

# CMPT 165

## Advanced XHTML + CSS – Part 1

June 1<sup>st</sup>, 2015

# What are the errors?

```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
2     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
3
4 <html xmlns="http://www.w3.org/1999/xhtml">
5
6 <head>
7 <link rel="stylesheet" href="lab2-style.css" type="text/css" />
8
9 <title>CMPT Lab 2</title>
10 <h1 > CMPT Lab </h1>
11
12 </head>
13
14 <body>
15
16 <p>Here's how to do a CMPT 165 lab exercise:<p>
17
18 <ol type="1">
19 <li > Read the lab</li>
20 <li> Do the lab </li>
21 </ol>
22
23 <p> But, you're not <em>really</em> done until you submit the lab. </p>
24 </body>
25
26 </html>
```

# What are the errors? (2)

```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR
2 <html xmlns="http://www.w3.org/1999/xhtml"><head>
3 <meta http-equiv="content-type" content="text/html; charset=windows-1252">
4
5 <title>CMPT165 Exercise2</title>
6
7 </head><link rel="stylesheet" href="lab2-style.css" type="text/css" />
8
9
10 <body>
11 |
12 <h1> How to get a good grade on CMPT165 </h1>
13 <ol><li>Do the homeworks</li>
14 <li>2. Attend the lecture</li>
15 <li>3. Review everyweek</li></ol>
16
17 <p><em>And then you will get a great mark in this course!</em></p>
18
19 </body></html>
```

# What are the errors? (3)

```
1
2 <html>
3 <head>
4
5 <title> Here is how to do a CMPT 165 lab exercise:</title>
6 <link rel="stylesheet" href="lab2-style.css" type="text/css" />
7 <h1> Here is how to do a CMPT 165 lab exercise: </h1>
8 </head>
9
10 <body>
11 Here is how to do a CMPT 165 lab exercise: <br> <ul>
12 <font color = "red"> <li> 1. Read the lab <br> </li>
13 <li> 2. Do the lab <br> </li> </font> </ul>
14
15 <em> But you're not really done until you finish the lab</em>
16 </body>
17 </html>
```

And <p></p> are missing!

# What are the errors? (4)

```
1 <html>
2 <head>
3     <title>Lab Exercise</title>
4     <link rel="stylesheet" href="lab2-style.css" type="text/css" />
5 </head>
6 <body>
7
8     <h1>Lab Exercise</h1>
9     <p1>
10    <b>Here's how to do a CMPT165 lab exercise</b>
11    </p1>
12    <ol>1. Read the lab</ol>
13    <ol>2. Do the lab</ol>
14    <p2>
15        But, you're not <em>really</em> done until you submit
16        the lab
17
18    </p2>
19 </body>
20 </html>
21
22
```

<ol> must contain <li>

# Structure of a webpage (review)

1. Document type declaration (DTD) ...more later
2. Header: “meta-information”
  - Not displayed in browser window!
  - `<Title>`:
    - Displayed on the tab
    - Shown on “Add to favorites”
    - Shown on search-engine results
3. Body: content displayed in browser window

## Results from search engines:

The image shows two screenshots of search engine results for the query "sfu lisat 165".

**Top Screenshot (Yahoo! Canada):** The search bar contains "sfu lisat 165". The first result is "CMPT 165 Sections - Simon Fraser University" with the URL [www.cs.sfu.ca/CourseCentral/165/common/sections](http://www.cs.sfu.ca/CourseCentral/165/common/sections). Below it, a snippet of text is visible. The second result is "CMPT 165 (Summer 2015): Introduction to the..." with the URL [www.cs.sfu.ca/CourseCentral/165/lisat](http://www.cs.sfu.ca/CourseCentral/165/lisat). Below it, contact information for the instructor is provided.

**Bottom Screenshot (Google):** The search bar contains "sfu lisat 165". The first result is "CMPT 165 - Computing Science - Simon Fraser University" with the URL <https://www.cs.sfu.ca/CourseCentral/165/lisat/>. Below it, a snippet of text is visible. The second result is "Designated Breadth Courses - Simon Fraser University" with the URL [https://www.sfu.ca/ugcr/.../certified\\_designated\\_breadth\\_courses.html](https://www.sfu.ca/ugcr/.../certified_designated_breadth_courses.html). Below it, a snippet of text is visible.

# Valid XHTML 1.0 Strict

- Document type declaration: case sensitive!
  - First reference: must be exact
- `xmlns: namespace name`

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
<head>

    <title>Conforming XHTML 1.0 Strict Template</title>
    <link href="mystyle.css" rel="stylesheet" type="text/css" />
    <meta name="keywords" content="HTML, CSS, XHTML, Python" />
    <meta name="description" content="My blog on HTML and CSS" />
    <meta name="author" content="Mr. FirstName LastName" />
    <meta content="text/html; charset=UTF-8" />

</head>
<body>

    <!-- put your content here -->

</body>
</html>
```

Not required  
but always  
good to have

# Validators



## Markup Validation Service

Check the markup (HTML, XHTML, ...) of Web documents

Validate by URI

Validate by File Upload

Validate by Direct Input

### Validate by URI

Validate a document online:

Address:

► More Options

Check

This validator checks the [markup validity](#) of Web documents in HTML, XHTML, SMIL, MathML, etc. If you wish to validate specific content such as [RSS/Atom feeds](#) or [CSS stylesheets](#), [MobileOK content](#), or to [find broken links](#), there are [other validators and tools](#) available. As an alternative you can also try our [non-DTD-based validator](#).



Try now the [W3C Validator Suite™](#) premium service that checks your entire website and evaluates its conformance with W3C open standards to quickly identify those portions of your website that need your attention.



# Validators

## CMPT 165 (D1 Summer 2015) Intro to the Internet and the World Wide Web

### USEFUL LINKS

#### Course-specific

- [Assignment Submission + Grades](#)
- [Course Mailing List Archive](#)

#### Select Course Software

- [Sublime Text 3](#)
- [FileZilla FTP](#)
- [Python 2.7.x](#)
- [GIMP](#)
- [Inkscape](#)

#### Quick References

- [W3 color names](#)
- [Character entity](#)

#### Web-Based Tools

- [Interactive HTML Editor | Interactive HTML/CSS Editor](#)
- [Lorem Ipsum \(text generator\)](#)
- [Paletton \(for color schemes\)](#)
- [WDG Validator | W3C Validator](#)
- [CSS Validator](#)

# Today's Agenda

- id attribute
- Creating tables

Tags you'll learn:

<table>

<th>

<tr>

<td>

<caption>

Attributes you'll learn:

summary

abbr

colspan

rowspan

# “id” attribute

- Provides an identity for an element
- e.g.

```

```

- Try to use meaningful id so you can remember easily

```
<ol id="menu_list">
```

- Should be unique for proper “anchoring”

# Linking elements within the same page

“Hash” symbol

Use # + id attribute

## AN ESSAY FOR CMPT 165

*“Anyone who has never made a mistake has never tried anything new.”-- Albert Einstein*

### 1. INTRODUCTION

Lorem ipsum dolor sit amet, ne has solet percipitur, voluptaria mnesarchum ea eum. Est te cibo erat rationibus, pro ponderum lobortis vulputate ea, his dolor luptatum eu. Quodsi vocibus eligendi ea duo, petentium neglegentur pro ne. Et vix laudem aperiri interesset, eos ut euismod accusam aliquando. In sit ignota alterum explicari, id vis utroque facilis temporibus, duo no erat iisque scaevola. Ne solet legimus splendide pri, ad mel habemus oportere corrumpit. Vel facilisi volutpat consetetur ut. Dicit graeco te quo, eos ei hinc animal volumus. Ne sea quem simul mucius, duo ei elitr euripidis. Quo tota choro insolens et, id dolore cotidieque duo.

*Vix legere legimus id, discere repudiare in vis, amet ridens efficiendi qui no. Aeterno constituam qui id, in dicit bonorum corrumpit eum. Qui id dicam periculis philosophia, id eos explicari quaerendum. Habeo consul ex per. Pri an agam assueverit.*

### 2. METHODS

Vix ne elitr aliquam erroribus, pro id quando deleniti gloriatur. Quo albugius philosophia cu, per diam audiam tamquam an. No illum luptatum delicatissimi his. Utamur qualisque deseruisse pro ei, usu modo eros invidunt ex. [top](#)

#### 2.1 Xaf sd afdsafasd f

Vix ne elitr aliquam erroribus, pro id quando deleniti gloriatur. Quo albugius philosophia cu, per diam audiam tamquam an. No illum luptatum delicatissimi his. Utamur qualisque deseruisse pro ei, usu modo eros invidunt ex. as aequae detraxit ad. Cu assum exerci vix, quem congue deserunt ea cum. Quot repudiare in duo, consul consetetur has in. Nam novum malorum ne. Dictas perfecto sententiae ad sea, modus delectus ex mei. Lorem ando. [top](#)

#### 2.2 Xaf sd afdsafasd f

In sit ignota alterum explicari, id vis utroque facilis temporibus, duo no erat iisque scaevola. Ne solet legimus splendide pri, ad mel habemus oportere corrumpit. Vel facilisi volutpat consetetur ut. Dicit graeco te quo, eos ei hinc animal volumus. Ne sea quem simul mucius, duo ei elitr euripidis. Quo tota choro insolens et, id dolore cotidieque duo. [top](#)

##### 2.2.1 Afasdf Xaf sd afdsafasd f

Lorem ipsum dolor sit amet, ne has solet percipitur, voluptaria mnesarchum ea eum. Est te cibo erat rationibus, pro ponderum lobortis vulputate ea, his dolor luptatum eu. Quodsi vocibus eligendi ea duo, petentium neglegentur pro ne. Et vix laudem aperiri interesset, eos ut euismod accusam aliquando. In sit

```
<h1>AN ESSAY FOR CMPT 165</h1>
```

```
<blockquote>Anyone who...</blockquote>
```

```
<h2>1. INTRO</h2>
```

```
<p id="p1"><a href="#p2">skip</a>
```

```
Lorem ipsum dolor sit amet, ne has solet  
pe. Est...</p>
```

```
<h2>2. METHODS</h2>
```

```
<p id="p2"><a href="#p3">skip</a>
```

```
Lipsum dolor sit amet, ne has solet sab  
ercipitur, voluptaria mnesarchum ea eum.  
Est ep. <a href="#p1">top</a></p>
```

```
<h3>2.1 Xafsd</h3>
```

```
<p id="p3"><a href="#p4">skip</a>Sipsum  
dolor sit amet, ne has solet percipitur,  
voluptaria mnesarchum ea Lorem ipsum  
dolo. Vptaria amet luptaria mnesarchum ea  
mnesarchum ea Lorem ipsum dolor sit amet,  
ne lorss sits.<a href="#p1">top</a></p>
```

# id attribute

Uses:

1) For anchoring parts within the same webpage

– Instantiate:

```
<h1 id="name_of_id"></h1>
```

– Reference (refer to the element as):

```
#name_of_id
```

2) For styling a specific element

```
#name_of_id {  
    color: red;  
}
```



Demo

# id attribute

- HTML 4.01 has restrictions on id values
  - Cannot start with a number
  - Cannot be used in <head>, <html>, <meta>, <style>, <title>, etc.
  - XHTML, HTML 5: no such restriction

# Today's Agenda

- id attribute
- Creating tables

Tags you'll learn:

<table>

<th>

<tr>

<td>

<caption>

Attributes you'll learn:

summary

abbr

colspan

rowspan

# Creating tables

Heading1	Heading 2	Heading 3
Item1	Data1	Data2
Item2	Data3	Data4
Item3	Data5	Data6

## Elements for table:

`<table>`

`<th>`      table head

`<td>`      table data

`<tr>`      table row

– May contain one or more of `<td>` `<th>`



# Creating a simple table

Reporting experimental results...

Substance examined	Measured pH level
Lemon juice	2.4
Baking soda	8.4
Orange juice	3.5

1 header row

3 data rows

→ each with 2 columns

# Creating a simple table

Substance examined	Measured pH level
Lemon juice	2.4
Baking soda	8.4
Orange juice	3.5

1 header row

3 data table rows

→ each with 2 columns

Example markup:

```
<table>
  <tr>  <!-- header row -->
    <th>Substance examined</th>
    <th>Measured pH</th>
  </tr>
  <tr>  <!-- data row -->
    <th>Lemon juice</th>
    <td>2.4</td>
  </tr>
  <tr>  <!-- data row -->
    <th>Baking soda</th>
    <td>8.4</td>
  </tr>
  <tr>  <!-- data row -->
    <th>Orange juice</th>
    <td>3.5</td>
  </tr>
</table>
```

# Creating a more complex table

“pH level” header spans over 3 columns

“Substance”  
header  
spans over  
2 rows

Table 1. pH levels measured in 3 test samples.

Substance	pH level		
	Measurement 1	Measurement 2	Measurement 3
Lemon juice	2.4	2.2	2.5
Baking soda	8.4	8.1	7.9
Orange juice	3.5	2.9	2.7

```
<th colspan="3">pH level</th>
```

```
<th rowspan="2">Substance</th>
```

# Example markup/styling of a table

```
<table >
    <tr> <!-- Headers -->
        <th rowspan="2">Substance</th>
        <th colspan="3">pH level</th>
    </tr>
    <tr> <!-- Subheadings -->
        <th>Sample 1</th>
        <th>Sample 2</th>
        <th>Sample 3</th>
    </tr>
    <tr> <!-- First data row -->
        <td>Lemon juice</td>
        <td>2.2</td>
        <td>2.4</td>
        <td>2.2</td>
    </tr>
    <tr> <!-- Second data row -->
        <td>Baking soda</td>
        <td>8.4</td>
        <td>8.1</td>
        <td>8.2</td>
    </tr>
    <tr> <!-- Third data row -->
        <td>Orange juice</td>
        <td>3.5</td>
        <td>2.9</td>
        <td>3.1</td>
    </tr>
</table>
```

```
/* CSS below */

table {
    border: solid green 2pt ;
    font-size: 14pt;
    font-family: sans-serif;
    text-align: center;
}

tr {
    background-color: #9d9;
    color: green;
    padding: 1em;
}

th {
    width: 120px;
    background-color: green;
    color: white;
}
```

# Making tables more accessible

```
<table >
  <tr>
    <th rowspan="2" class="left">Substance</th><th colspan="2">pH level</th></tr>
    <tr><th>Measurement 1</th><th>Measurement 2</th></tr>
    <tr> <!-- First row -->
      <td>Lemon juice</td>
      <td>2.4</td>
      <td>2.2</td>
    </tr>
    <tr> <!-- Second row -->
      <td>Baking soda</td>
      <td>8.4</td>
      <td>8.1</td>
    </tr>
    <tr> <!-- Third row -->
      <td>Orange juice</td>
      <td>3.5</td>
      <td>2.9</td>
    </tr>
    <caption>This is caption of table.</caption>
</table>
```

# Making tables more accessible

→ Add summary description

```
<table summary="Measured pH levels in samples collected for Experiment A.">
  <tr>
    <th rowspan="2" class="left">Substance</th><th colspan="2">pH level</th></tr>
    <tr><th>Measurement 1</th><th>Measurement 2</th></tr>
    <tr> <!-- First row -->
      <td>Lemon juice</td>
      <td>2.4</td>
      <td>2.2</td>
    </tr>
    <tr> <!-- Second row -->
      <td>Baking soda</td>
      <td>8.4</td>
      <td>8.1</td>
    </tr>
    <tr> <!-- Third row -->
      <td>Orange juice</td>
      <td>3.5</td>
      <td>2.9</td>
    </tr>
    <caption>This is caption of table.</caption>
</table>
```

# Making tables more accessible

→ Add summary description

```
<table summary="Measured Ph levels in samples collected for Experiment A.">
  <tr>
    <th rowspan="2" class="left">Substance</th><th colspan="2">Ph level</th></tr>
    <tr><th>Measurement 1</th><th>Measurement 2</th></tr>
    <tr> <!-- First row -->
      <td abbr="lemon">Lemon juice</td>
      <td>2.4</td>
      <td>2.2</td>
    </tr>
    <tr> <!-- Second row -->
      <td abbr="soda">Baking soda</td>
      <td>8.4</td>
      <td>8.1</td>
    </tr>
    <tr> <!-- Third row -->
      <td abbr="orange">Orange juice</td>
      <td>3.5</td>
      <td>2.9</td>
    </tr>
    <caption>This is caption of table.</caption>
</table>
```

→ Add short version of header contents

Tip: Making sense of a large table via listening can be very difficult. Try to simplify it first.

# Use of tables

- Tables not for structuring contents
  - Old (bad) practice in the 90s
  - Use CSS instead
- Use tables only for display of tabular data

Other tips:

- Group related columns or rows for improved readability
- Simplify large tables whenever possible



# Questions?

# Today's summary

- 3 parts to webpages
  - meta vs. content
- id attribute
  - Uses:
    1. Anchoring within a webpage
    2. Styling specific elements
- Creating tables

Tags: <table><th><tr><td><caption>

Attributes in tables: summary, abbr, colspan, rowspan