

HTML = hyper text markup language

HTML =

protocol for creating HTML documents that make possible:

- display of text, images
- inclusion of multi-media applications
- ability to connect with other such documents on remote computers

An HTML document is a scripted computer program that is interpreted by a *web browser* for

- display on monitor
- dynamic interaction within local functions defined by the document
- dynamic interaction with other such documents

Result - a web page

The power of html is that it allows the creation of documents through which you can interact with similar documents throughout the world - through the *internet*

The internet constitutes the net of all interconnected computers. A computer on the internet is accessed through a unique address called an IP address. Different types of information pass through the internet

- file transfer through ftp
- email
- telnet
- web pages

A computer that is an internet server - has software that allows handling of different types of internet activity.

A computer with software handling web page activity called web-server

Totality of interconnected web pages = the WEB made up of:

- Web Servers, network of computers hooked together through the internet that can be accessed through an IP address and which contain software necessary to interpret and pass on both to its clients and other web servers web page related data
- Web clients, any computer that is connected to the Internet and can retrieve information from a web server
- HTTP protocol, the instructions in software which allow transmission of files between servers and their - rather like FTP protocol but specialized to web traffic
- Browser, the software residing on a web client that interprets the html documents for display or dynamic interaction either within the documents - e.g. filling out forms or with other html documents residing any where on any web server. Popular web browsers are: netscape (no longer supported), [firefox](#), [internet-explorer](#), [safari](#), [opera](#)

How to make web pages

With a text editor create a file *index.html* containing

```
<HTML>
<HEAD>

<TITLE>
This is my first html document
</TITLE>

</HEAD>

<BODY>
Hello everyone, my name is .....
</BODY>

</HTML>
```

Save the file - and drag its icon onto your web-browser icon to open it.

The SIT computer is our web server

Each user (that's you) has webspace on SIT -namely a directory

`/www/users/username`

accessible through ftp.

Up load your file to this directory by:

(1) moving the file using ftp to your home directory on SIT and then moving it with the unix command `mv` to your webspace

OR

(2)

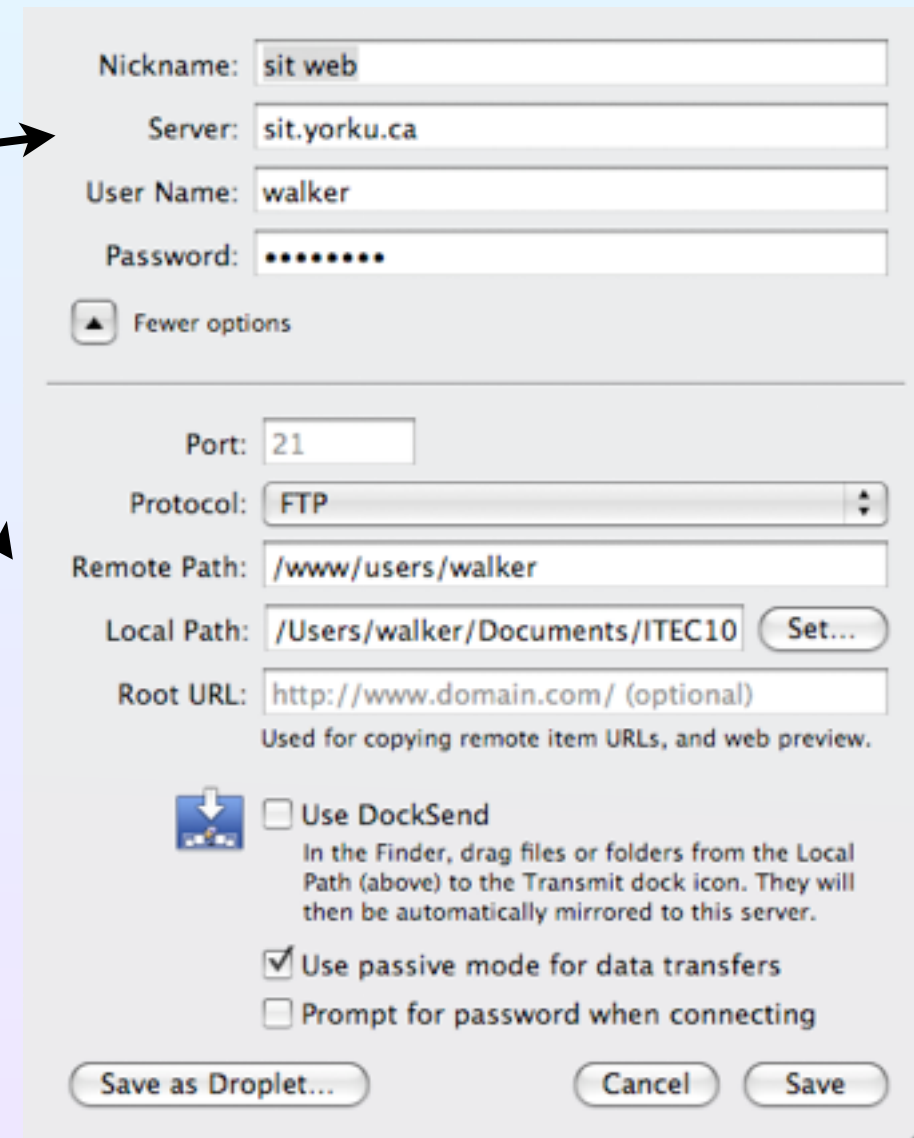
installing an ftp-client such as

- [core-ft](#) or [ws-ftp](#) for windows based machines
- [cyberduck](#), [yummy](#), or [transmit](#) for Mac,
- dragging from one window to another

Protocol to add to the client may look something like

In your web browser now type

http://www.sit.yorku.ca/your_user_name



Nickname: sit web

Server: sit.yorku.ca

User Name: walker

Password:

Port: 21

Protocol: FTP

Remote Path: /www/users/walker

Local Path: /Users/walker/Documents/ITEC10

Root URL: http://www.domain.com/ (optional)

Used for copying remote item URLs, and web preview.

☐ Use DockSend
In the Finder, drag files or folders from the Local Path (above) to the Transmit dock icon. They will then be automatically mirrored to this server.

☒ Use passive mode for data transfers

☐ Prompt for password when connecting

Formatting html text with tags

Changing font: to change size, font style, or color, type before the text

`< font face = "fontname" size = size number color = "color number">`

After text, close the tag with ``

Example:

``

`<HTML>`

`<HEAD>`

`<TITLE>`

This is my first html document

`</TITLE>`

`</HEAD>`

`<BODY>`

``

My name is not Albert Einstein

``

``

Here is some text using Times New Roman font face...

``

``

Here is some text using Arial font face...

``

`</BODY>`

`</HTML>`

The color number: 3 sets of 2 hex digits defining the level of red, blue, and green

- left 2 digits define red level
- middle 2 define blue level
- right 2 green level

85c497

Simple tags to get started

- Making text larger surround it with

`<big>` *text* `</big>`

- Making text smaller surround it with

`<small>` *text* `</small>`

- Making bold text surround it with

`` *text* ``

- Making italic text surround it with

`<i>` *text* `</i>` or with

`` *text* `` where “em” stands for “emphasis”

- To create a line break use `
`

Example code

```
<HTML>
<HEAD>

<TITLE>
This is my first html document
</TITLE>
</HEAD>

<BODY>

<font face= "arial" SIZE =8 COLOR = "#85c497">
My name is <big> not </big> Albert Einstein.
<br>
<small> This is smaller type </small>
</FONT>
<hr>
<br>
<font face="times new roman">
Here is some text using Times New Roman font ...
</font>
<br>
<font face="arial">
Here is some text using Arial font ...
</font>
<hr size =8 color = red width = "80%" align = "center" noshade >
<font face = "garamond" size =6 color = "b552ad">
<em> This is garamond italic font using em tag</em> at size 6 and <b>this is bold </b>
<br> Above is a fat horizontal rule

</BODY>

</HTML>
```

Formatting

- Headings can be created and aligned with

`<h n align = direction > text </h n>`

where *n* stands for a number 1,2,3, ... and the lower the number the bigger the text.

- To create a new paragraph and align it (left, center, or right) use

`<p align = direction > text </p>`

Example Code

```
<HTML>
<HEAD>

<TITLE>
This is my first html document
</TITLE>
</HEAD>

<BODY>
<h1 align = center color = "b552ad">
Introduction to Mathematics </h1>
There will be 7 sections on various topics

<h3 align =left> Logic </h3>
```

Mathematics aims at trying to express ideas as clearly and unambiguously as possible. But this is not such an easy task - sometimes the ideas that we wish to express are complex, and it is easy for readers to become overwhelmed.

```
<p align = center>
Most people are unaccustomed to reading
for precise meaning. We read novels and descriptive texts in which ambiguity is often part
of the author's style. However for complicated texts the best way to minimize ambiguity
is to use principles of logic - these rules are a tremendous aide to lazy people such as myself
who do not wish to spend time meditating on what might otherwise be perceived as obscure
writing. Using the ideas of logic simplifies life enormously.
</p>
```

```
<h4 align =left> Description </h4>
In these notes I give a very
brief introduction - just enough so we can deal with some of the more abstract concepts.
These notes are very informal. The idea behind them is to introduce principles with
a minimum of fuss.
```

```
</BODY>
</HTML>
```

Inserting Images

An image file can be inserted - on the left, center or right

And the resolution of the image can be altered - with perhaps degradation

To do this use

```
<img src = image.ext align = direction width =x height =y>
```

- image.ext = the name of your image file - snow.jpg
- x and y each represents a number of pixels

Example Code

```
<HTML>
<HEAD>

<TITLE>
This is my third html document
</TITLE>
</HEAD>

<BODY>
<h1 align = center color = "b552ad">
Here we show how to insert an image
</h1>
This is a photo taken in the park across the street from my house
<p align =left>
<img src = "snow_small.jpg" align = center border =>
</p>
<br>

<p align =center>
<img src = "snow_small.jpg" width =350 height = 467 align = center border =1>
</p>
Here I show how to enlarge a picture and it in the center.

</BODY>

</HTML>
```

Inserting hyper-links

Links to another web page - on your computer can be set up using

```
<a href = “ page.html” >    label text    </a>
```

where *label text* refers to the label that is given the link

A link to a web page on a remote computer can be set up substituting the full address for “*page.html*” for instance

```
<a href = “http://www.yorku.ca/itec1000/” >    ITEC home page    </a>
```

If you wish to have a link to a media file - the file's full address can also be used.

Example code

```
<HTML>
<HEAD>

<TITLE>
This is my fourth html document
</TITLE>
</HEAD>

<BODY>
<h1 align = center color = "b552ad">
Here we show how to insert an link to another file
</h1>
This will be a link to the ITEC home page

<a href = "http://www.yorku.ca/itec1000/index.html"> ITEC home page </a>
<p>

This will be a link to an audio file
<a href = "http://www.yorku.ca/walker/Intro1.aif"> Some music </a>
</p>

<p align =center>
<img src = "snow_small.jpg" width =350 height = 467 align = center border =1>
</p>
Here I show how to enlarge a picture and it in the center.

</BODY>

</HTML>
```