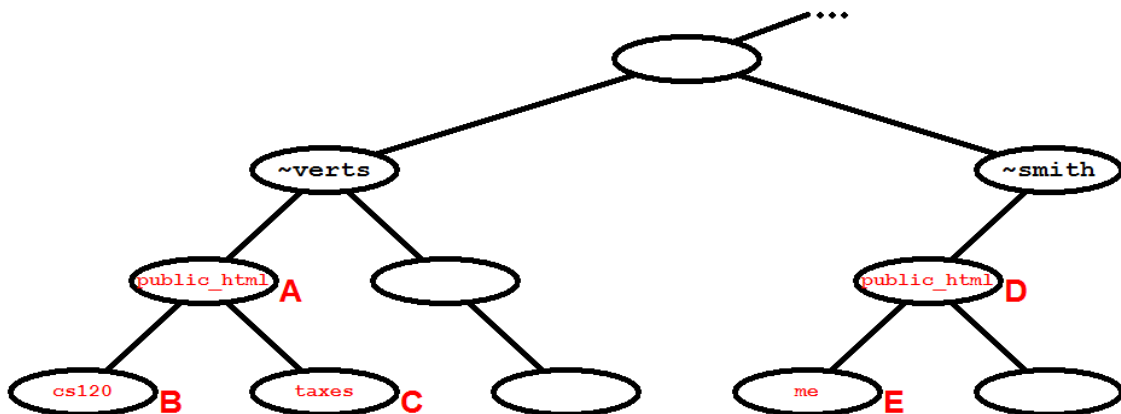
<HR>

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</BODY>

- <6> 10 Points – The diagram represents the folder structure on the Computer Science Web site. Indicate where the following files will be found (you must fill in ovals with appropriate folder names, but not all ovals will be filled in). → Hint: public_html

- A. <http://www.cs.umass.edu/~verts/index.html>
- B. <http://www.cs.umass.edu/~verts/cs120/class.html>
- C. <http://www.cs.umass.edu/~verts/taxes/2015.html>
- D. <http://www.cs.umass.edu/~smith/index.html>
- E. <http://www.cs.umass.edu/~smith/me/addresses.html>



- <7> 10 Points – Short Answer – You read on a Web blog that someone once got a flu shot but came down with the flu two days later. Their conclusion was that the flu shot *gave* them the flu. What is the person's mistake here? Explain fully, and discuss ***cognitive bias*** in your answer. You may answer on the back of this page.

This fallacy is one where **correlation is not causality**. The incubation period for the flu is usually between one and four days, and flu shots take up to two weeks to reach full effectiveness. The person was likely coming down with the flu already at the time that they received the flu shot, making the timing seem suspicious. The correlation in time does not imply that the first event caused the second, but the fact that both events were related (i.e., both involved flu) and close in time can lead people to jump to the wrong conclusion. Had the person come down with the measles or with chickenpox two days after receiving the flu shot, it is unlikely they would have made this particular cognitive error.