CMPT 165 Midterm

Answers

- You have 50 minutes to complete this exam.
- Please hand in all answers in an exam booklet. **Do not hand in the question sheet.**
- There is a total of 47 points on this exam; points for each question are indicated.
- Read through the entire exam before you begin.
- There are 4 pages (*not* counting this page); make sure you have them all.
- No books, calculators or any other aids are allowed.
- All "Figures" are at the back of the exam.
- If you don't think there is enough information to answer a question, make a reasonable assumption that allows you to answer the question and note it in your answer booklet.

1. [5 points]
   Give the word that fits best in place of the ■.

   (a) ■ refers to interactive multimedia where you can click on part of the presentation. Hypermedia

   (b) HTML is a specific DTD created in ■. SGML

   (c) Two HTML ■ are `<p>` and `<img>`. tags/elements

   (d) The *property* in this CSS "`h1 em { font-size: larger;}`" is ■. font-size

   (e) The design principle that states that everything should have a visual connection with something else on the page is ■. alignment

2. [4 points]
   Give a numeric HTML/CSS colour code (ie. not one of the colour names) for each of these colours:

   (a) red `#FF0000`

   (b) dark blue `#000077`

   (c) black `#000000`

   (d) purple `#CC00FF`

3. [6 points]
   We've discussed structural (logical) and visual (physical) markup. In addition to categorizing the HTML tags this way, we can also categorize individual attributes. For each of these *attributes*, would you consider them structural or visual? Why?

   (a) `align`, used for text alignment (can be `left`, `center` or `right`) in the `<p>` tag

   (b) `lang`, used to indicate the language with the `<i>` tag

   (c) `class`, used to indicate subclass of the `<span>` tag

   (a) visual; directly indicates appearance

   (b) structural; indicates type of content, but doesn't specify appearance

   (c) structural; should be used to indicate meaning, not an appearance (CSS assigns an appearance to the meaning)

4. [10 points]
   Here is some HTML, which would be inside the `<body>...</body>` in Figure 1.

```
<h1>Sample web page</h1>
<p><img src="x.png" alt="X" class=figure>
The point isn't the HTML that's here, it's the <em>style sheet</em>
or <abbr>CSS</abbr> that we're really interested in.
<h2>The next section</h2>
<p>This is the <a href="next.html">next</a> part of the page.
```

Have a look at Figure 2. Without a style sheet, this HTML looks like the screen capture on the left of the figure. **Give a style sheet** to make the same HTML look like the screen capture on the right of Figure 2. Note that the words "The next section" are below the image on the page with the style sheet.

```
img.figure {
  float: left;
}
h1 {
  font-family: sans-serif;
  border-top: medium solid;
}
a {
  background-color: #ccc;
}
h2 {
  clear: both;
}
```

5. [12 points]
Have a look at the HTML below. The HTML has several errors that will keep the page from validating as HTML 4.01 (Strict). **List four of the errors** and briefly describe what the error is. You don't have to find *all* of the errors and only your first four will be marked. If there's a single mistake might confuse the validator and make it give several errors, it still only counts once.

   You can assume that everything that *isn't shown* is correct and that an appropriate style sheet has been defined. You can use the line numbers to help indicate where each error is.

   This is only the HTML that would replace the `<body>...</body>` in Figure 1.

```
    ⋮
1 <body>
2 <h2>Non-valid HTML</h2>
```

```
<p>This is a page with some non-valid HTML. Your job is to find the
errors.
<p type="intro">The HTML has several errors that will keep the page
from validating as HTML 4.01 (Strict). <strong class=imp+stuff>List
four of the errors</strong> and describe what the error is.  You
don't have to find <b>all</b> of the errors and you won't be given
marks for any more than four.  If a single mistake might confuse the
validator and make it give several errors, it still only counts
once.</p>
<p class=details><em>You can assume that everything that <u>isn't
shown</u> is correct and that an appropriate style sheet has been
defined.  You can use the <xref>line numbers</xref> to help indicate
where each error is.
<p>Just four errors.  Like this:</p>
<ol class="example"><li>error<li>error<li>error<li>error</ol>
</body>
```

⋮

- no attribute `type`, line 5
- need quotes around value, line 6
- `<em>` not closed, from line 12
- `<u>` tag depreciated, line 12
- no tag `<xref>`, line 14

6. [10 points]
   It is possible to use structural formatting in a WYSIWYG program. For example, MS Word has a "Styles" feature where you can create a style for headings, paragraphs, etc. These can then be applied to the appropriate parts of your document.

   How do you think structural WYSIWYG formatting compares to structural markup? What are some situations where you think one would be better than the other?

   Your answer should be a few paragraphs in length, not in point form. We aren't looking for you to spew back points from lectures here, but to demonstrate that you understand the concepts.

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN">
<html>
<head>
<title></title>
<link rel=StyleSheet href="style.css" type="text/css">
</head>
<body>

</body>
</html>
```

Figure 1: The skeleton of a full HTML page.

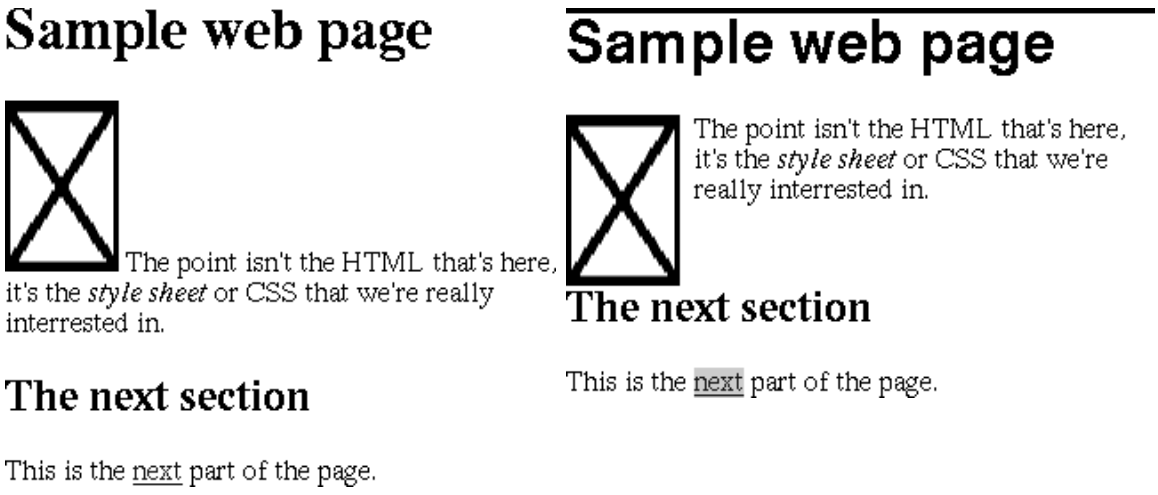

Figure 2: An HTML page without (left) and with (right) a style sheet