

Creating And Publishing A Webpage

You will learn how your web page can be ‘hosted’ as well as the basic html ‘tags’ for formatting a webpage along with the mechanism of including internal and external content

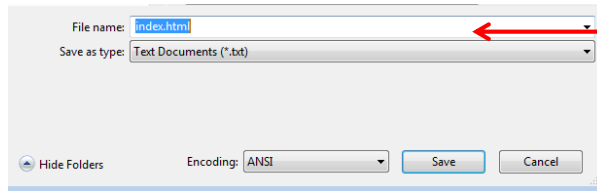
Web Page

- A document that can be seen “online” via the World-Wide-Web
- Going to the web address:
 - www.cpsc.ucalgary.ca/~tamj (or pages.cpsc.ucalgary.ca/~tamj)
 - Retrieves a document called “index.html” from the computer science web server to load into your web browser.



Making A University Webpage

- Use a simple editor WordPad (don't use MS-Word because it will generate a great deal of extra unnecessary information for a simple webpage).
- Save it as a text file



Make sure you manually add the .htm or .html suffix to the end of the file otherwise it will be text .txt file and not display properly (uses a text editor such as Notepad instead of web browser to view).

'Hosting' Your Webpage

- In order for your website to be available on the web, the page and it's content has to be stored on a web server.
- This web server is described as 'hosting' your webpage.
- Two examples of how your page can be hosted will be described:
 - Creating a University of Calgary personal web page (the university web server hosts your page).
 - Creating a personal web page external to the university (a third party can host your page after you graduate).

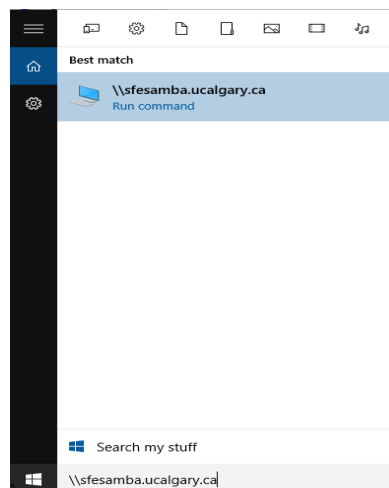
Saving The Webpage On The 'Host'

- Save documents (html, locally hosted images and videos) in a folder called "public_html" that is contained in a folder called "Webdisk".
 - (The Webdisk is where you save documents on the UC-IT server and not on a local drive)
 - In order to have this folder you need to register for a U of C account:
 - https://ucalgary.service-now.com/it?id=kb_article&sys_id=9d6fc9b913b93ec06f3afb2e144b07e
- My account in the CPSC 203 computer lab (yours may look slightly different but you need to have a WebDisk folder).

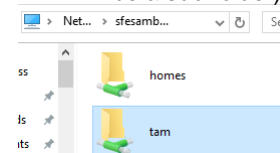


If WebDisk Doesn't Exist: How To Make It Appear Yourself

- When you are logged into a computer in a computer lab type (under 'Start' in Windows): [\\sfesamba.ucalgary.ca](https://sfesamba.ucalgary.ca)



If you successfully login then you should see something similar to this (WebDisk will be a sub-folder)



Web Address Of Your Page

- The first part is the general University of Calgary web address for personal web pages:
 - `https://people.ucalgary.ca/`
- The final part after the “.ca/” identifies you:
- Format:
 - `<tilda><your U of C Login name>`

Example:

`~tam/`

(The web server will look in your `public_html` folder and try to load the ‘`index.html`’ file into the browser when the above web address is entered).

- Web address of my U of C web page (which is different from my Computer Science website)
 - `https://people.ucalgary.ca/~tam/index.html`

Viewing Website: Reminder

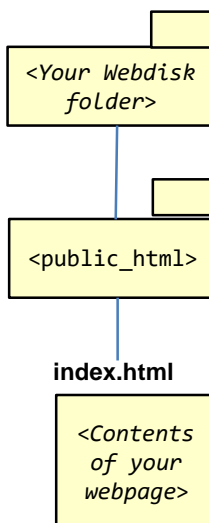
- To “publish the website” (make it viewable on the web).
 - Put the ‘.html’ document in your folder “`public_html`”
 - The web address is:
 - <http://people.ucalgary.ca/~<username>/<filename>>
 - Example if the file were called ‘`index.html`’ my web address would be: <https://people.ucalgary.ca/~tam/index.html>
- If you want to see what your website would look like with a browser **before** (a very good idea) having it publically appear on the web:
 - Start up a web browser (e.g., IE, Firefox) and ‘drag’ the webpage document into the browser
 - OR
 - Just double click on the document (your computer should pull up a web browser unless you reconfigured the default setup).

Transferring Your Work To/From UC/Home

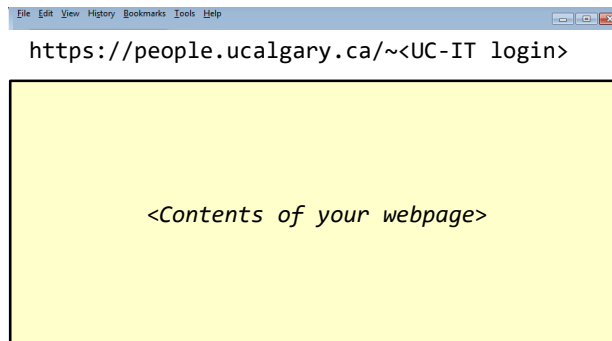
- Similar to the other assignment work you can use a flash memory device
- (Just make sure that you don't just transport your web document 'htm' file back and forth but ALSO all images and video that you have embedded into your web page (links to external pages don't apply).
 - If you don't include the content then your page will have "broken links"

Recap

Setup: folder structure



Accessing your page through the web



Technical Issues Building Your Page

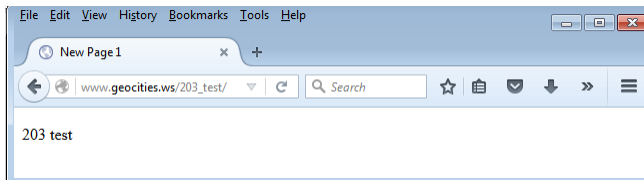
- <https://ucalgary.service-now.com/it>

Alternative Methods Of Creating A Website (If There Is Time)

- (The 'content' e.g., `index.html` and other documents must still be created).
- Your website must be 'hosted' on server that is not part of the university.
- Minimum requirements for the host
 - Stores the content of your website (`index.html` and other files)
 - It has the ability to register your custom website (give it a name)
 - E.g., `www.tamj.com`
 - OR
 - Your website will be a sub-address of their main web address
 - E.g., `www.somewebsitehost.com/~tam`

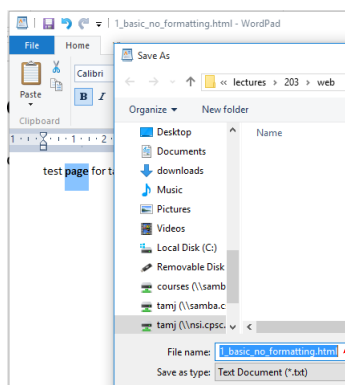
Website Hosts (If There Is Time)

- Many Internet service providers automatically (without additional cost) provide hosting services for subscribers
- Some Internet companies provide webhosting services to anyone without charge
 - <http://www.geocities.ws>



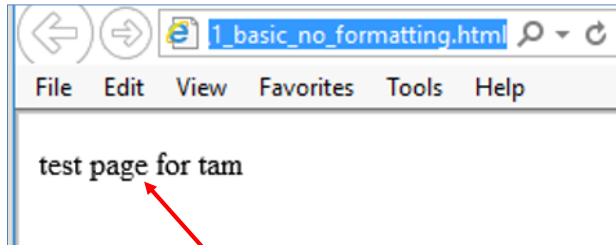
Creating A Simple Page

- Creating the document in WordPad and saving it as an '.html' document.
- **Name of example web page:**
1_basic_no_formatting.htm



Save it as a text document but add in the suffix '.html'

Viewing The Page In A Web Browser



The text
appears but is
not formatted

HTML

- HTML (Hypertext Markup language): used to specify the format and content of a web page.
 - An Internet protocol (rules) that was developed in the early 1990's decades after the creation of the original Internet.
 - The purpose of the protocol was to allow documents to be linked (sharing information by linking related documents).
 - “Rules for how documents would be linked together”
 - Mechanisms for formatting the webpage were also built into the protocol.
- Examples of specifying formatting used in web page text: font effects (bold, italics, underline), font sizes, font types
- Examples of specifying the content of a web page:
 - Multi-media such images and videos can be imbedded into a web page.
 - Links to other documents (or even external web sites)

Example Uses Of HTML

Font effects

External website



Image

Video

Lion Dance

The lion dance is an integral part of the martial arts of Southern China. In the past it was performed by the most advanced students in the class because the stances and movements of the lion dance requires that the student is already so proficient in the basic techniques of the martial arts style that they have already become second nature. Although I haven't performed the dance for a few years it used to be something that I did on a regular basis. At the martial arts school, [The Jing Wo Martial Arts and Athletics Association](#), where I learned the Lion Dance and Wing Chun my student from many, many years ago Desmond Lee is now teaching one of the classes.

You might want to turn the volume before playing the video. Also if the video does not play your browser, try Internet Explorer instead.

Formatting Your Webpage

- You must use 'tags'.
- Formatting tags specify:
 - Exactly what part of the web page will be formatted e.g., a paragraph, line, word, single character etc.
 - How that section will be formatted e.g., bold, italics etc.
- Many tags come in pairs.
 - 'Opening tag' (e.g., indicates the beginning of the formatting)
 - 'Closing tag' (indicates the end of the formatting)
- Other tags don't require a closing tag
 - Example a tag to insert a 'break' just places a carriage return at the specified location

Common Formatting Tags

- The text between the opening tag `<tag name>` and the closing tag `</tag name>` will be formatted in the manner specified by the tag.
- **Extra thing to keep in mind!**
 - The formatting effect on **appears** when you view the webpage **through a browser** not when you are editing the page using the WordPad editor
- View from WordPad
 - **Bold**

```
<b> this text is bolded </b> this text will not be bolded
```
 - **Italics**

```
<i>this text is italicized</i> this text is non-italicized
```
 - **Underline**

```
<u>underlined text</u> non-underline text
```
 - **Strikethrough** (alternative tag `<strike></strike>`)


```
<s>strike-through text</s>text with no strike
```

Tags Appear In The Editor (WordPad) But Not In The Browser (IE)

- **Name of example web page: 2formatting_tags.htm**

Viewed with WordPad (shows the formatting tags)

```
<b> this text is bolded </b> this text will not be bolded
<i>this text is italicized</i> this text is non-italicized
<u>underlined text</u> non-underline text
<s>strike-through text</s>text with no strike
```

Viewed through a web browser (shows the effect of the tags in IE, Firefox etc.)

this text is bolded this text will not be bolded *this text is italicized* this text is non-italicized underlined text non-underline text ~~strike-through text~~ text with no

Moving Text To A New Line

- Notice in the last example that the carriage returns ('enter' key) typed into WordPad did not separate lines when viewed through the browser (no 'new lines' to break up the text).
- The tag to separate lines is `
`
 - There is no closing tag needed because the break-tag just moves the text after the tag to the next line (again when viewed through the browser)

New Version Of The Webpage

- (The previous web page with line separators)
- **Name of the web page:**
`3formatting_tags_line_breaks.htm`

Viewed with WordPad (shows the formatting tags)

```
<b> this text is bolded </b> this text will not be bolded<br>
<i>this text is italicized</i> this text is non-italicized<br>
<u>underlined text</u> non-underline text<br>
<s>strike-through text</s>text with no strike<br>
```

Viewed through a web browser (shows the effect of the tags)

this text is bolded this text will not be bolded
this text is italicized this text is non-italicized
underlined text non-underline text
~~strike-through text~~text with no strike

Headings

- Recall the 'CRAP' design principles (spreadsheet design section
 - may not have been covered this term)

– Contrast: making different things really stand out

CPSC 203: Assignment 4 (Creating web pages and writing Java Scripts for the web)

Due Tuesday March 24 at 4 PM

Creating a web page

You are to build a web page. Sample themes include a personal page, a page your favorite organization or group (team, charity etc.)

Generally you are pretty free in your choice of website theme - it should be something that is appropriate for a university assignment submission.

Heading?

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You are to build a web page. Sample themes include a personal page, a page your favorite organization or group (team, charity etc.)

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Heading!

The Headings Tag

- Each headings tag has an associated number
 - 1 is first level (largest and most prominent)
 - 2 is second level (not as large, less prominent)
 - Etc.
- **Example webpage: [4headings.htm](#)**

```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

Notice how the 'break' tag isn't needed when the heading tag is used

The List Tags

- Lists can be:
 - unordered (bullet points) `list`
 - ordered (numbered in ascending order) `list`
 - The entire list (ordered or unordered must be enclosed in one of the above opening/closing tag pairs)
 - The above two tags determine whether an entire list consists EITHER ordered or unordered elements.
 - This is why the above `<opening>-<closing>` tag pair must enclose the entire list
 - In both of the above cases *each list element* must be enclosed in a list-tag `element`

```

<ol>
<li> 1. Dubai </li>
<li> 2. Germany </li>
</ol>

```

The List Tags (2)

- Name of example web page: [5lists.htm](#)

```

<h2>Shopping list</h2>
<ul>
  <li>bread</li>
  <li>milk</li>
</ul>

```

Shopping list

- bread
- milk

```

<h2>Favorite vacation sites</h2>
<ol>
  <li>Dubai</li>
  <li>Germany</li>
</ol>

```

Favorite vacation sites

1. Dubai
2. Germany

Embedding "Content"

- (Note: there are different ways of embedding content, this is one of the easier ways).
- Like text, multi-media such as images and videos can be embedded into a website.
- The multi-media can either be local (on the same computer as your web page document) or external (an external website such as: Vimeo, Bing video, Yahoo video, YouTube etc).
- Video:


```
<embed src="<Video name>" autostart="false">
```
- Images:

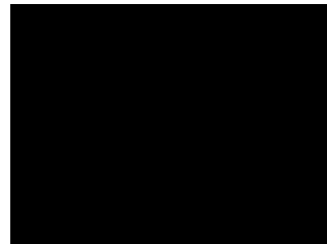

```

```

Embedding Local Multimedia

- **Name of the web document: 6content.htm**
- (Assumes that the image 'lion.jpg' and the video "WoodenMan.wmv" are in the same folder as this web document).
- Video example

```
My oaken friend: <embed src="WoodenMan.wmv" autostart="false" />
<br><br><br>
```



My oaken friend:



Embedding Local Multimedia (2)

- Image example

```
A boy and his lion: <br>
```

- How to handle cases where the **image doesn't load properly**:

– Format:

```
">
```

Example:

```

```



A boy and his lion.

Previous Example: Images Didn't Load



<Alternate text> Example: No lion loaded

```
">
```

Example:

```

```

Links To Other (External) Webpages

- Suppose you want your web page to link to a YouTube video or to an image located on another website.
- You can use the 'href' tag for external links
 - `<a href="<web address">`
- **Name of web document:** 7links_external.htm
- Video example

WordPad

My time in the Persian Gulf:
`[[Video]

`

Hosted/Stored on www.jetvision.tv

Web browser

My time in the Persian Gulf: [\[Video\]](#)



Links To Other (External) Webpages (2)

- Image example:

WordPad

A boy and his lion: `
`

Web browser



A boy and his lion.

- **Previous example** (image stored on my university website "Embedding Local Multimedia (2)": ``)
- **This example** (image is stored on an external website) ``

Advantages To External Links “HREF”

- Less disk space used
- May allow content that you don't ‘own’ to appear on your page

A HREF: Contact Information

- You can use the ‘mailto’ in conjunction with “A href”
- General format

```
<a href="mailto:<Email address>"> <Instructions> </a>
```
- Example

```
<a href="mailto:tam@ucalgary.ca">Email</a>
```



```
<a href="mailto:tamj@cpcs.ucalgary.ca"></a>
```

After This Section You Should Now Know

- How to create a web document ('htm' or 'html' document) and have it published (viewable) on the web via the university web server
- The web address for your university web page
- Common html tags
 - Font effects: bold, italics, underline, strike out/strike through
 - Headings
 - Ordered and unordered lists
 - Embedding multi-media images and text within a web page
 - Creating external links via the "A href"