

CIS 3.5, Spring 2010, Midterm Review

- Your midterm will take place on Wednesday 3/24/2010.
- The midterm will cover each of the topics covered in Units I and II.
- All test questions will be drawn from the presentations and labs.
- Below are series of questions that relate to each of the topics that we covered. If you can answer all of the questions you can consider yourself prepared for the exam.

Principles of Web Design

1. Define “affordances”.
2. We discussed interface design in great detail. Give two general principles of interface design with examples.
3. We discussed things to avoid when designing an interface as well. Give two rules about what should be avoided in interface design with examples.

XHTML

1. Define “markup languages”.
2. There are 3 things that markup languages can be used for; what are they?
3. Define Tag, Element and Attribute.
4. We discussed in class rules that XHTML has that HTML does not. What are those rules.
5. What is wrong with the following lines of XHTML?

```
<P BGCOLOR=BLUE> This is a new paragraph. <B><I>This text is bold and  
italic</B></I> <BR>
```

6. XML documents have “minimal components”. What is missing from the following “minimal XHTML document”?

```
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
  <title>simple document</title>  
<body>  
  <p>a simple paragraph</p>
```

7. What does it mean when an XHTML document has been “validated”?

CSS

1. Why use CSS (we discussed 5 reasons in class)?
2. What does the “cascading” in CSS stand for?
3. There are 3 ways to implement CSS on a site, what are they?

4. What is wrong with the following lines of CSS

```
h1 [    font-family; Verdana, sans-serif,
        color; red,
        font-size; 20px,
      ]
p, div, h2 [color; #00DDFF, width; 80%, ]
```

5. Create a custom class called “caution” that will make the text red with a font-size of 20px. This class needs to be able to be used by all tags.
6. Apply the custom class you created above to word “special” in the section of text below:
- The word
special
has been formatted using a custom class.

Processing

1. What is the “internet”? How is the “Internet” different from the WWW?
2. What is one advantage and one disadvantage using client/server architecture?
3. Imperative languages are like “smart lists”. These smart lists need 3 things to function, what are they?
4. For this class, what’s the difference between a “full strength programming language” and a scripting language?
5. What is special about the draw() function in processing?
6. What’s wrong with the program below? Fix the errors.

```
void setup() {
void draw() {
void keyPressed() {
    if ( key == 'P' || key == 'p' ) {
        point( 50, 50 )
    } else if ( key == 'L' || key == 'l' ) {
        line( 10, 20, 30, 40 )
    } else {
        background( #ffffff )
    }
}
```

7. What would the program above (now that you have fixed it) do if you pressed the ‘space’ key?
8. Define ‘variable’.
9. Define ‘event listener’.
10. What’s the difference between a vector and a bitmap image?

JavaScript

1. We discussed 7 things that JavaScript can be used to do; list two.
2. Where do “client side” web scripts run?
3. What’s wrong with the JavaScript below? Fix it.

```
<html>
  <head>
    <script type="text/javascript">
      function displaymessage()
      [
        alert("HelloWorld!")
      ]
      / this is a comment
    </script>
  </head>
  <body>
    <input type="button" value="Click me!" onclick="displaymessage()"/>
  </body>
</html>
```

4. What does the webpage (after you have fixed it) above do?

Many Eyes

1. What is “many eyes” and what is it good for?