

Part 1, Documentation (30%)

Tag: `` `` font

Syntax (required and [optional attributes]; including face=, size=, and color=)

What do these do?:

Example:

Tag: `` Image

Syntax (required and [optional attributes]; including src=, alt=, and height= width= align=)

What do these do?:

Example:

Part 2, Activity (40%):

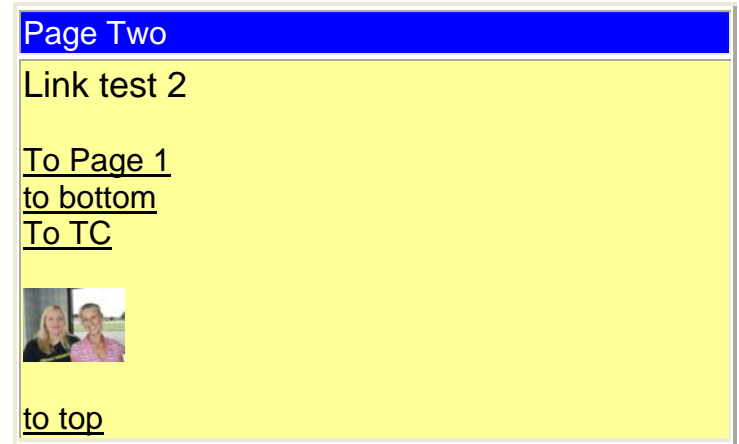
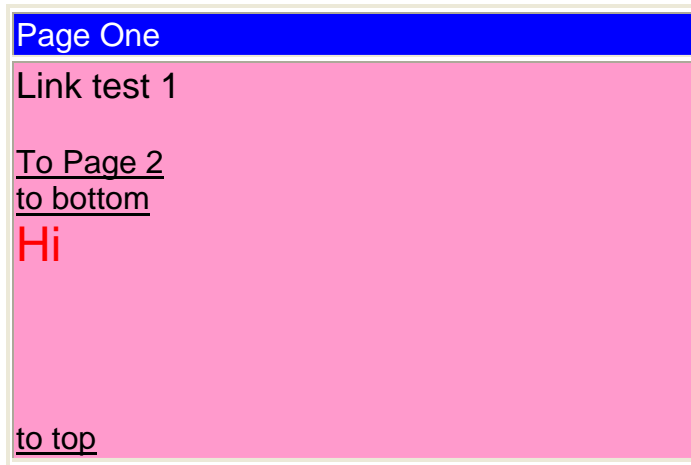
- Create a folder named lab4

Using a text editor, create two pages, **page1.htm** and **page2.htm** in the lab lab4 folder

(QUICKSTART ALTERNATIVE: copy your lab3 FOLDER, and rename the copy to lab4)

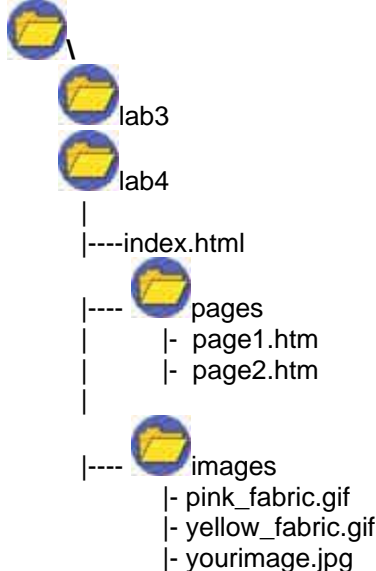
page1.htm

page2.htm



Modifications :

- **5 points Make Folders**
Create a folder in lab3 named pages Create a folder in lab3 named images
- **10 points: Create a new file of your own design called index.html** inside of lab4, [but not in pages] (why not copy your template.htm into lab4 as a starting point, renaming it index.html?)



***index.html must properly coded with appropriate title**

***Link from index.html to page1.htm & page2.htm**

You will have to adjust the path so the web page can locate the file.

*You may make this page your own design, choose backgrounds, colors, etc., as long as it links to page1 and page2, and has an appropriate title

- **10 points: On page1.htm, add the word Hi, and using one font tag:**

*make it red,

*make it arial, and

*make it one size larger

- **10 points: To your image file that displays on page2.htm:**

*Crop the excess part of the picture, using GIMP, Photoshop, etc., (You may also adjust the brightness, contrast, etc.)

*Save the new version of your image to a different name, leaving the original in place.

*Optimize the new file

*Correct the img src=" ../images/

to open the new, optimized file

- **10 points: All pages correctly coded**

Part 3: Hands On (30%)

Posers, could you answer these on a test?

- How many counting symbols, or digits are in Base₁₀? Base₂? Base₁₆?
- What do we call Base₂?
- Base₁₆?
- How do you count to 16 in Base₁₀? Base₂? Base₁₆?

- What is 256₁₀ in Base₁₆?

- What is 255₁₀ in Base₁₆?

(You may use a Scientific View Calculator. Set starting base, enter number, then select target base.)

- Color representation in monitors uses what three colors?
- 6. 256 shades of each color yields 2^8 for Red + 2^8 for green + 2^8 for blue, which = 2^{24} , or the ability to represent about _____ colors using RRGGBB.
In a scientific view calculator, enter use the x^y function; enter 2, then choose x^y, then choose 24
- 7. Using word colors, What is the syntax to change the body text to white, and the body background color to black?
< body >
- 8. Using hex colors, What is the syntax to change the body text to white, and the body background color to black?
< body >
- 9. What is the hex code for blue (try to use just 0's and F's)
- 10. What is the hex code for green (try to use just 0's and F's)
- 11. What is the hex code for red (try to use just 0's and F's)
- 12. What is the hex code for yellow (look at a color chart, if you like, but try to use just 0s and F's)
- 13. What is the hex code for purple (magenta) (try to use just 0s and F's)
- 14. Convert the following color from decimal representation to hex representation
(you may use a calculator: covert the red, green, and blue components separately, then combine into the 6 digit hex value)
126 126 126= #_ _ _ _ _ _
What color is this? You may add this number to the <body bgcolor= ...> section of a web page to test

Section 2 Fonts and Images (Overview 7)

- 15. Describe a serif font.
- 16. Describe a sans-serif font.
- 17. Describe a monospace font.

- From [Tutorial 3](#) font notes

- 18. From my Tutorial three notes, what does <tt> </tt> do?
- 19. From my Tutorial three notes, what does <pre> </pre> do?
- 20. From my Tutorial three notes, what does do?
- 21. What is a .gif? What is it well suited for?
- 22. What is a .jpeg (or .jpg)? What is it well suited for?
- 23. What is a png? What is it well suited for?
- 24. Which format supports animation?
- 25. Which format supports transparency?
- 26. Does the book mention any other **image** format that supports animation?
- 27. List some of the align= options for the img tag.

- Image maps will be included in a future lab, but some theory questions.
- 28. What is an image map?
- 29. What is a hot spot?
- 30. What are the hotspot shapes?

Lab 4 Question

1. What is the font tag?

(Choose the one best answer)

- A deprecated tag
- Allows you to change the size of text
- Allows you to change the color of text
- Allows you to change the type face of text
- all the above

2. Which of the following is correctly coded?

- text
- text
- text
- <text color="red" size="+1" face="arial" >text</text>

3. Match the following

- 1. Font tag attribute that changes text color using word or hex colors
- 2. Font tag attribute that changes text size, using specific values such as 4, or relative values such as +1
- 3. Font tag attribute that changes text's type face, if that type face is installed on the users computer
- 4. Font tag attribute that changes text color using only hex colors
- 5. Font tag attribute that changes text to allow anti-aliasing
- 6. Font tag attribute that changes text size, using specific values such as 72 points
- 7. Font tag attribute that changes text's type face, even if that type face is not installed on the users computer

size

color

face

4. Match the following

the attribute to set the vertical size of an image, measured in pixels

the attribute to point to the graphic file

the tag to display a graphic

the attribute to display alternate text for ADA compliance

the attribute to locate an object, such as an image, to the left, center, or right

the attribute to set the horizontal size of an image, measured in pixels

1. img

2. src

3. alt

4. height

5. width

6. align

5. match the following

1. uses two counting symbols, also called binary
2. uses ten counting symbols, also called decimal
3. uses sixteen counting symbols, also called hex or hexadecimal
4. uses 10 counting symbols, also called binary
5. uses two counting symbols, also called hexadecimal
6. uses two counting symbols, also called octal
7. uses none counting symbols, also called decimal

base₂

base₁₀

base₁₆

6. Fill in the missing number

base₂ 0 1 10 11 100 101 ____ 111 1000 1001 1010 1011 1100 1101 1111 10000

base₁₀ 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

base₁₆ 0 1 2 3 4 5 6 7 8 9 A B C D E F ____

7. What is 256₁₀ in Base₁₆? (type in number) ____

What is 255₁₀ in Base₁₆? The answer is FF (True or False)

8. Color representation in monitors uses what three colors?

Answer in the order used when typing in the hex values ____

9. 256 shades of each color yields

2⁸ for Red + 2⁸ for green + 2⁸ for blue,

which =2²⁴, or the ability to represent about _____ colors using RRGGBB.

24

256

about 65,000

about 16.7 million

10. Using word colors, What is the syntax to change the body text to white, and the body background color to black?

- | | | | |
|---|--|---|---|
| <input type="checkbox"/> <code><body
text=white
bgcolor=black>
...
</body></code> | <input type="checkbox"/> <code><body
text="white"
background="black">
...
</body></code> | <input type="checkbox"/> <code>< text="white"
bgcolor="black">
...
</body></code> | <input type="checkbox"/> <code><body
text="white"
bgcolor="black">
...
</body></code> |
|---|--|---|---|

11. Using hex colors, what is the syntax to change the body text to white, and the body background color to black?

- | | | | |
|---|--|---|---|
| <input type="checkbox"/> <code><body
text="ffffff"
bgcolor="000000">
...
</body></code> | <input type="checkbox"/> <code><body
text="#ffffff"
background="#000000">
...
</body></code> | <input type="checkbox"/> <code><body
text="#000000"
bgcolor="#ffffff">
...
</body></code> | <input type="checkbox"/> <code><body
text="#ffffff"
bgcolor="#000000">
...
</body></code> |
|---|--|---|---|

12. Match the hex code and the color (Just type in the number)

#ff00ff

1. blue

#ffff00

2. green

#00ff00

3. red

#ff0000

4. yellow

#0000ff

5. purple (magenta)

13. Convert the following color from decimal representation to hex representation (you may use a calculator: covert the red, green, and blue components separately, then combine into the 6 digit hex value) 126 126 126= #_____ What color is this?

- a) 999999; GRAY b) 7E7E7E; RED c) 7E7E7E; GRAY d)999999; RED

14. Match the following (Just type in the number)

- | | | | |
|--------------------------|--|----|---|
| <input type="checkbox"/> | a way to add extra spaces in HTML without using any formatting | 1. | <code><tt> ... </tt></code> |
| <input type="checkbox"/> | each letter takes up as much space as any other letter, such as
iii
WWW | 2. | <code><pre> ... </pre></code> |
| <input type="checkbox"/> | a typeface with extra lines and marks, such as Times | 3. | san serif font |
| <input type="checkbox"/> | a typeface with no extra lines or marks, such as Arial | 4. | serif font |
| <input type="checkbox"/> | only changes the font to typewriter text, doesn't recognize link breaks or extra spacing | 5. | monospace font |
| <input type="checkbox"/> | changes the font to typewriter text, but recognizes spaces and line breaks | 6. | <code>&nbsp;</code> |

15. Match the following (Just type in the number)

- | | | | |
|--------------------------|--|----|-------------------------------------|
| <input type="checkbox"/> | options of gif | 1. | .gif |
| <input type="checkbox"/> | old format limited to 256 colors, best suited for charts and line graphics | 2. | .jpg |
| <input type="checkbox"/> | best suited for photographs | 3. | .png |
| <input type="checkbox"/> | options of align | 4. | supports animation and transparency |
| <input type="checkbox"/> | new format, a possible replacement for gif that is not limited to 256 colors | 5. | left center and right |
| <input type="checkbox"/> | another option to make animations | 6. | flash |

16. Match the following (Just type in the number)

- | | | | |
|--------------------------|---|----|----------------|
| <input type="checkbox"/> | the area of a graphic that works as a link | 1. | image map |
| <input type="checkbox"/> | rectangle, circle, and polygon | 2. | hotspot shapes |
| <input type="checkbox"/> | name given to HTML code that makes part of an graphic into a link | 3. | hotspot |