

CMPT 165

Midterm review & prep. session

June 22nd, 2015

Topics covered in the midterm

- Internet & WWW
- Markup
- CSS
- Graphics
- Color

Today, for each topic, we'll review:

- key concepts
- do some practice questions as well...

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Questions on WWW

1. Web browser is a software. T/F?
2. Software also includes hardware and memory storage. T/F?
3. Name 2 types of software.
_____, _____
4. Name 2 types of wired network.
_____, _____
5. Name 2 types of wireless network.
_____, _____

1 min.

Questions on WWW

6. Router is a computer device. T/F?
7. IP is an identifier. T/F?
8. Protocols are a set of rules. T/F?
9. URL is an identifier for a resource published on the web. T/F?
10. What is the **scheme** in the following URL?
https://www.sfu.ca

2 mins.

Uniform Resource Locator (URL)

<http://www.sfu.ca/learning/study-abroad.html>

Scheme: type of network protocol

Server: domain name of a server

Path: the location of a specific file stored on server

Review these terms too:

Hardware Software Application software Operating system Malware

Data Bits Bytes Memory storage

Internet structure Modem Router ISP

Fiber optic ADSL TV cable Ethernet Wi-Fi

Client/server IP address

Protocols HTTP FTP HTTPS

URL MIME HTML HTML Tags

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Questions on markup

- | | |
|-------------------------------------------------------------------------------------|-----|
| 11. Inline tags tend to expand across the page? | T/F |
| 12. <code></code> is a generic block tag? | T/F |
| 13. <code><div></code> is a generic block tag? | T/F |
| 14. <code><p></code> is an inline tag? | T/F |
| 15. <code></code> is preferred over <code></code> ? | T/F |
| 16. <code><bold></code> is a formatting tag? | T/F |
| 17. <code></code> is preferred over <code></code> ? | T/F |
| 18. <code>
</br></code> and <code>
</code> are equivalent? | T/F |

2 mins.

Questions on markup

19. `` is also known as a style selector. T/F?

20. Given:

```

```

What are 2 attribute specifications shown in above?

_____, _____

Which required attribute specification is missing?

21a. Use of relative path is generally preferred over absolute paths in markup. T/F?

21b. Why or why not? _____

22. Good markup practices involve annotating the semantic meaning and formatting contents of a webpage. T/F?

3 mins.

Highlights on Markup

You should also understand differences between:

- Elements, contents, tags
 - Empty tag vs. closed tags
 - Syntax of attribute specification
 - Block vs. inline tags
 - E.g. div vs. span
 - Understand:
 - what their behaviours are
 - when they should be used
-

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Quick review of CSS syntax

Syntax*:

*http://www.w3schools.com/css/css_syntax.asp

```
selector1 { Declaration
  property_1: value_1;
  property_2: value_2;
  ...
  property_N: value_N;
}
```

A CSS rule set

Selector(s): HTML element(s) that you want to style

Examples:

```
ol, ul{
  font-family: sans-serif;
  font-weight: 100;
}
```

A rule set for ol and ul tags

```
p {
  text-align: center;
}
```

Another rule set for p

vs.

“Attribute specification”
in older versions of HTML

`name_of_attribute="value"`

`<p align="center">`

Highlights on CSS

3 ways to add styles to your markup:

1. Inline
2. In the header
3. External style sheet

You need to understand how they are different...

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
  <head>
    <title>Title</title>
  </head>
  <body>
    <h1>Heading</h1>
    <p align="center">This is Paragraph1.</p>
    <p align="center">This is Paragraph2.</p>
  </body>
</html>
```

Highlights on CSS

3 ways to add styles to your markup:

1. Inline

2. In the header

3. External style sheet

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
  <head>
    <title>Title</title>
    <style type="text/css">
      p {
        text-align: center;
      }
    </style>
  </head>
  <body>
    <h1>Heading</h1>
    <p>This is a paragraph.</p>
    <p>This is another paragraph.</p>
  </body>
</html>
```

Highlights on CSS

3 ways to add styles to your markup:

1. Inline

2. In the header

3. External style sheet

second_page.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-st
<html>
  <head>
    <title>Page 2</title>
    <link href="my_style.css" type="text/css" />
  </head>
  <body>
    <h1>Heading</h1>
    <p>This is yet another page.</p>
  </body>
</html>
```

my_style.css

```
p {
  text-align: center;
}
```


Questions on CSS

23. What does “C” in CSS stand for? _____
24. Every style rule consists of at least one selector, attribute, and value. T/F?
25. Inline styling are always preferred over external CSS because it offers higher specificity scores. T/F?
26. Every CSS declaration consists of a property and a selector. T/F?
27. Two declarations must be separated by a colon. T/F?
28. Shorthand style rules are preferred. T/F?
29. The code `p > p` allows one to select all nested paragraph tags. T/F?

Questions on CSS

30. The following is valid. T/F?

```
h1, p, ol > li {  
    font-family: "Times New Roman" sans-serif;  
    colour: red;  
}
```

31. Consider these style rules:

```
div#menu { font-family: serif; }  
#menu { font-family: serif; }
```

The second rule will override the first one because it comes after it. T/F?

32. To change the background color of body, we can use the `color` property?

3 mins.

Questions on CSS

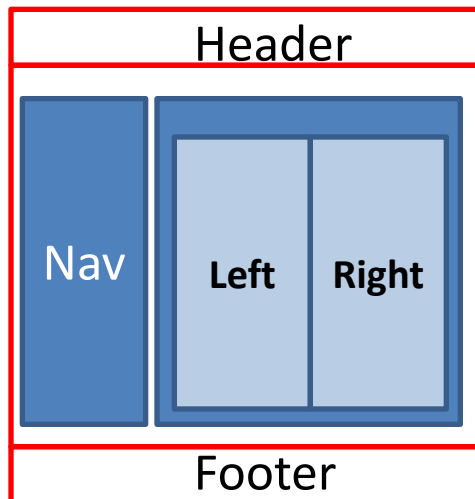
33. Write the **shorthand** version for this style rule:

```
p {  
    border-style: solid;  
    border-color: red;  
    border-width: 5px;  
}
```

1 min.

Questions on CSS

34. Draw the tree diagram for a webpage that looks like this:

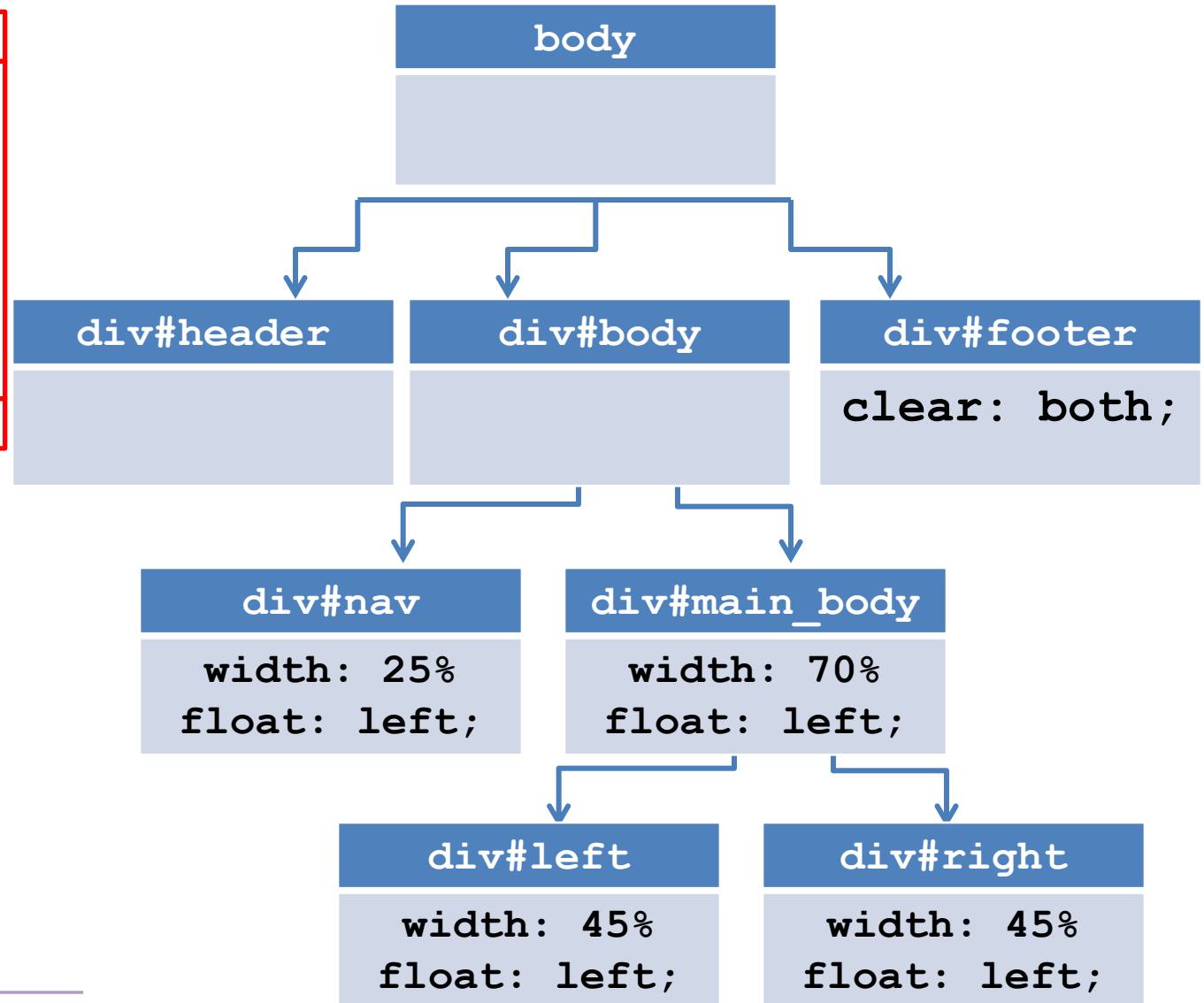
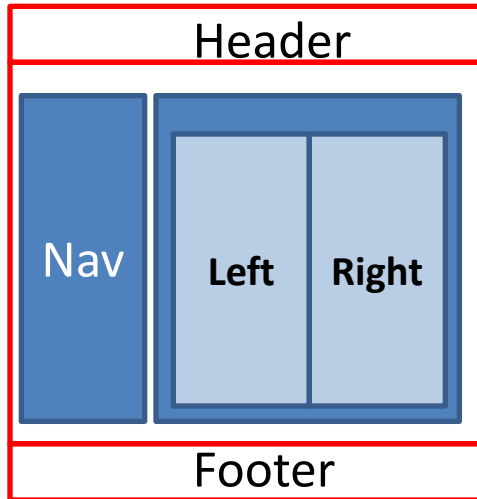


Notes:

- Use divider tags only with these id's:
Header, Footer, Nav, Left, Right
- Box A inside box B indicates that box A is a child of box B.

3 mins.

Answer



Also review...

- 3 approaches to position elements: what are these?
- And know what these refer to:
 - z-index
 - Clear
 - Float
 - +
 - >

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On Graphics

35. Monochrome can only give grayscale color images? T/F

36. Dithering is a method to reduce file size? T/F

37. SVG stands for Style Vector Graphics? T/F

38. JPEG, PNG, GIF all support animation? T/F

39. *Rasterization*: process of converting images from bitmap to vector graphics. T/F?

2 mins.

On Graphics

- 40. SVG files contain markup and can be compressed.
- 41. Many software like GIMP allows you to edit pixels of SVG images. T/F?
- 42. The position of a pixel is referred to as _____.
- 43. The opacity of a pixel can be stored in 2 ways. Which 2 ways?
- 44. The more opaque an element is, the more transparent it is. T/F?

2 mins.

Review your notes on graphics

Image resolution

Pixel, bits, unit of bytes

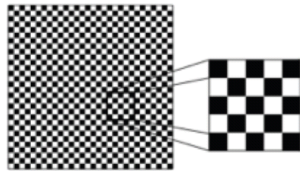
Intensity vs. coordinates

Color-depth

Monochrome, 8-, 16-, 24-bit, etc.

Dithering

How & Why



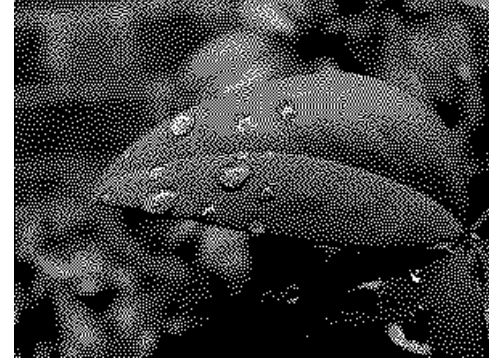
Compression

Lossy vs lossless

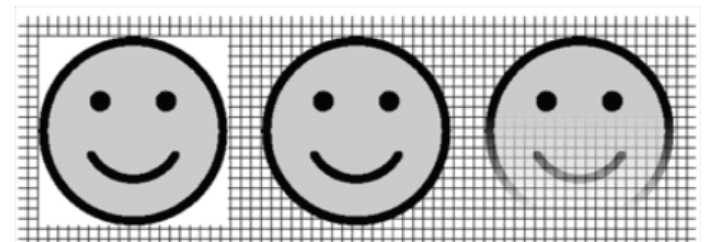
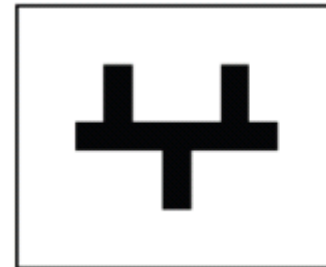
Transparency

Opacity, transparency, alpha channel

Dithering illustrated (1-bit):



24-bit:



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On colors

45. Orange is considered a cool color, as opposed to warm color. T/F

46. Which color does FF in the hex code #00FF55 represent? ____

47. #00FF55 is the same as #0F5? T/F

48. #FEFEFE and #FFF refer to the same color? T/F

49. #1A0000 is brighter than #A10000? T/F

50. What does the following style rule specify?

rgba (255 , 0 , 255 , 0 . 5)

Ans: _____

51. Value in HSV model stands for the intensity of a color? T/F

52. What should the X,Y, Z values be in the following to specify white color?

hsl (X , Y , Z)

Ans: _____

3 mins.

Again, review
both **study guide** & all related **lecture slides**.

**Good luck with your
midterm next week!**