

You've got to get your design right... why?

You've got to get your design right... why?



bad

**EVEN BAD
LOOKS GOOD
WITH HELVETICA**

Understanding usability (Cont'd)

- Principles
- Components
- Rules

What is Usability?

“The degree to which something is able or fit to be used”

- Oxford English Dictionary

It is directly related to the experience of the use (i.e. **user experience**)

- Based on the expectations and abilities of the target user group
- The measure of the ease of use of a site
 - i.e. ensuring something works well
- Various aspects need to be considered when referring to usability
 - Important usability principles
 - Usability components

Important usability principles (Recap - Top Hat)

The 7 ± 2 Principle

Important usability principles (Recap - Top Hat)

The 2 Second Rule

Important usability principles (Recap - Top Hat)

The 3-Click Rule

Usability components

Quesenberry's (2001) five E's

- **Effective:** *how completely and accurately is the work (or, experience) completed by a user?*
- **Efficient:** *How quickly can this work be completed?*
- **Engaging:** *How well does the interface draw the user into the interaction? How pleasant and satisfying is it to use?*
- **Error Tolerant:** *How well can the product prevent errors, and can help users recover from errors that occur?*
- **Easy to learn:** *How well does the product support both initial orientation and continuous learning throughout the complete lifetime of use?*

Usability components

Example:

- Consider web application development
- In what aspects of a website can we apply Quesenberry's usability elements?

Quesenberry's five E's

Effective

Efficient

Engaging

Error Tolerant

Easy to learn

Usability components

Example:

- Consider web application development
- In what aspects of a website can we apply Quesenbery's usability elements?
 - ***Navigation***
 - E.g. navigation menus, breadcrumbs, text links
 - ***Site search***
 - E.g. search bar, search results
 - ***Submission***
 - E.g. instructions
 - ***Error pages***
 - E.g. 404 pages

Quesenbery's five E's

Effective

Efficient

Engaging

Error Tolerant

Easy to learn

Usability Rules

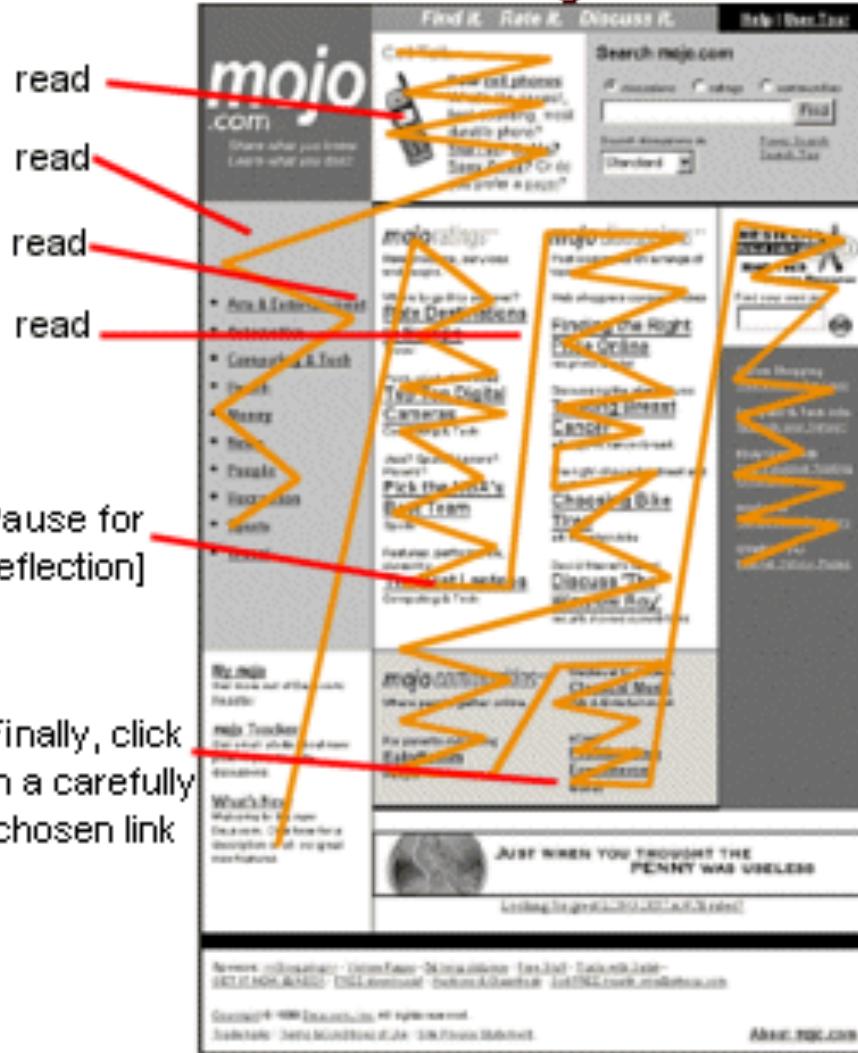
- Do not make users think
- Your message should be clear and to the point
 - *Omit words that do not add to your message*
- Design elements should make a user's required interactions obvious

< OBVIOUS		REQUIRES THOUGHT >
<p>Jobs! Click</p>  <p>Jobs</p>	<p>Hmm. <i>[Milliseconds of thought]</i></p> <p>Jobs. Click</p>  <p>Employment Opportunities</p>	<p>Hmm. Could be Jobs. But it sounds like more than that. Should I click or keep looking?</p>  <p>Job-o-Rama</p>

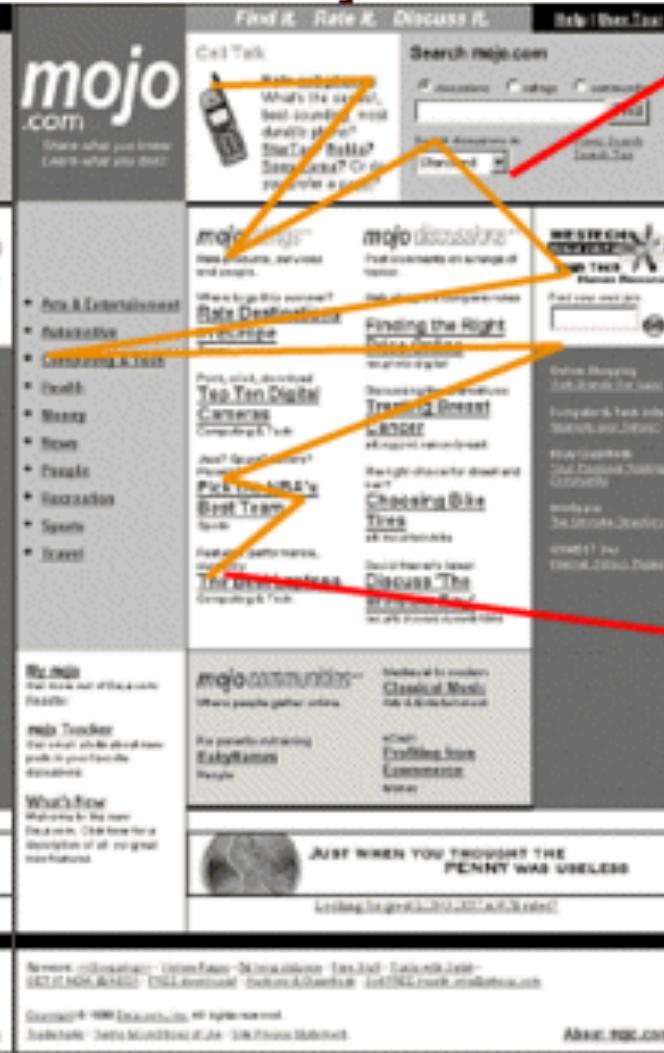
Usability Rules

- Design a web page to help a user scan its content

What we design for...



The Reality ...



Look around feverishly for anything that

- a) is interesting,
or vaguely
resembles what
you're looking for
and

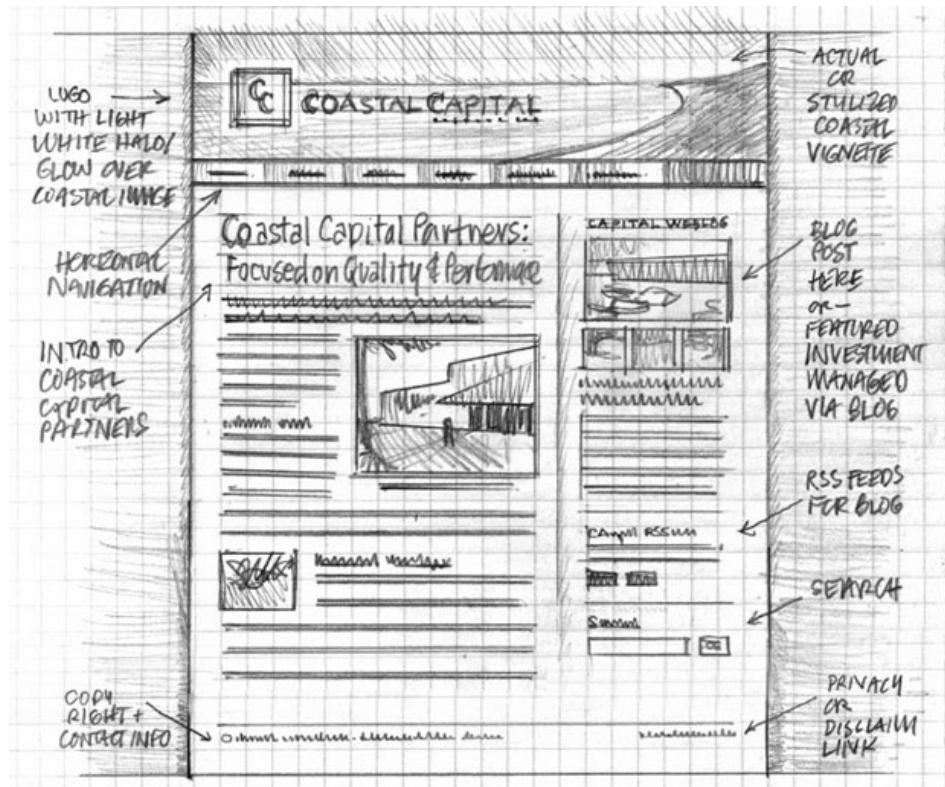
b) is clickable.

As soon as you find a halfway-decent match, click.

If it doesn't pan out, click the Back button and try again.

Usability Rules

- Use *clear visual hierarchy*
 - Logically related content should be visually related
 - “Clickable” objects should be obvious
 - Some frameworks define CSS styles for these *clickable* elements very well
 - Pages should be broken up into clearly defined areas/sections



Usability Rules

- Give users choices that guide them
- **Do not** complicate the process of completing a task



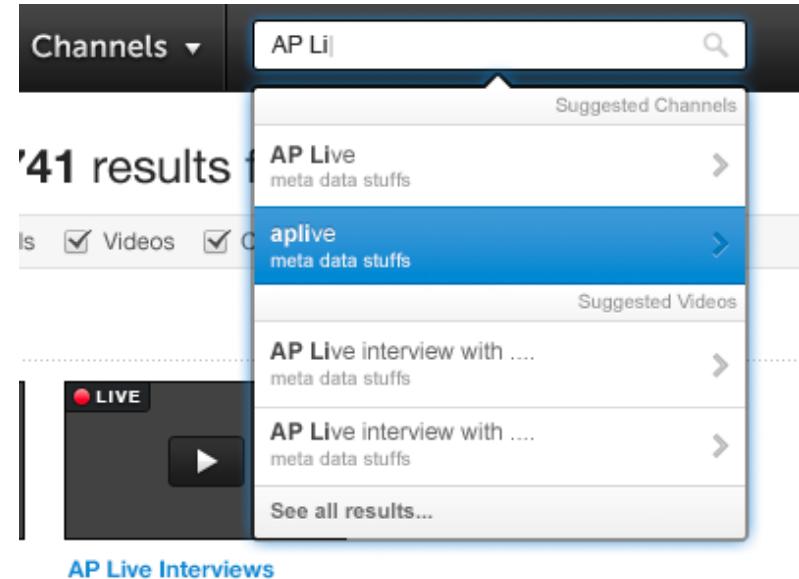
Usability Rules

- Page names and navigation menus influence the use of an application
 - Navigation bars are meant to help, not confuse

The screenshot shows the official website of the Government of Canada. At the top, there is a navigation bar with links for Jobs, Immigration, Travel, Business, Benefits, Health, Taxes, and More services. To the right of the navigation bar is a search bar labeled "Search Canada.ca" and a "Français" link. Below the navigation bar, there is a large image of four diverse individuals (two men and two women) smiling and holding smartphones. To the left of this image is a sidebar with a list of links under the "Jobs" category, including Job Bank, Find a job, Training, Hire and manage employees, Starting a business, Workplace standards, Pensions and retirement, Employment insurance, and Jobs – More. To the right of the image is a large graphic of a speech bubble containing a smiley face, with a blue arrow pointing towards it. At the bottom of the page, there is a dark banner with the text "On January 25, Let's Talk" and a "Play" button with a video camera icon.

Usability Rules

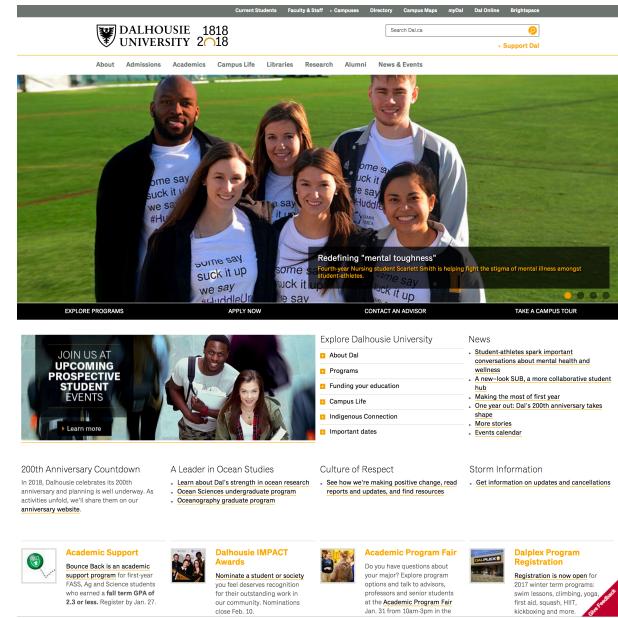
- Pull-down menus, drop-down menus...
 - Save real estate on the screen – sure, that's a good thing
 - They are efficient
 - They also have **issues**:
 - **You have to seek them out** (e.g. click on the pull-down to see the list)
 - **Hard to scan** (e.g. standard pull-down menus can be cumbersome to style)
 - **Twitchy!** (hard to read, because the list appears and goes away quickly)
- Drop-down menus can be useful if you are using it with search (e.g. auto-completion suggestions)



Usability Rules

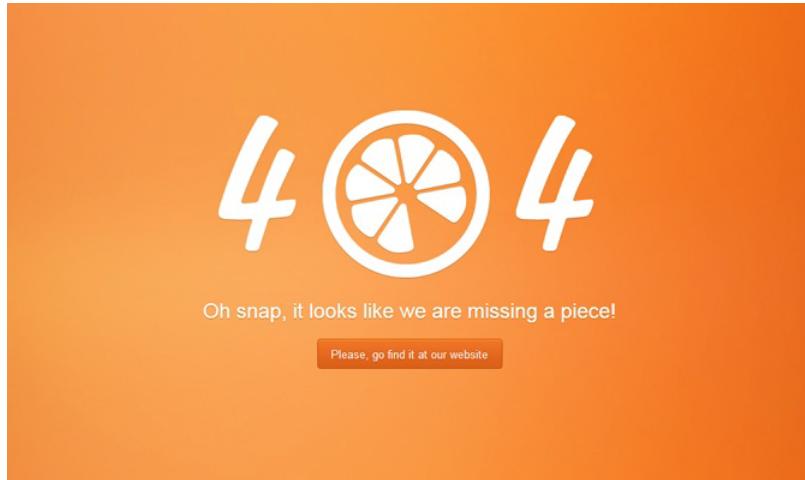
Home pages

- Meant to convey the “big picture”
- Meant to provide answers to question such as:
 - What is the site about?
 - What information/product/service can be obtained through this site?
 - Why should the user visit this site instead of another?
 - How can the user get around the site?
- Useful approaches for a home page:
 - Use taglines
 - **Do not write your mission statement on your home page**
 - It belongs in the “about” or some other page



Usability Rules

- Don't punish the user for getting lost
 - See if you can turn it into an opportunity



DALHOUSIE 1818
UNIVERSITY 2018

About Admissions Academics Campus Life Libraries Research Alumni News & Events

OOPS! PAGE NOT FOUND!

We can't find what you're looking for.

Search dal.ca or myDal (login required) for the information you're looking for.

You can also fill out the following form to request information. Please include your email address so we can respond to you.

Tell us what's missing from Dal.ca.

Want a response?
Please include your email address so we can send you the information you're looking for.

Email address (please include to receive a reply)

Authentication *

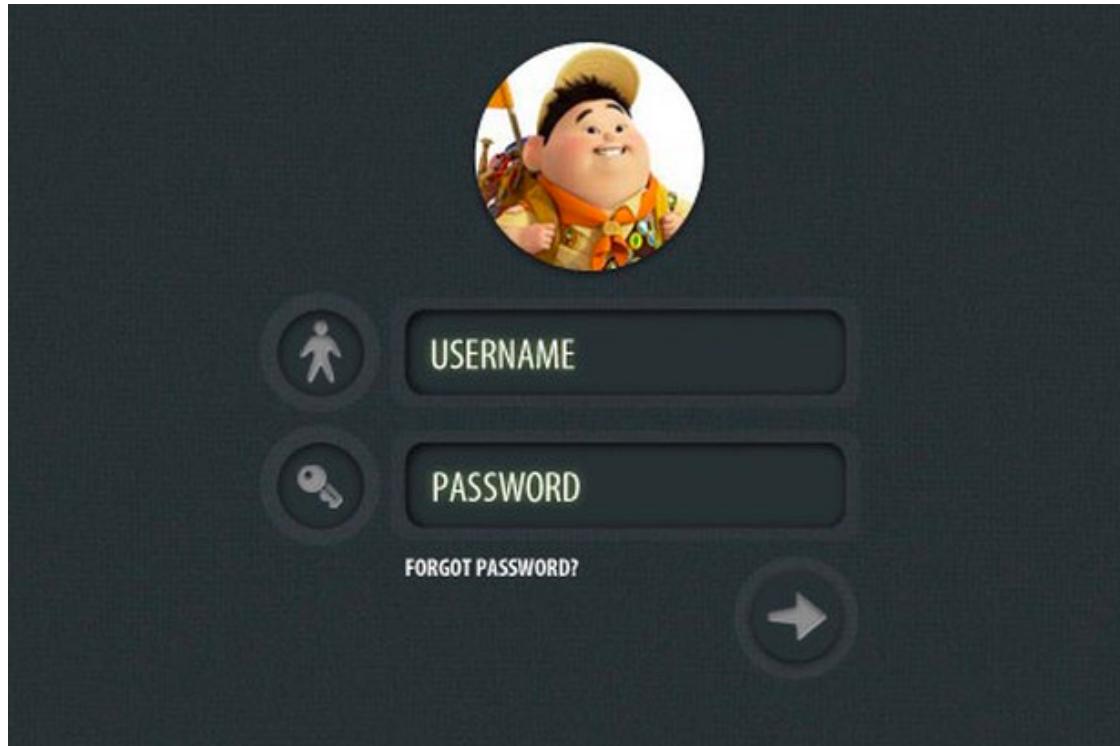
I'm not a robot

reCAPTCHA
Privacy - Terms

Send Feedback

Usability Rules

- Let the user know what you need
 - **Do not ask for information that you don't really need**

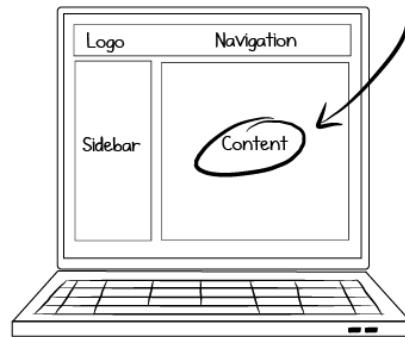


Usability Rules

- Don't do this. Just don't...

What a mobile website is **supposed** to do

Make this

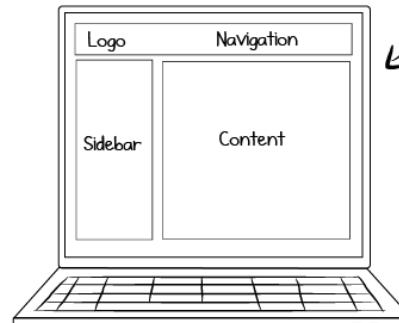


readable on this



What every major news outlet is doing:

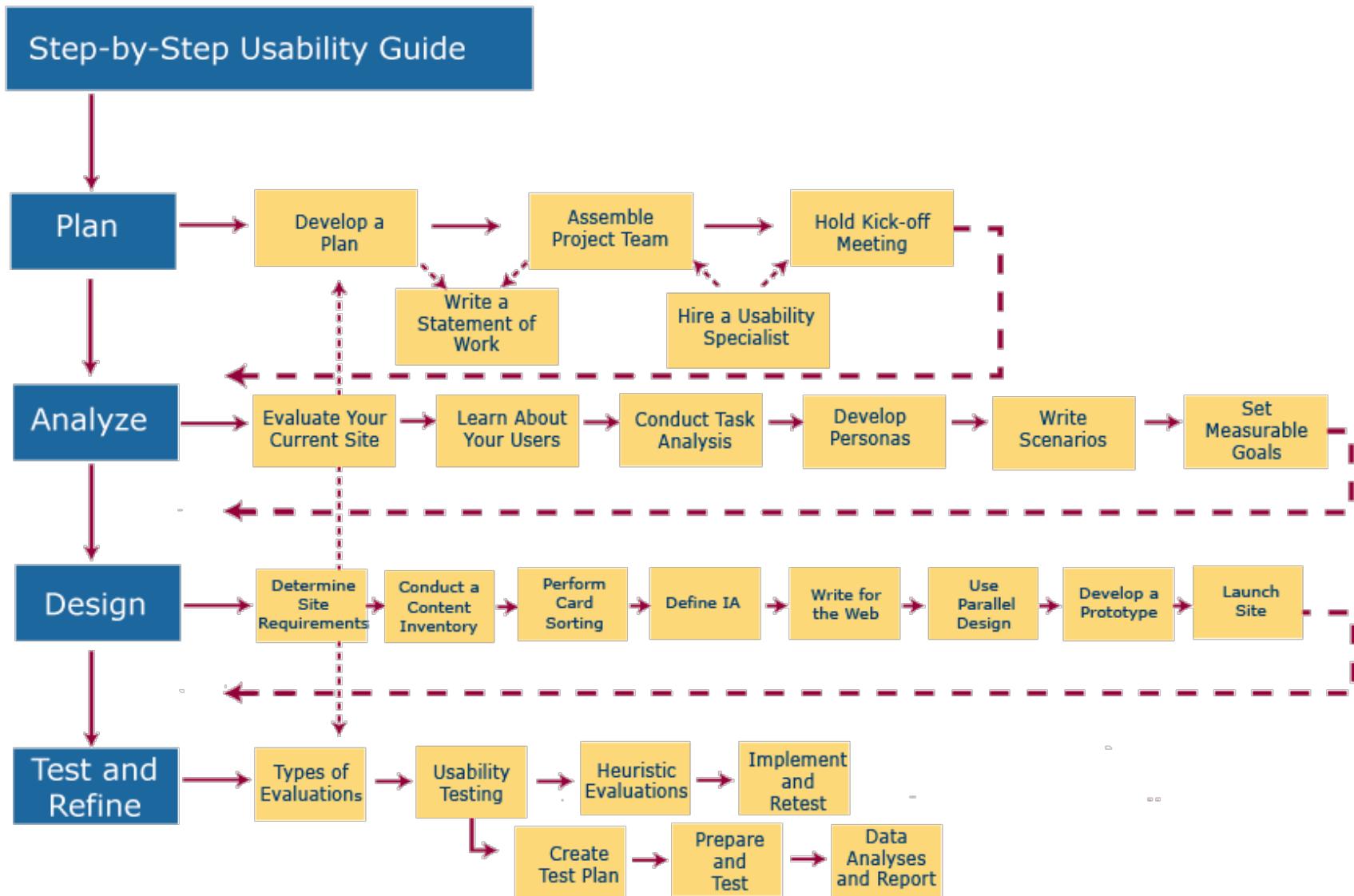
Turning this



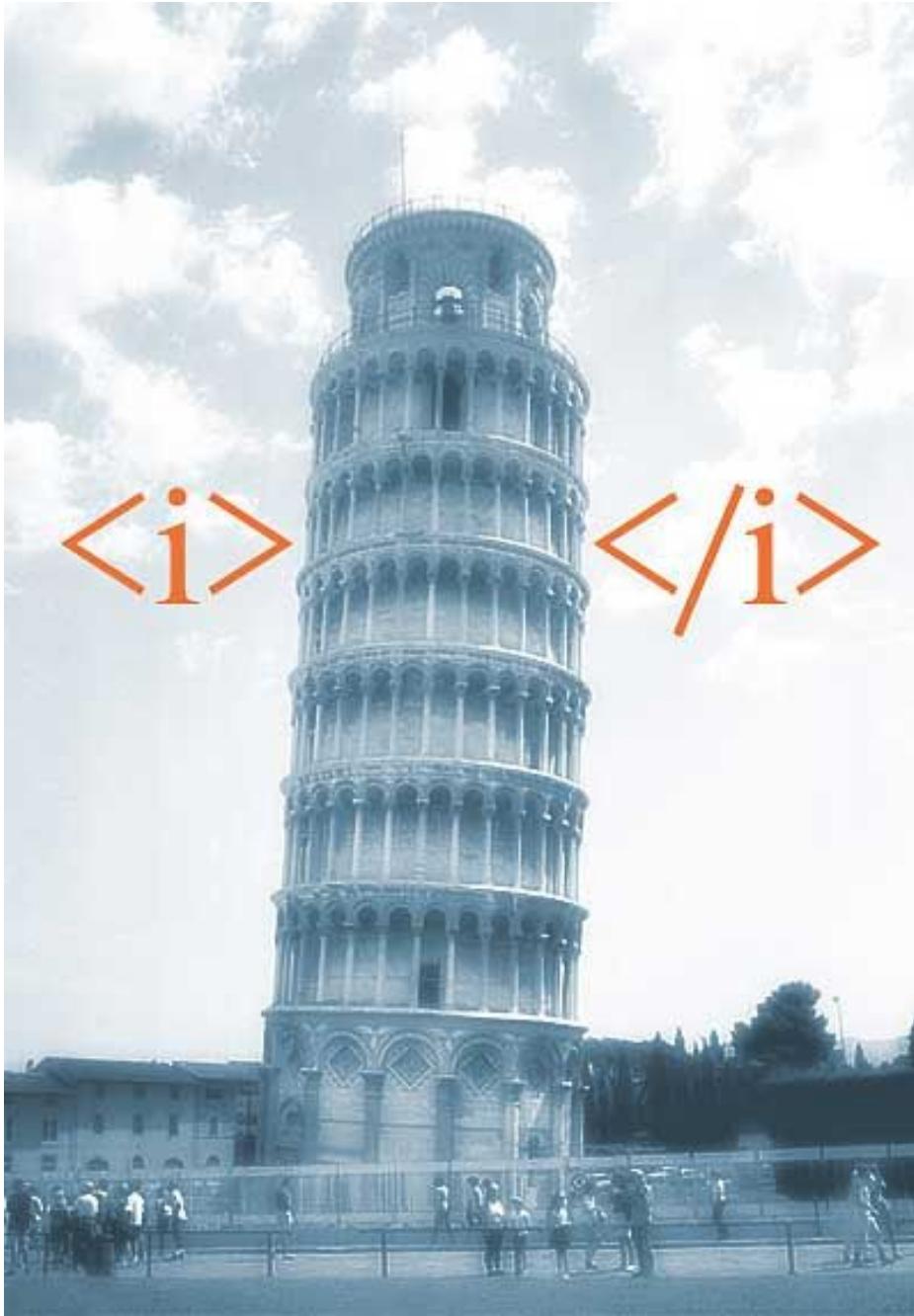
Into this



Step-by-Step Usability Guide



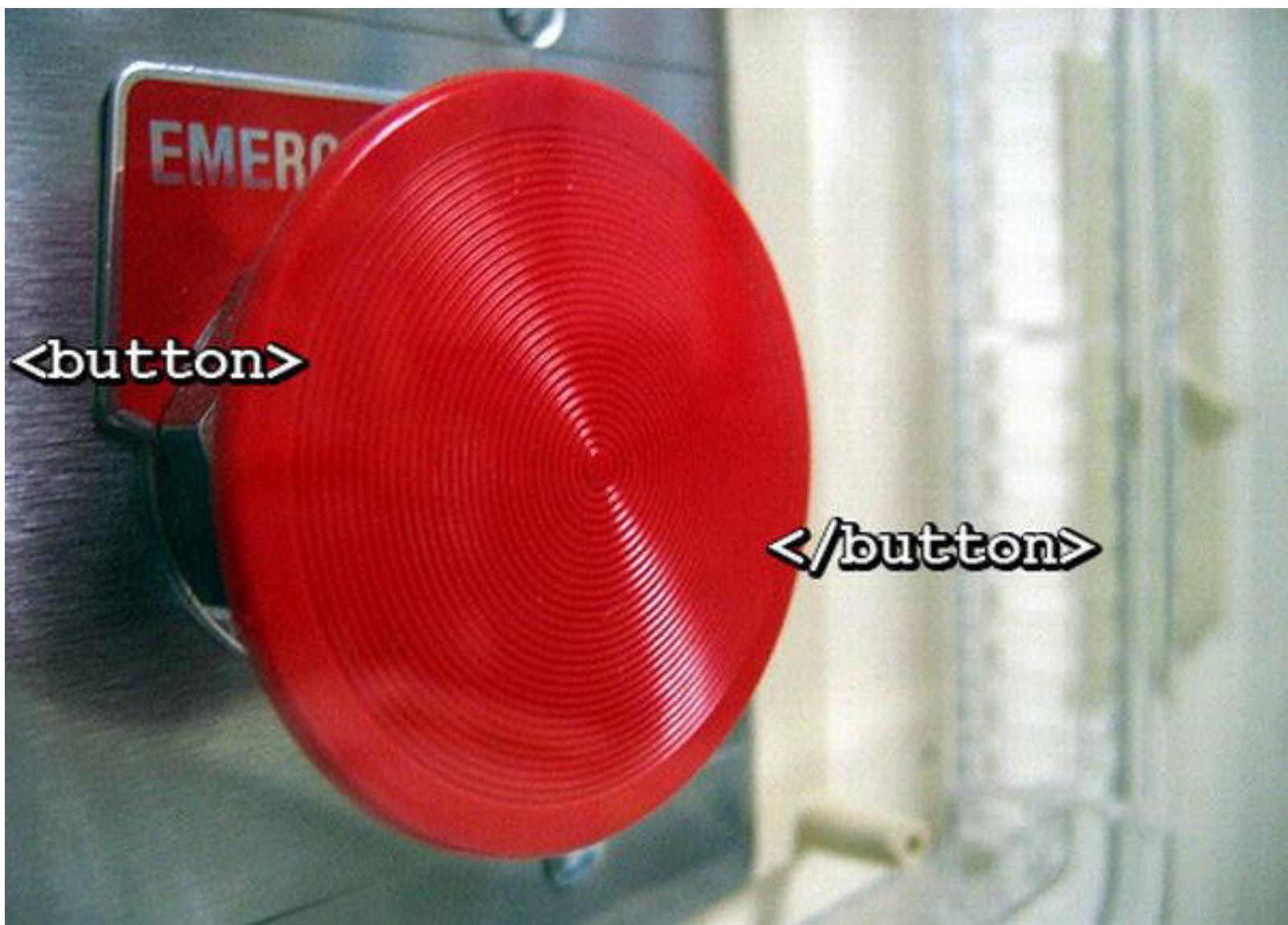
HTML is everywhere!



<table>



</table>



<button>

</button>

<select>

<option>

<option>



</option>

<option>



</option>

</option>



</select>

INFX 1606

INTRODUCTION TO
WEBSITE CREATION



HTML: HyperText Markup Language

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Outline

HTML: Part 1

- Overview
- Tags
- Elements
- Attributes
- Pages

THE DAILY NEWS

www.dailynews.com

THE WORLD'S FAVOURITE NEWSPAPER

- Since 1879

INSERT YOUR HEADLINE HERE



ARTICLE HEADLINE

In libris graecis appetere mea. At vim odio lorem omnes, pri id iuvaret partiendo. Vivendo menandi et sed. Lorem volumus blandit cu has. Sit cu alia porto fuisse.

Ea pro naturum invidunt repudiandae, his et facilis vituperatoribus. Mei eu ubique altera senserit, consul eripuit accusata has ne. Ignota verberem te nam, eu cibo causee menandi vim.

Ea pro naturum invidunt repudiandae, his et facilis vituperatoribus. Mei eu ubique altera senserit, consul eripuit accusata has ne. Ignota verberem te nam, eu cibo causee menandi vim.

LOREM IPSUM In libris graecis appetere mea. At vim odio lorem omnes, pri id iuvaret partiendo. Vivendo menandi et sed. Lorem volumus blandit cu has. Sit cu alia porto fuisse.

Ea pro naturum invidunt repudiandae, his et facilis vituperatoribus. Mei eu ubique altera senserit, consul eripuit accusata has ne.

In libris graecis appetere mea. At vim odio lorem omnes, pri id iuvaret partiendo. Vivendo menandi et sed.

Ea pro naturum invidunt repudiandae, his et facilis vituperatoribus. Mei eu ubique altera senserit, consul eripuit accusata has ne.

In libris graecis appetere mea. At vim odio lorem omnes, pri id iuvaret partiendo. Vivendo menandi et sed. Lorem volumus blandit cu has. Sit cu alia porto fuisse.

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In libris graecis appetere mea. At vim odio lorem omnes, pri id iuvaret partiendo. Vivendo menandi et sed.

Ea pro naturum invidunt repudiandae, his et facilis vituperatoribus. Mei eu ubique altera senserit, consul eripuit accusata has ne.

In libris graecis appetere mea. At vim odio lorem omnes, pri id iuvaret partiendo. Vivendo menandi et sed.

Word Document.docx - Word

FILE HOME INSERT DESIGN PAGE LAYOUT REFERENCES MAILINGS REVIEW VIEW

This is the Page Title

Main Heading

Multiple sentences make a paragraph. It is usually descriptive, and often long, discussing various situations. Sometimes, paragraphs are used to justify an idea you might have.

Sub-Heading 1

Sub-headings are used to describe smaller sections of a page.

Sub-Heading 2

See how easy it is to include another sub-heading? It's as simple as that.

Styles

Normal

No Spacing

Heading 1

Heading 2

Heading 3

Title

Subtitle

Subtle Emphasis

Emphasis

Intense Emphasis

Strong

Quote

Intense Quote

Subtle Reference

Intense Reference

Book Title

List Paragraph

Show Preview

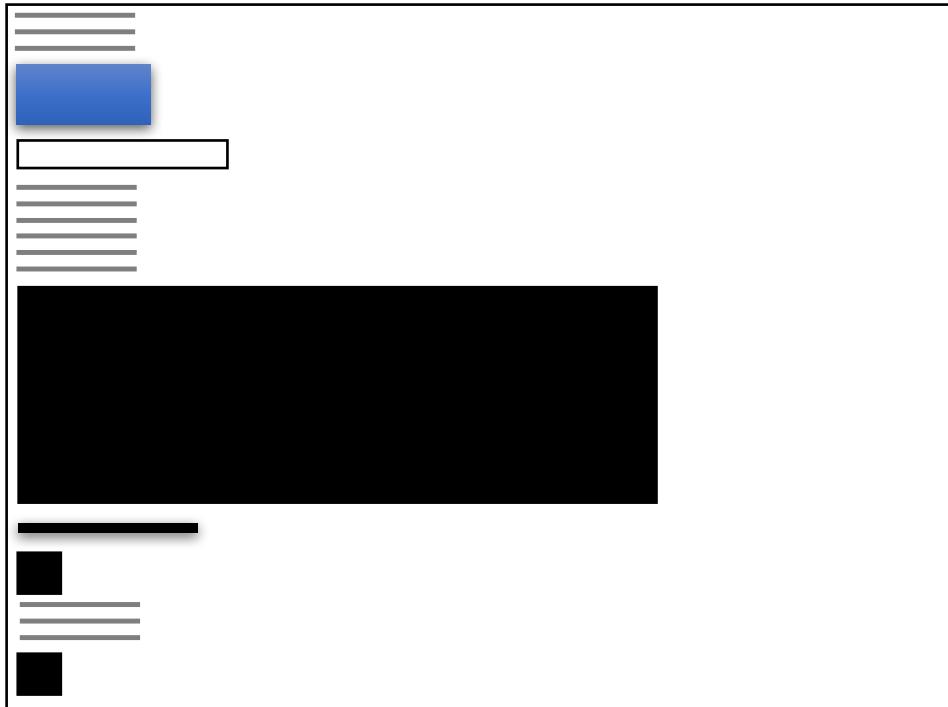
Disable Linked Styles

Options...

PAGE 1 OF 1 61 WORDS ENGLISH (CANADA) 130%

HTML, CSS and JavaScript

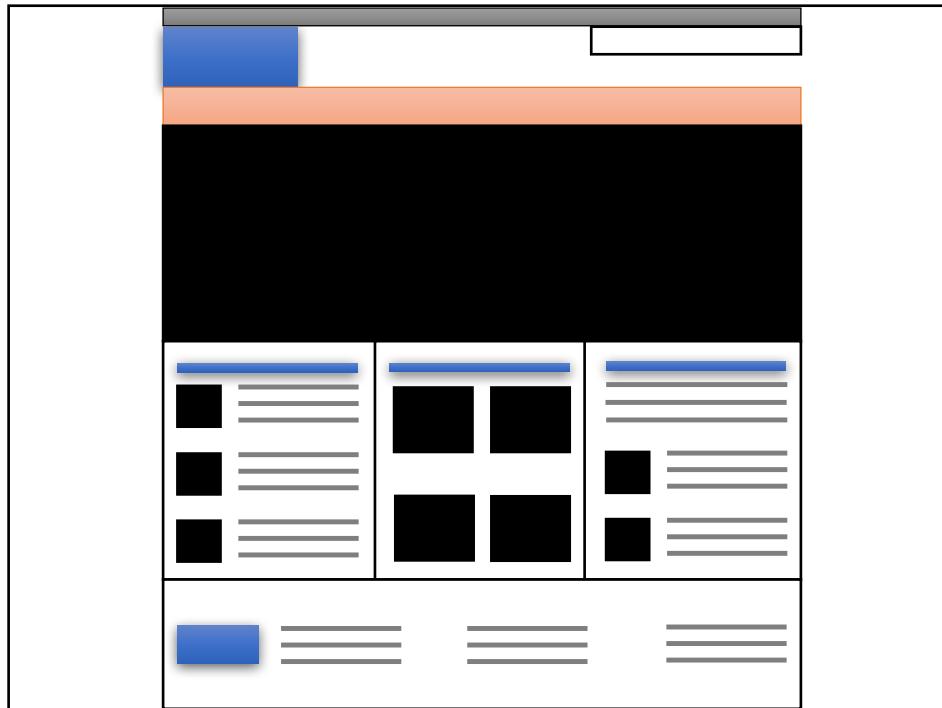
How do HTML, CSS and JavaScript work together?



HTML helps in creating the content (i.e. the **content layer**);

HTML, CSS and JavaScript

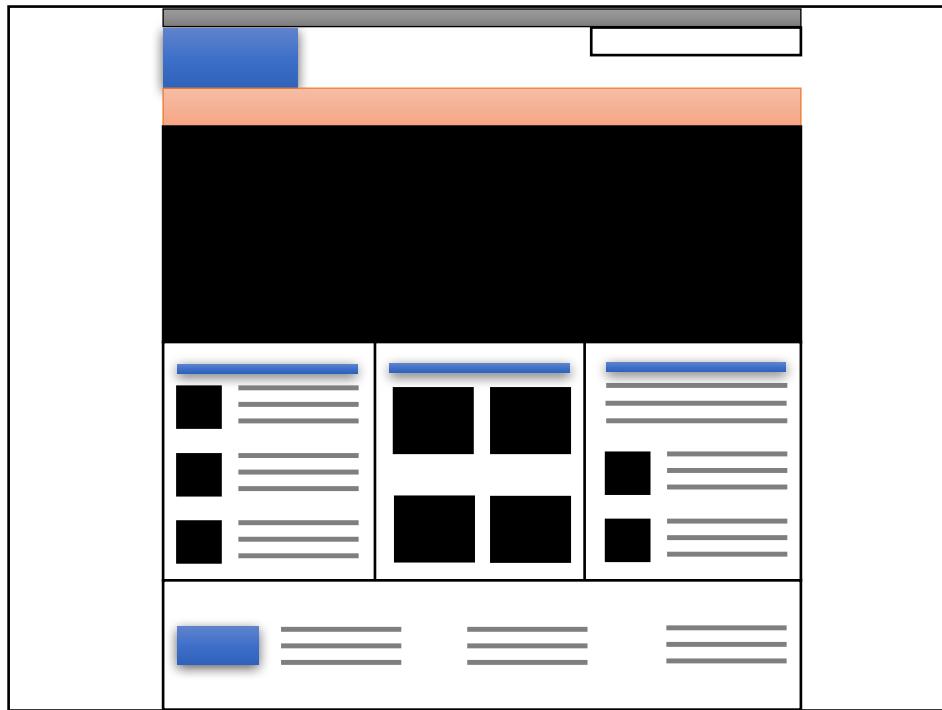
How do HTML, CSS and JavaScript work together?



HTML helps in creating the content (i.e. the **content layer**);
CSS enhances the presentation of this content (**presentation layer**);

HTML, CSS and JavaScript

How do HTML, CSS and JavaScript work together?



*Mmm...
Think of the user,
you must!*



HTML helps in creating the content (i.e. the **content layer**);
CSS enhances the presentation of this content (**presentation layer**);
And, JavaScript/jQuery gives us mechanisms to change the way pages behave (acting as the **behaviour layer**)

HTML

It is a markup language – helps you organize and describe pieces of data in your document

It also helps you do so much more than that!

- Identify each element distinctly (using IDs)
- Style them differently (using styles / CSS)
- Manipulate individual elements on the page (using JavaScript)
- In addition to organizing and presenting data!

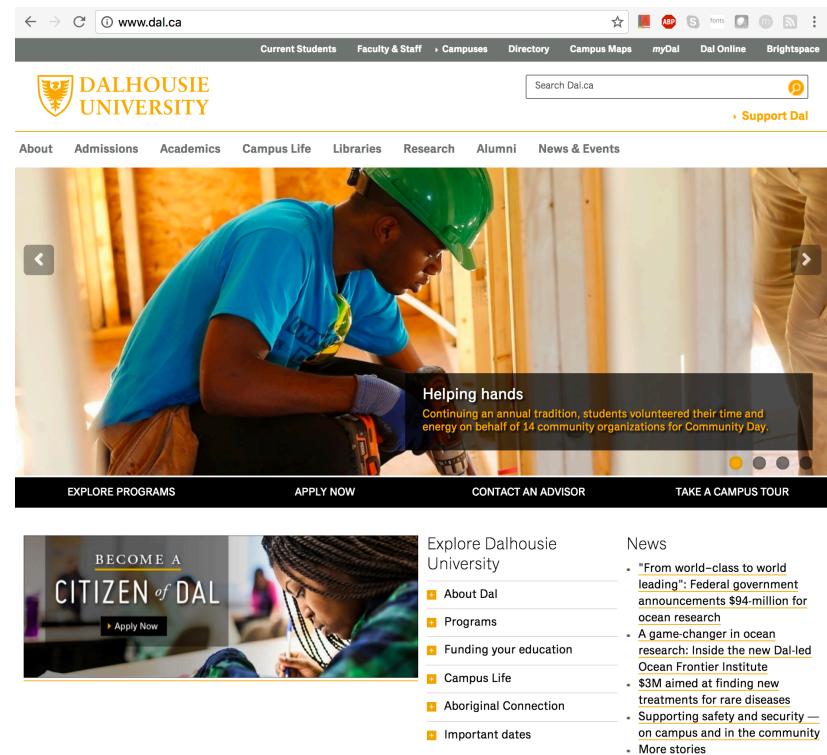
HTML

HTML code is composed of
HTML elements

Each element tells the browser
“something” about the data
it describes / represents

Typically, HTML elements are
composed of two ***HTML tags***

Tags are also known as markup

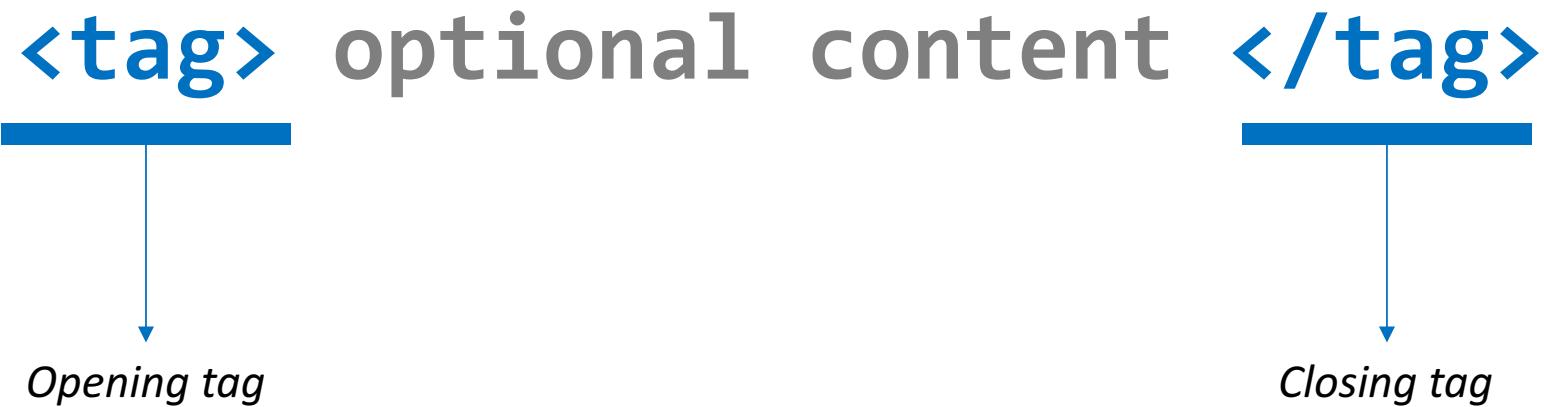


The screenshot shows the homepage of www.dal.ca. At the top, there's a navigation bar with links for Current Students, Faculty & Staff, Campuses, Directory, Campus Maps, myDal, Dal Online, and Brightspace. Below the navigation is the Dalhousie University logo and a search bar. The main content area features a large image of a student wearing a hard hat and safety glasses, working on a construction site. A dark overlay box contains the text "Helping hands" and a subtitle about students volunteering for Community Day. Below the image are three calls-to-action: "EXPLORE PROGRAMS", "APPLY NOW", and "CONTACT AN ADVISOR". To the right, there's a sidebar with a "Explore Dalhousie University" section listing links for About Dal, Programs, Funding your education, Campus Life, Aboriginal Connection, and Important dates. The sidebar also includes a "News" section with a list of recent announcements.

- Explore Dalhousie University
 - About Dal
 - Programs
 - Funding your education
 - Campus Life
 - Aboriginal Connection
 - Important dates
- News
 - "From world-class to world leading": Federal government announcements \$94-million for ocean research
 - A game-changer in ocean research: Inside the new Dal-led Ocean Frontier Institute
 - \$3M aimed at finding new treatments for rare diseases
 - Supporting safety and security — on campus and in the community
 - More stories

HTML Tags

Typically, everything that has a beginning, has an end

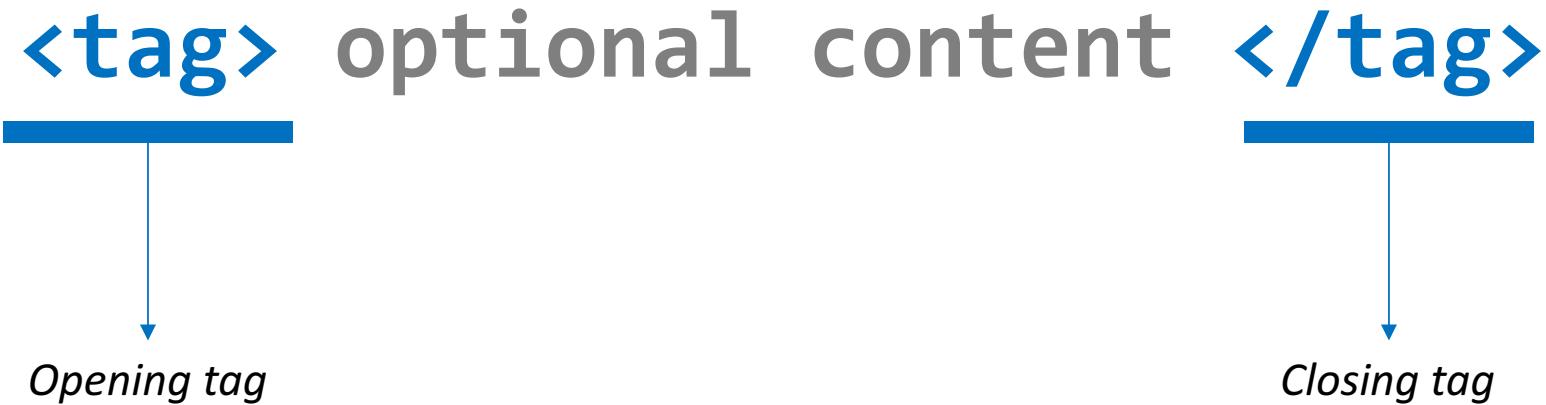


Tags are characters that are surrounded by angled brackets <>

Note. Closing tags have a forward slash / that tells the browser that the HTML element ends at that point

HTML Tags

Everything that has a beginning, has an end

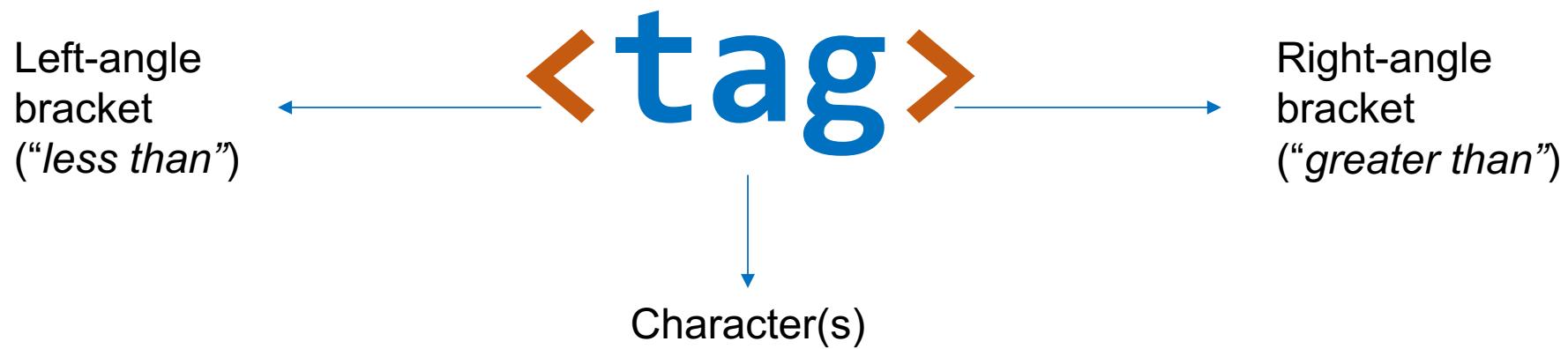


See how tags seem to enclose or “contain” the data / content?

So, tags act like **descriptive containers**.

They give you more information about the data they “contain” between the opening and closing tags.

HTML Opening Tags



Examples:

<div> → division

<p> → paragraph

<a> → anchor reference (used for hyperlinks)

HTML Opening Tags, with Attributes

<tag attr="val">

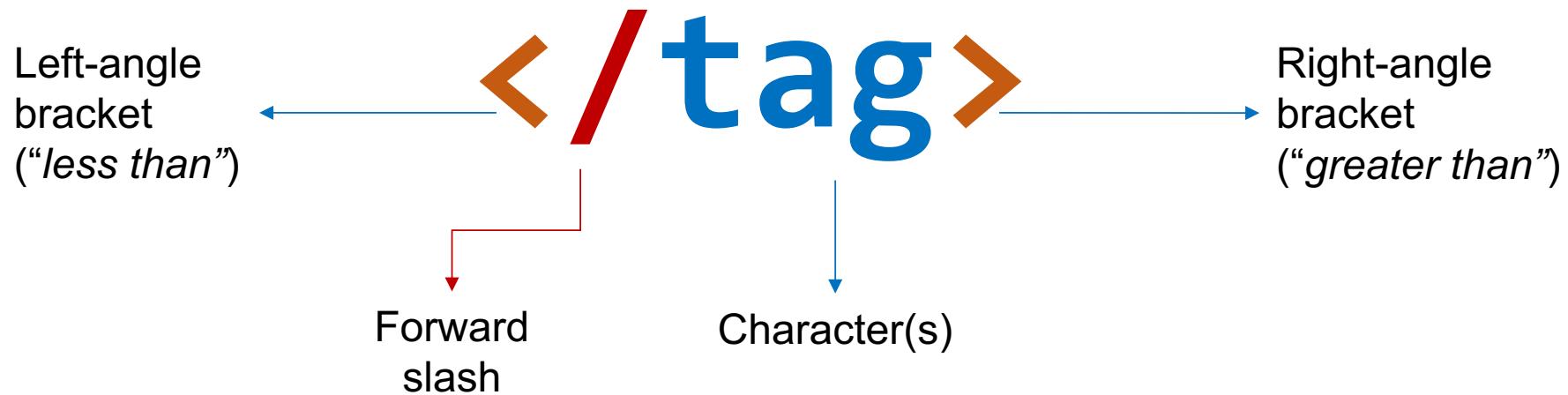
Attributes and their values are like name-value pairs of data.

attr : attribute name (e.g. id, style, class, etc.)

val : attribute value (e.g. "logoLink", "color: red;", etc.)

Example: **<div id="myLogo">...</div>**

HTML Closing Tags



Examples:

`</div>` → end of division

`</p>` → end of paragraph

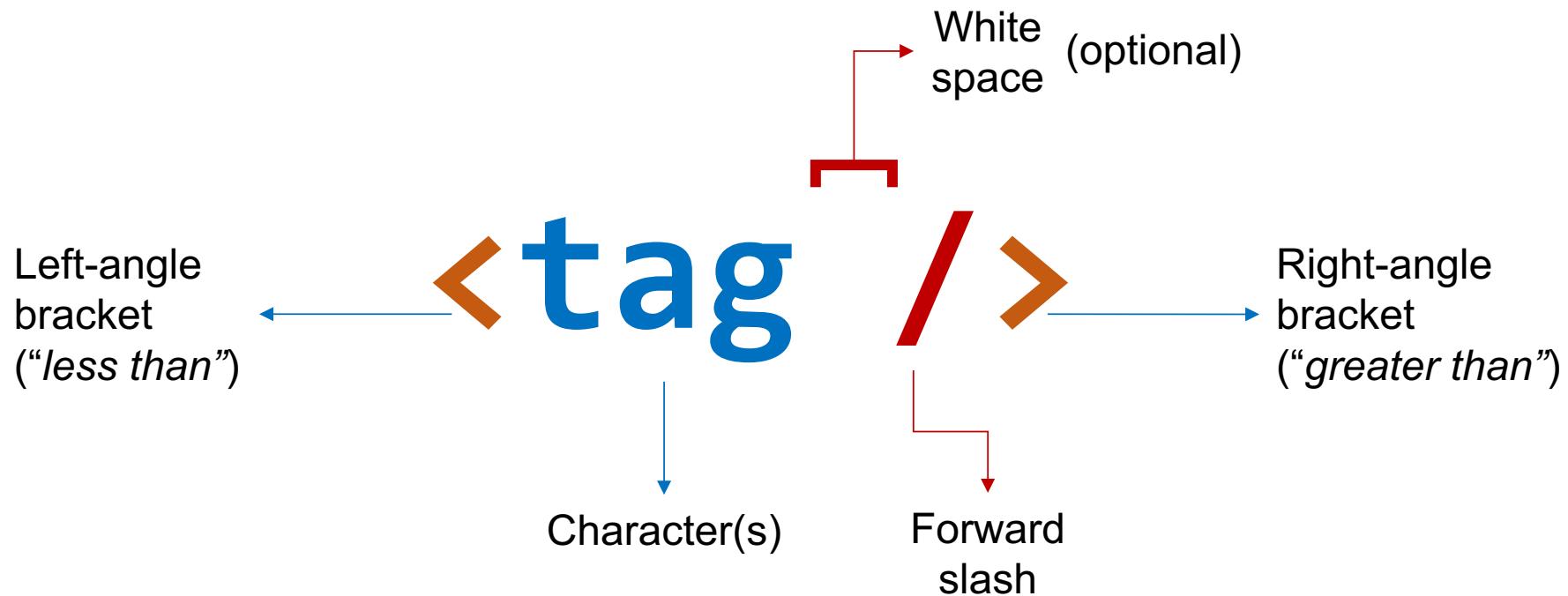
`` → end of anchor reference (used for hyperlinks)

HTML Elements (Recap - Top Hat)

HTML Elements

Always remember to write tags in *lower case*.

HTML Empty Tags (a.k.a. Empty Elements)

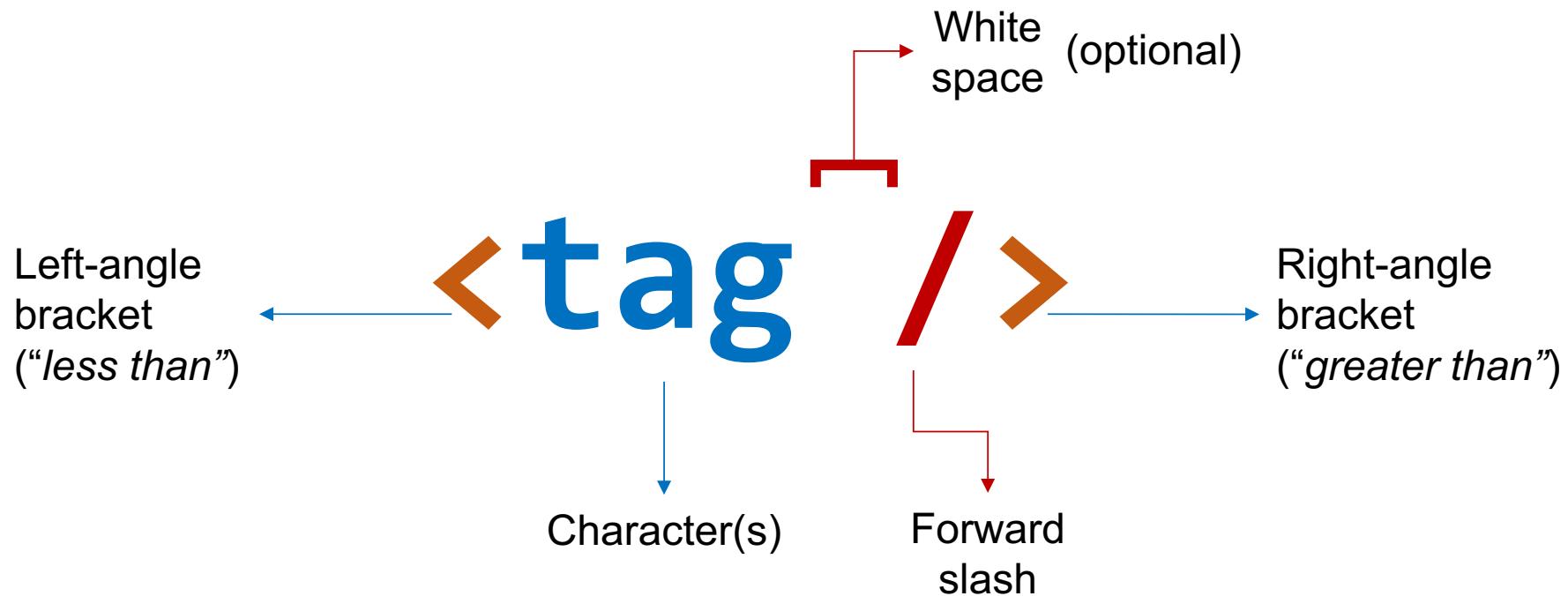


This is the syntax for an ***empty tag*** (or empty element). Also known as ***self-closing tag***.

As with the `
` tag, it does not make sense to have any closing tag in this case.

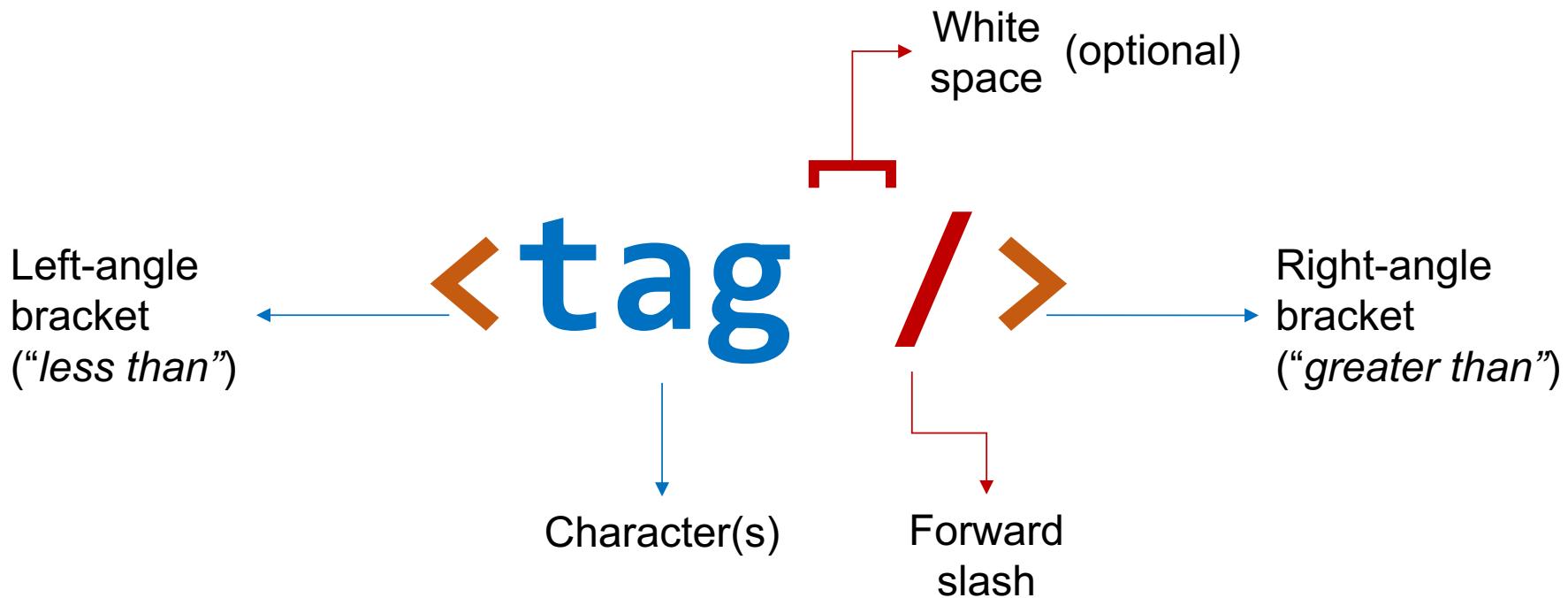
You are just telling the browser to put the text that follows this tag in a new line, but treat it as being within the same paragraph.

HTML Empty Tags (a.k.a. Empty Elements)



In this case, you deviate from your usual HTML tag rules, and tell the browser that such tags don't have any additional information to display, but are used to “beautify” existing content.

HTML Empty Tags (a.k.a. Empty Elements)



"A **Self-closing tag** is a special form of **start tag with a slash immediately before the closing right angle bracket**. These indicate that the element is to be closed immediately, and has no content."

Where this syntax is permitted and used, the end tag must be omitted.

In HTML, the use of this syntax is restricted to void elements and foreign elements. If it is used for other elements, it is treated as a start tag.

In XHTML, it is possible for any element to use this syntax. But note that it is only conforming for elements with content models that permit them to be empty."

HTML Void Elements or Void Tags

Represent elements that **must** be empty.



Void elements **may also** use Empty (or, self-closing) Element syntax.



*This format is also
XHTML compatible*

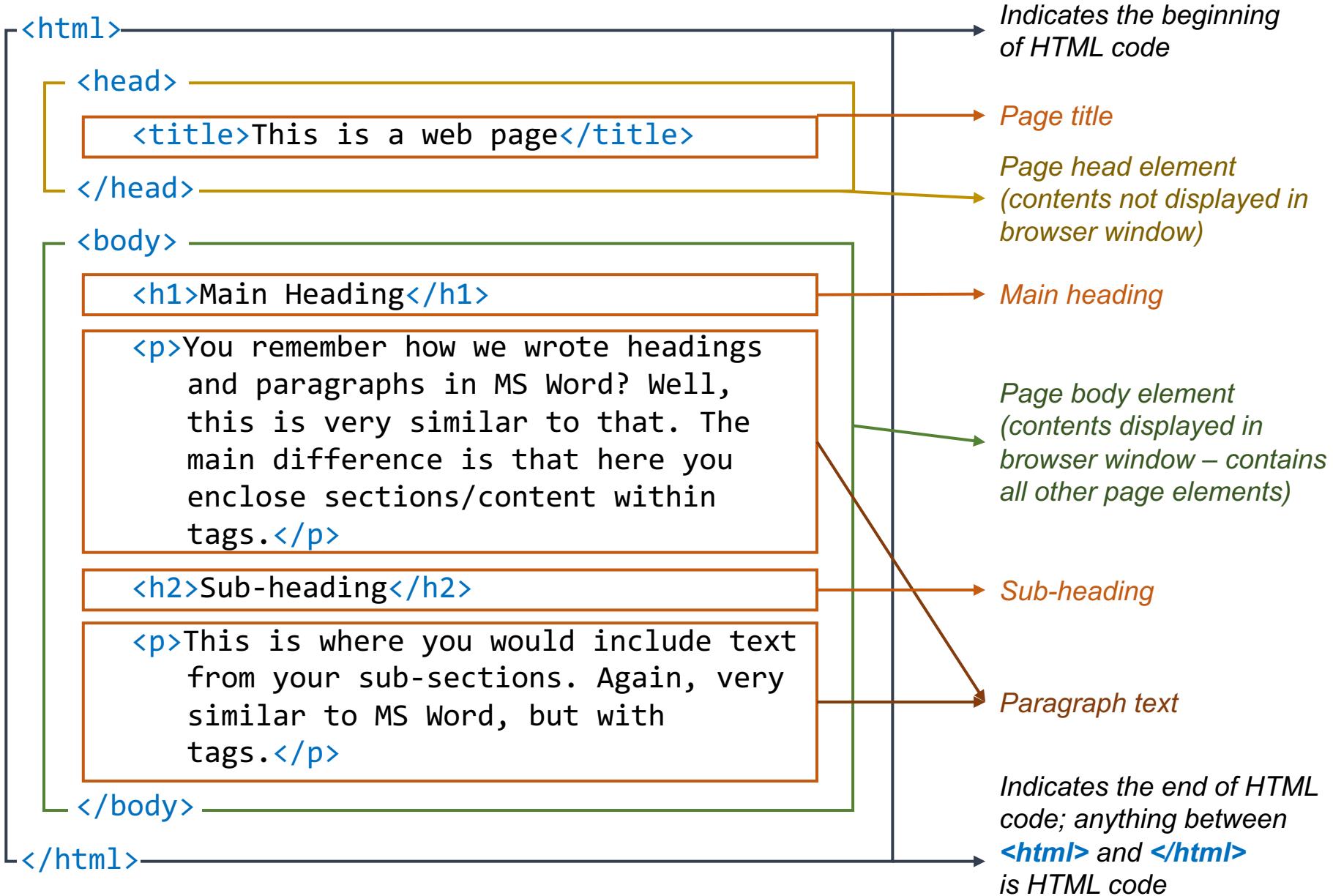
Other examples:

 OR
 OR
 → line break

<link> OR <link/> OR <link /> → reference to other files (e.g. CSS or JavaScript) in page head

<meta> OR <meta/> OR <meta /> → metadata elements (e.g. keywords, character encoding) in page head

HTML Tags: Example code



HTML Version Declaration

The code we discussed just now is incomplete, in a way

It is missing the HTML version declaration

Note. We will discuss this in more detail at a later point – once we have covered other aspects of HTML

For now, know that all HTML documents have to begin with the following declaration:

`<!DOCTYPE html>`

This declaration tells the web browser the version of HTML used to create (or, code) the website

Note. The above declaration tells the web browser that the page is coded using HTML5

HTML Tags: Revisiting our example code

```
<!DOCTYPE html>
```

Doctype declaration

```
<html>
```

```
  <head>
```

```
    <title>This is a web page</title>
```

```
  </head>
```

```
  <body>
```

```
    <h1>Main Heading</h1>
```

```
    <p>You remember how we wrote headings  
        and paragraphs in MS Word? Well,  
        this is very similar to that. The  
        main difference is that here you  
        enclose sections/content within  
        tags.</p>
```

```
    <h2>Sub-heading</h2>
```

```
    <p>This is where you would include text  
        from your sub-sections. Again, very  
        similar to MS Word, but with  
        tags.</p>
```

```
  </body>
```

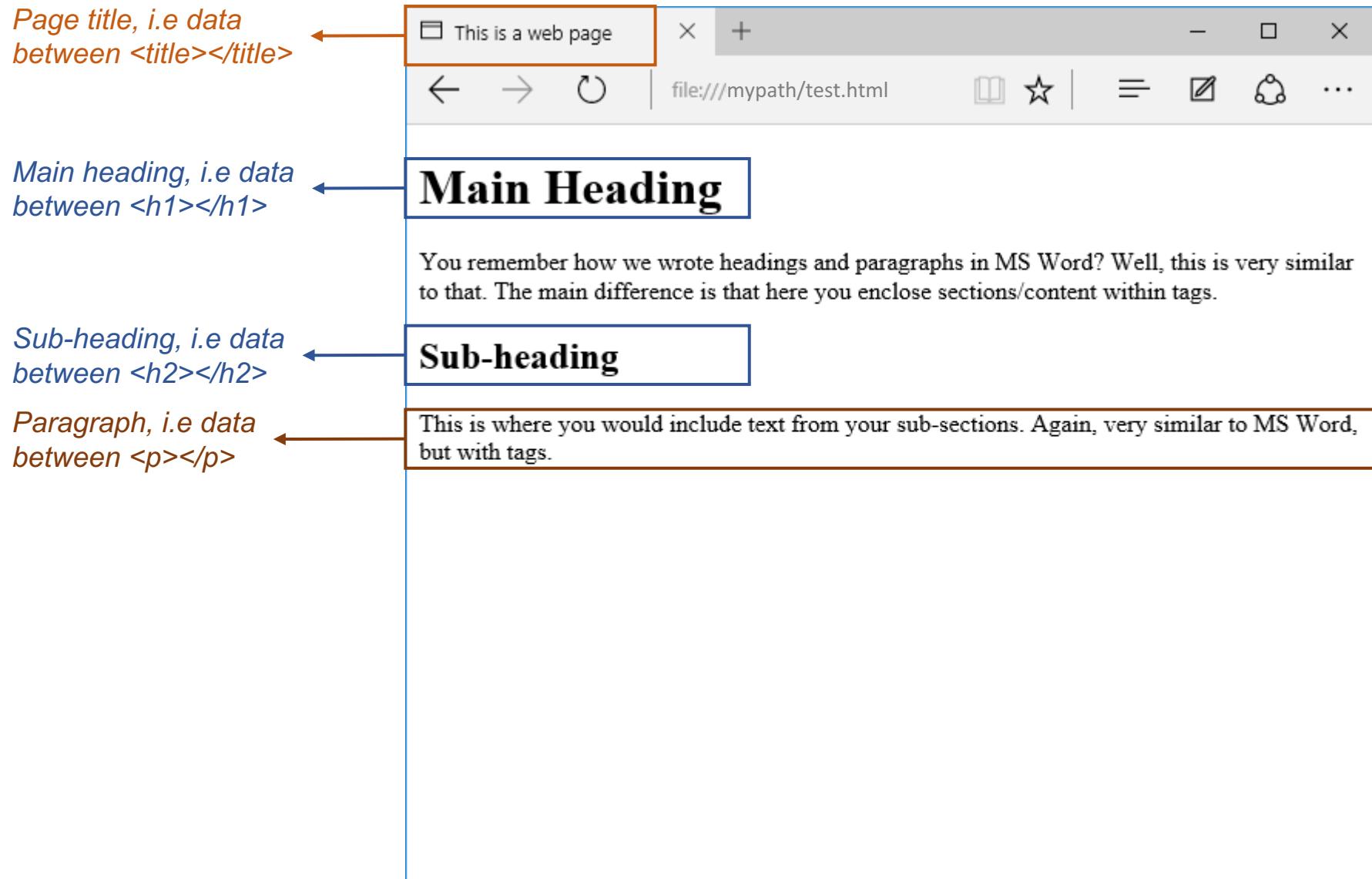
```
</html>
```

HTML Tags: Revisiting our example code

```
<!DOCTYPE html>  
  
<html lang="en">  
  <head>  
    <title>This is a web page</title>  
  </head>  
  
  <body>  
    <h1>Main Heading</h1>  
  
    <p>You remember how we wrote headings  
      and paragraphs in MS Word? Well,  
      this is very similar to that. The  
      main difference is that here you  
      enclose sections/content within  
      tags.</p>  
  
    <h2>Sub-heading</h2>  
  
    <p>This is where you would include text  
      from your sub-sections. Again, very  
      similar to MS Word, but with  
      tags.</p>  
  
  </body>  
</html>
```

Remember to also indicate the language of the content on the page!

HTML Example code - result



HTML Attributes

What is an attribute?

It indicates a property of “something”, and contains a value

In HTML, attributes contain a **name** and a **value**

Just like tags, also written in **lower case**

E.g.

`Dalhousie University website`

Good practice to keep values within “quotes” – Single or double quotes.
But, use quotes for values of attributes!

Avoids scenarios that could result in errors – especially when you have a white space between two parts of the value

HTML pages

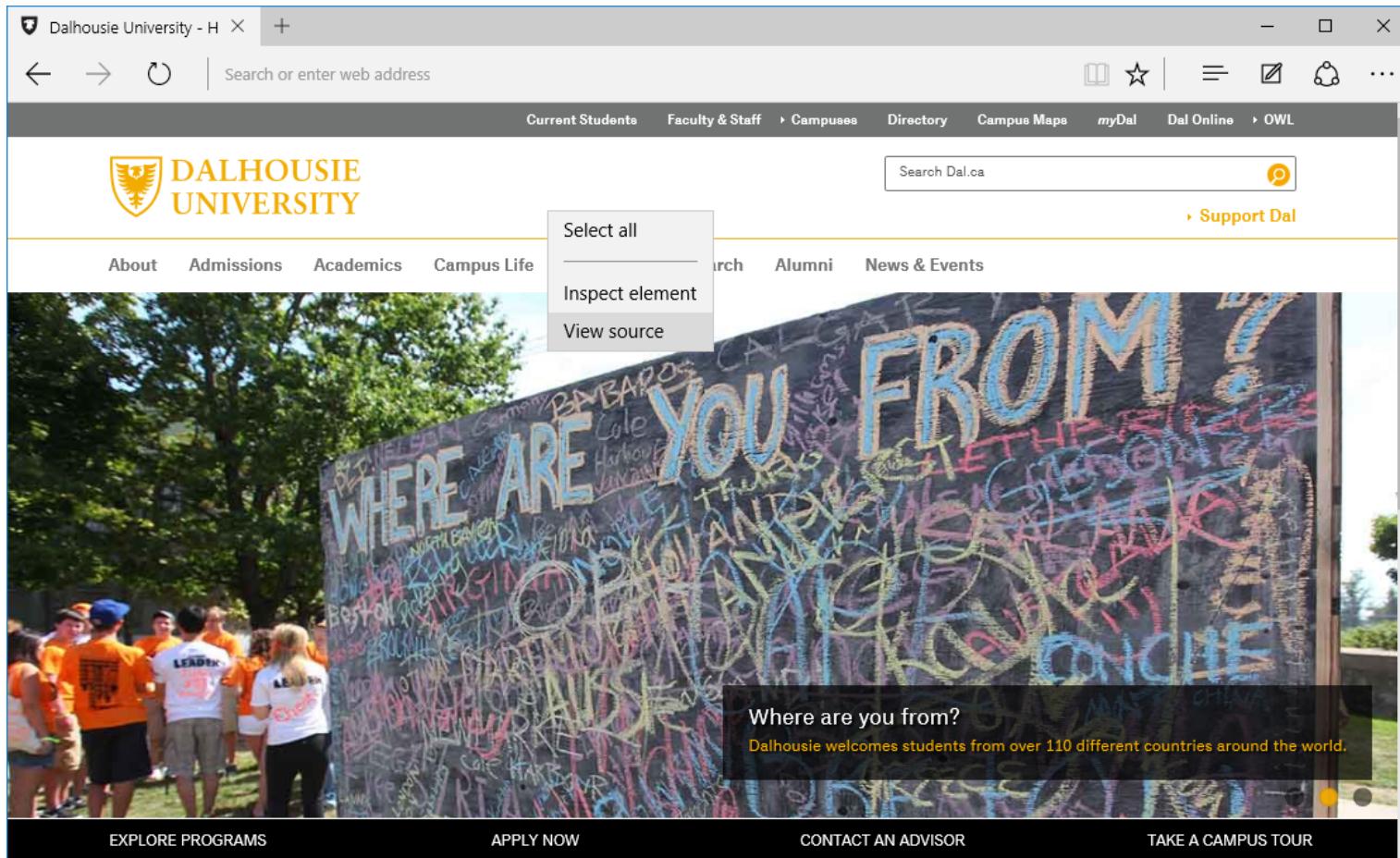
All HTML code must be saved in files that have an extension **.html**

To save files on either a PC / Mac / Unix-based machine, open an editor (such as Notepad /TextEdit / Notepad++ / SublimeText / others), and click on “file >> save as”, enter the full file name (**filename.html**)

Check the file extension:

Sometimes, operating systems like to “hide” file extensions – so, even if you have saved your file as HTML, you would probably have saved it as .txt → double check to see if the file is actually HTML

Source code of websites that are deployed?



A screenshot of a web browser displaying the Dalhousie University homepage. A context menu is open over a large photograph of a wall covered in colorful chalk graffiti. The menu items visible are "Select all", "Inspect element", and "View source". The main content area shows a large chalk mural with the words "WHERE ARE YOU FROM?" and "Dalhousie welcomes students from over 110 different countries around the world.". Below the mural, there are four calls-to-action: "EXPLORE PROGRAMS", "APPLY NOW", "CONTACT AN ADVISOR", and "TAKE A CAMPUS TOUR". At the bottom of the page, there is a sidebar with a photo of two students, a "WE SEE GREATNESS IN YOU" banner, and links to "Explore Dalhousie University" and "News".

Search or enter web address

Current Students Faculty & Staff Campuses Directory Campus Maps myDal Dal Online OWL

DALHOUSIE UNIVERSITY

Select all

Inspect element

View source

Search Dal.ca

Support Dal

Where are you from?
Dalhousie welcomes students from over 110 different countries around the world.

EXPLORE PROGRAMS APPLY NOW CONTACT AN ADVISOR TAKE A CAMPUS TOUR

Explore Dalhousie University

- + About Dal
- + Programs
- + Funding your education

News

- Students lend a hand for Community Day
- Dal celebrates two new Royal Society Fellows

WE SEE GREATNESS IN YOU

Give Feedback

Source code of websites that are deployed?

The screenshot shows the Microsoft Edge Developer Tools interface, specifically the Debugger tab, displaying the source code of the website www.dal.ca. The code is presented in a syntax-highlighted text area, showing various HTML meta tags and links. The Microsoft Edge browser window is visible in the background, showing the Dalhousie University homepage.

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5   <meta name="keywords" content="" />
6   <meta name="description" content="With campuses located in Halifax and Truro, NS, Dalhousie is a..." />
7   <link rel="shortcut icon" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
8   <link rel="apple-touch-icon" sizes="57x57" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
9   <link rel="apple-touch-icon" sizes="114x114" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
10  <link rel="apple-touch-icon" sizes="72x72" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
11  <link rel="apple-touch-icon" sizes="144x144" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
12  <link rel="apple-touch-icon" sizes="60x60" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
13  <link rel="apple-touch-icon" sizes="120x120" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
14  <link rel="apple-touch-icon" sizes="76x76" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
15  <link rel="apple-touch-icon" sizes="152x152" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
16  <link rel="icon" type="image/png" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
17  <link rel="icon" type="image/png" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
18  <link rel="icon" type="image/png" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
19  <link rel="icon" type="image/png" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
20  <link rel="icon" type="image/png" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/favicon.ico" />
21
22 <meta name="application-name" content="Dalhousie University" />
23   <meta name="msapplication-starturl" content="http://www.dal.ca" />
24   <meta name="msapplication-TileColor" content="#ffc40d" />
25   <meta name="msapplication-TileImage" content="/etc/designs/dalhousie/clientlibs/global/default/images/tile_144x144.png" />
26   <meta name="msapplication-config" content="/etc/designs/dalhousie/clientlibs/global/default/images/config.xml" />
27
28 <meta name="mobile-web-app-capable" content="yes" />
29 <meta name="apple-mobile-web-app-capable" content="yes" />
30 <meta name="apple-mobile-web-app-title" content="Dalhousie University" />
31 <meta name="apple-mobile-web-app-status-bar-style" content="black" />
32 <link rel="apple-touch-startup-image" href="https://static.dal.ca/etc/designs/dalhousie/clientlibs/global/default/images/icon_1536x864.png" />
33 <meta property="og:title" content="Dalhousie University #8209; Halifax, Nova Scotia, Canada" />
34 <meta property="og:type" content="university" />
35 <meta property="og:url" content="http://www.dal.ca" />
```

HTML Overview: Key ideas

Save all HTML code in **.html** files

HTML tags: *everything that has a beginning, has an end*

Tags → opening and closing tags

Tags → contain information between them

Tags → also known as markup

Structure of HTML elements: **opening tag + content + closing tag**

HTML tags may contain **attributes**, which contain **values** that help describe / characterize the specific element

HTML Elements: Text, Lists and Links

Outline

HTML Elements

- Text
- Lists
- Links

HTML Elements: Text

What else is there to know about adding text in web pages, other than paragraphs (`<p></p>`) and headings (`<h1></h1>`, `<h2></h2>`, etc.)?

You have to consider two important distinctions in organizing and presenting text in HTML:

Structure. (i.e. structural markup)

This will help you organize text into headings and paragraphs.

Semantics. (i.e. semantic markup)

This will help you include extra information for the text, such as emphasizing a part of the sentence, including acronyms, etc.

HTML Text: Structural Markup

Headings.

There are six types or levels of headings:

`<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, and `<h6>`

Each level of heading applies different font sizes to the heading text

`<h1>` is the main heading;

`<h2>` is the first sub-heading, and all other levels are used for headings within the level 2 heading (`<h2>`)

HTML Text: Structural Markup

Headings.

Example:

```
<h1>Main Heading</h1>
```

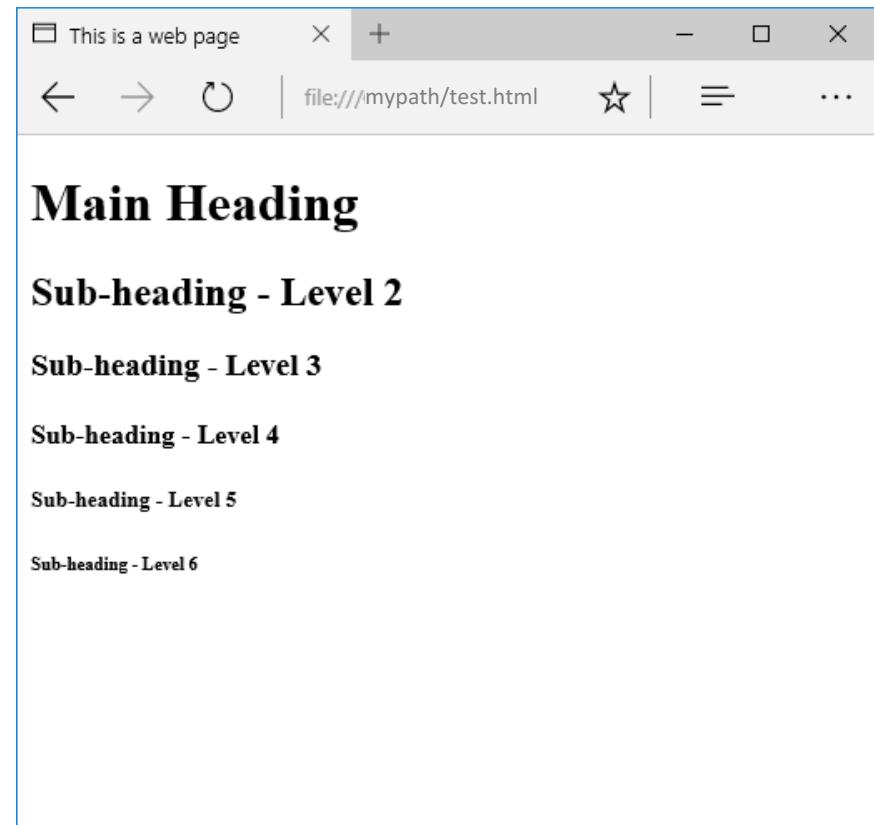
```
<h2>Sub-heading - Level 2</h2>
```

```
<h3>Sub-heading - Level 3</h3>
```

```
<h4>Sub-heading - Level 4</h4>
```

```
<h5>Sub-heading - Level 5</h5>
```

```
<h6>Sub-heading - Level 6</h6>
```



Note. You can change the style / appearance of each type of heading using CSS.

HTML Text: Structural Markup

Paragraph.

You can create a paragraph in HTML by including the text between the opening and closing “p” tags:

```
<p>This is a sample paragraph.</p>
```

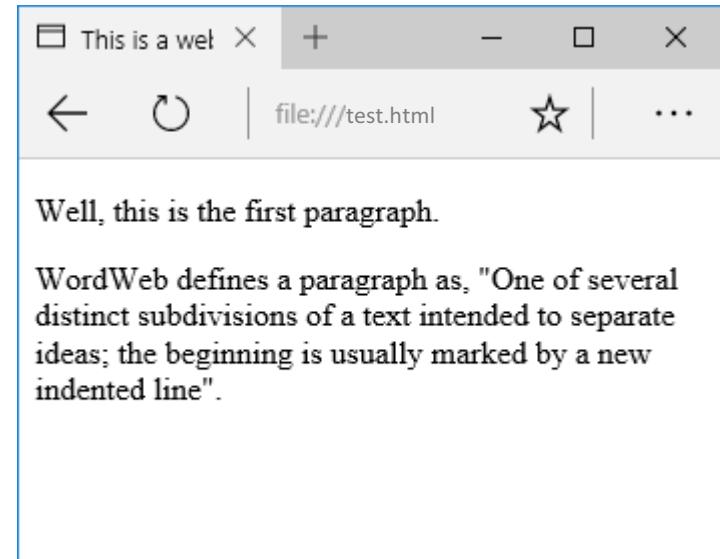
The browser adds a line space between paragraphs when it renders them

HTML Text: Structural Markup

Paragraph.

Example:

```
<p>Well, this is the first paragraph.</p>  
<p>WordWeb defines a paragraph as, "One of  
several distinct subdivisions of a text  
intended to separate ideas; the beginning  
is usually marked by a new indented line".  
</p>
```



HTML Text: Structural Markup

Paragraph: Line breaks.

Let's suppose that you want to put some text in your paragraph in the next line – but you don't want it in a new paragraph

For this, you would use **line breaks**, represented by `
`

(similar to the “Shift + Return” key combination in MS Word or PowerPoint)

What is the difference between this and other tags?

This is an example of an **empty tag** (or, empty element).

HTML Text: Structural Markup

Paragraph: Line breaks.

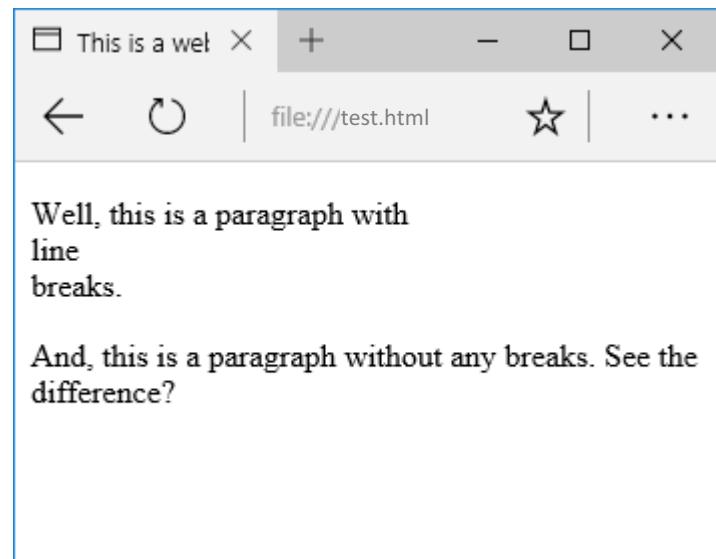
Let's suppose that you want to put some text in your paragraph in the next line – but you don't want it in a new paragraph

For this, you would use **line breaks**, represented by `
`

Example:

```
<p>Well, this is a paragraph with<br />
line<br />breaks.</p>
```

```
<p>And, this is a paragraph without
any breaks. See the difference?</p>
```



HTML Text: Structural Markup

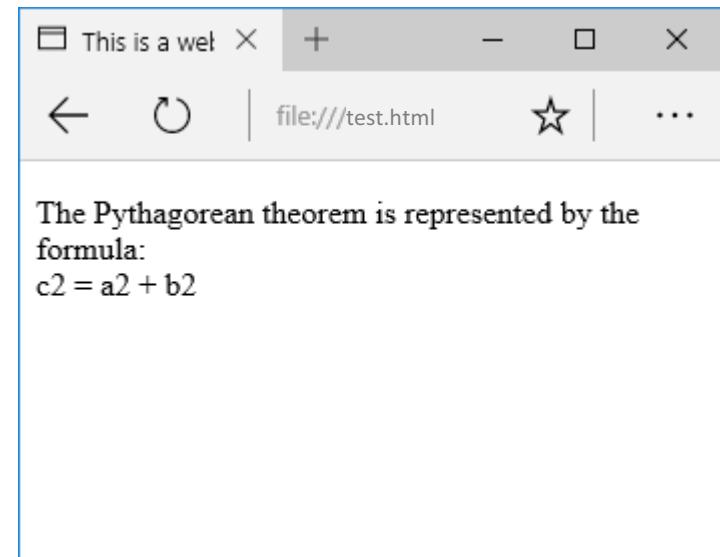
Paragraph: Special formatting.

You are required to display the Pythagorean theorem on your website. **What would you do to display the formula?**

Would this help?

< p > The Pythagorean theorem is represented by the formula: < br />
c² = a² + b² </ p >

Unfortunately, no!



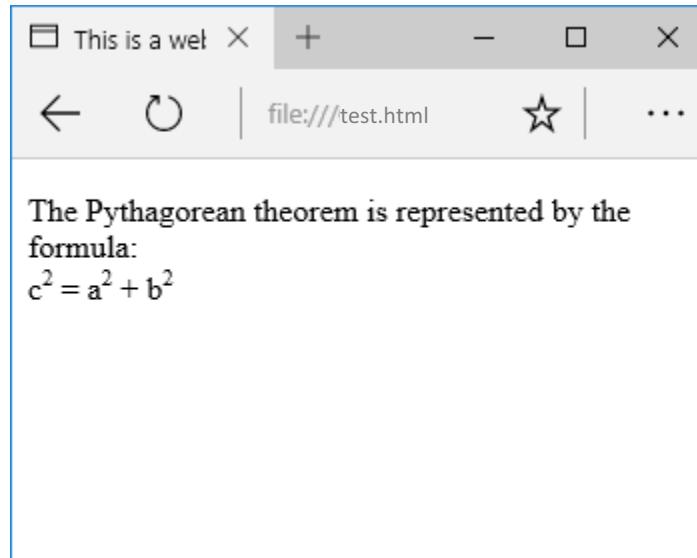
HTML Text: Structural Markup

Paragraph: Special formatting.

For this, you would need to use superscript tags,

Here's what you could use:

```
<p>The Pythagorean theorem is represented by the formula:<br />
c<sup>2</sup> = a<sup>2</sup> + b<sup>2</sup></p>
```



HTML Text: Structural Markup

Paragraph: Special formatting.

Similarly, if you wished to use subscripts in your text, you would need to use subscript tags, ``

Here's what you could use:

`<p>A simple formula that has been made up for this class is represented as follows:
`
`x2 = a12 + 2 / b22</p>`

