

Web Client Computing

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Announcements

- The next class (March 16th Thursday) will start from 17:50 (10 minutes earlier)

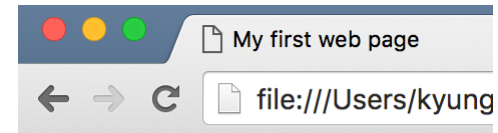
Recap from the last class

- <title> <pre>
- <small> <mark> <sup> <sub>
-
 tag
 - Empty tag – needs no element and closing tag
 - Sometimes, a closing tag is inserted for backward compatibility with XHTML
- Adding auto indentation in VIM editor
 - Open/Create .vimrc file (in your home folder)
 - vi ~/.vimrc

```
filetype plugin indent on
syntax on
set expandtab
set autoindent
set smartindent
set tabstop=2
```

Examples

```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
This is <small>small text</small><br>
This is <mark>marked text</mark><br>
This is <del>deleted text</del><br>
This is <sup>superscript</sup><br>
This is <sub>subscript</sub>
  █
</body>
</html>
```

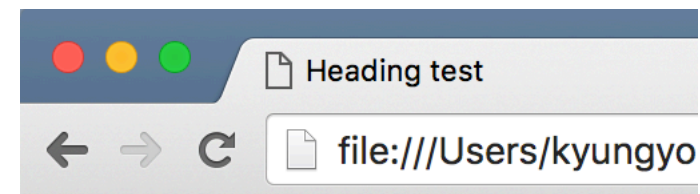


This is small text
This is **marked text**
This is ~~deleted text~~
This is ^{superscript}
This is _{subscript}

HTML Headings

- Organizing contents hierarchically
 - Recommended to use in order
 - h1, h2, h3, h4, h5, h6
 - Space is automatically added after heading
 - Search engine use headings to **index** the structure of the content

```
<!DOCTYPE html>
<html>
<head>
  <title>Heading test</title>
</head>
<body>
  <h1>h1 heading</h1>
  <h2>h2 heading</h2>
  <h3>h3 heading</h3>
  <h4>h4 heading</h4>
  <h5>h5 heading</h5>
  <h6>h6 heading</h6>
</body>
</html>
```



h1 heading

h2 heading

h3 heading

h4 heading

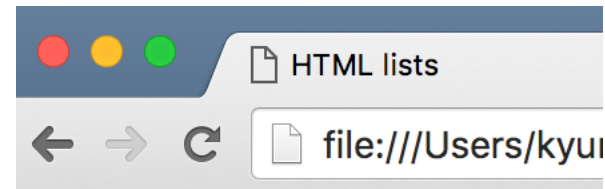
h5 heading

h6 heading

HTML Lists

- Represents a set of lists in the content
 - ul – unordered list (usually expressed with bullets)
 - ol – ordered list (usually expressed with incremental numbers)
 - li – an element in the list

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML lists</title>
</head>
<body>
  <ul>
    <li>Unordered</li>
    <li>list</li>
  </ul>
  <ol>
    <li>ordered</li>
    <li>list</li>
  </ol>
</body>
</html>
```



- Unordered
 - list
-
1. ordered
 2. list

Lists Bullet Shape

- Unordered list style
 - list-style-type:disc - entry mark with bullet (default)
 - list-style-type:circle - entry mark with circle
 - list-style-type:square - entry mark with square
- Ordered list attribute
 - type="1" : numbered 1, 2, 3, ...
 - type = "A" or "a": numbered A, B, C, ...
 - type = "I" or "i" : number in roman number in upper or lower case

List Example

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML lists</title>
</head>
<body>
  <ul style="list-style-type:circle">
    <li>Coffee</li>
    <li>Tea</li>
    <li>Milk</li>
  </ul>
  <ol type="A">
    <li>Coffee</li>
    <li>Tea</li>
    <li>Milk</li>
  </ol>
</body>
</html>
```

-
- Coffee
 - Tea
 - Milk

- A. Coffee
- B. Tea
- C. Milk

Nested Lists

- Lists can be nested

```
<!DOCTYPE html>
<html>
<body>

<h2>A Nested List</h2>

<ul>
  <li>Coffee</li>
  <li>Tea
    <ul>
      <li>Black tea</li>
      <li>Green tea</li>
    </ul>
  </li>
  <li>Milk</li>
</ul>

</body>
</html>
```

A Nested List

- Coffee
- Tea
 - Black tea
 - Green tea
- Milk

HTML Time Elements

- Express time information in the page
 - `<time>2017-03</time>`
 - `<time>2017-03-13</time>`
 - `<time>18:30</time>`
 - `<time>18:30:12</time>`
 - `<time datetime="2017-03-13">My birthday</time>`
- Time element does not render special. Then what is the purpose?

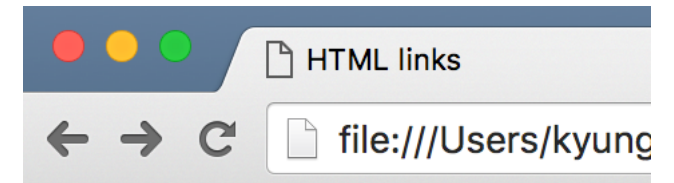
HTML – Make a Link to Other Page

- Hyper Text
 - a structured text that uses links to navigate through different pages
- WWW – World Wide Web
 - Interlinked by hyper text
- Anchor tag `<a>` represents a link
- Destination is added as an attribute within `<a>` tag
 - `Kookmin Univ. Computer Science`

HTML Link Example

- To open the link in a new window add target="_blank" attribute

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML links</title>
</head>
<body>
  <a href="http://cs.kookmin.ac.kr">Kookmin University CS</a><br>
  <a href="http://cs.kookmin.ac.kr" target="_blank">Kookmin University CS</a>
</body>
</html>
```



[Kookmin University CS](http://cs.kookmin.ac.kr)

[Kookmin University CS](http://cs.kookmin.ac.kr)

HTML – Link within a Page

- Within a page, we can assign ID to an entry and link to it

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML page links</title>
</head>
<body>
  <p id="bookmark-1">This is a new paragraph</p>
  <br><br><br><br><br><br><br><br><br><br><br>
  <br><br><br><br><br><br><br><br><br><br><br>
  <br><br><br><br><br><br><br><br><br><br><br>
  <br><br><br><br><br><br><br><br><br><br><br>
  <br><br><br><br><br><br><br><br><br><br><br>
  <a href="#bookmark-1">jump in a page</a>
</body>
</html>
```

~

Insert an Image

- Using tag. Attributes
 - src : the location of image file. Both local file system path and URL are OK
 - width : the width of the image in a page (unit: pixel or %)
 - height : the height of the image in a page (unit: pixel or %)
 - title : a message shown when a pointer is over the image
 - alt : a message that will be shown when the image is not available
 - ``
- HTML Screen reader
 - A software program that reads what is displayed on the screen
 - For blind people, visually impaired, learning disabled

HTML Image Example

```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
  </br>
  <br>
  
</body>
</html>
```



 KMU Logo



HTML5 Video Tag

- Used to add a video into a web page
- Under the video tag, nest source tag with src specifying the movie location
 - controls – show control bar
 - loop – loop when the file play is over
 - autoplay – automatically start the rendering when the page is ready
 - <source> tag contains type to specify the video type

```
<!DOCTYPE html>
<html>
<head>
  <title>Adding movie to a page</title>
</head>
<body>
  <video width="640" height="480" controls loop>
    <source src="movie.mp4" type="video/mp4">
  </video>
</body>
</html>
```

HTML5 Audio Tag

- Very similar to <video> tag
- Audio type
 - MP3 - audio/mpeg
 - Ogg – audio/ogg
 - Wav - audio/wav

```
<!DOCTYPE html>
<html>
<head>
  <title>Adding moive to a page</title>
</head>
<body>
  <audio controls>
    <source src="maple.mp3" type="audio/mpeg">
  </audio>
</body>
</html>
```

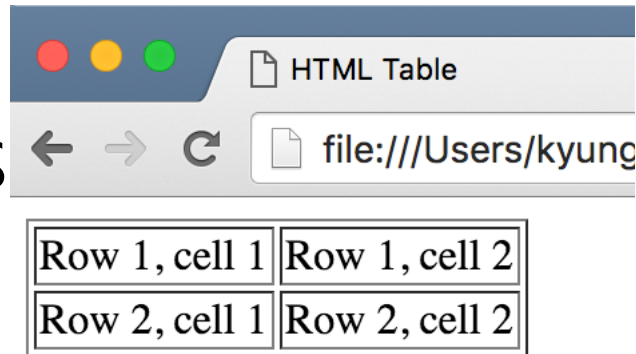
HTML5 Embed Tag

- Adding contents that are not supported with `` `<audio>` `<video>`
 - The embedded file type has to be defined in the type attribute
 - Flash: `application/x-shockwave-flash`, PDF: `application/pdf`
 - Application media type list - <http://www.iana.org/assignments/media-types/media-types.xhtml#application>
 - Be cautious for the copyright.

```
<!DOCTYPE html>
<html>
<head>
  <title>Adding flash to a page</title>
</head>
<body>
  <embed type="application/x-shockwave-flash" src="bigfish.swf" width="600" height="400"></embed><br>
  <a href="http://www.crazymonkeygames.com/Big-Fish.html">The original location</a><br>
  <embed type="application/pdf" src="week1-intro.pdf" width="800" height="1600"></embed>
</body>
</html>
```

HTML Tables

- `<table>` defines a table
 - Attribute `border` decides whether the border is on
- `<tr>` defines each row – Table Row
- `<td>` defines each column with a row – Table Cell
 - Data should be written in this field
- Table border attribute
 - Defines border style
 - Styling better to use CSS

A screenshot of a web browser window. The title bar says "HTML Table". The address bar shows "file:///Users/kyung". The main content area displays a table with two rows and two columns. The first row contains "Row 1, cell 1" and "Row 1, cell 2". The second row contains "Row 2, cell 1" and "Row 2, cell 2".

Row 1, cell 1	Row 1, cell 2
Row 2, cell 1	Row 2, cell 2

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML Table</title>
</head>
<body>
  <table border="1">
    <tr>
      <td>Row 1, cell 1</td>
      <td>Row 1, cell 2</td>
    </tr>
    <tr>
      <td>Row 2, cell 1</td>
      <td>Row 2, cell 2</td>
    </tr>
  </table>
</body>
</html>
```

HTML Table Heading

- Use Table Heading with `<th>` tag
 - Bold and centered
- padding attribute – a style attribute to specify the space between table cell and the data within the cell
- Caption tag immediately after the table tag

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML Table</title>
</head>
<body>
<table border="1">
<caption>Points of employee</caption>
  <tr>
    <th style="padding:15px;">Firstname</th>
    <th style="padding:15px;">Lastname</th>
    <th style="padding:15px;">Points</th>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
</table>
</body>
</html>
```

Firstname	Lastname	Points
Eve	Jackson	94

Table Cells that Span Many Columns

- colspan tag to make cell to merge multiple columns

Name	Telephone	
Bill Gates	555 77 854	555 77 855

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML Table</title>
</head>
<body>
<table border="1">
  <tr>
    <th>Name</th>
    <th colspan="2">Telephone</th>
  </tr>
  <tr>
    <td>Bill Gates</td>
    <td>555 77 854</td>
    <td>555 77 855</td>
  </tr>
</table>
</body>
</html>
```

Table Cells that Span Many Rows

- rowspan tag to make a cell to merge multiple rows

Name:	Bill Gates
Telephone:	555 77 854
	555 77 855

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML Table</title>
</head>
<body>
<table border="1">
  <tr>
    <th>Name:</th>
    <td>Bill Gates</td>
  </tr>
  <tr>
    <th rowspan="2">Telephone:</th>
    <td>555 77 854</td>
  </tr>
  <tr>
    <td>555 77 855</td>
  </tr>
</table>
</body>
</html>
```

Table Rowspan and Colspan In One Place

two rowspan	four colspan			
	I	II	III	IIII
0	1	2	3	4

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML Table</title>
</head>
<body>
<table border="1">
  <tr>
    <th rowspan="2">two rowspan</th>
    <th colspan="4">four colspan</th>
  </tr>
  <tr>
    <th>I</th>
    <th>II</th>
    <th>III</th>
    <th>IIII</th>
  </tr>
  <tr>
    <td>0</td>
    <td>1</td>
    <td>2</td>
    <td>3</td>
    <td>4</td>
  </tr>
</table>
</body>
</html>
```


How To Make This?

2 and 2		four colspan			
		first col	second col	third col	fourth col
two rowspan	Third row	1	2	3	4
	Fourth row	5	6	7	8

References

- <http://www.w3schools.com/html/> - HTML tutorial
- <http://www.htmldog.com/guides/html/>
- <http://fromyou.tistory.com/581>