



All About Creating a Website. How the SIR Websites are Built.

SIR Branch 116

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The Internet is Just a Collection of Websites

- You are connected to an **ISP** (Internet Service Provider) such as Astound, Comcast, ATT, etc
- You open a **Browser** program (Internet Explorer, Firefox, Chrome, Safari, etc) on your computer which links you to your ISP
- You type in a **URL** (Universal Resource Locater) address showing where you want to go (yahoo.com, google.com, sir-web.org, etc)
- Your ISP routes your request to the hosting Server you have requested.
- If there is a programmed web page at the address requested, then a website will appear on your computer.



Simplistic View of a Server

- Internet Hosting Services are referred to as Servers.
- Think of a Server as a giant hard drive with countless partitions.
- Each partition contains a website and all of its information
- The hosting hardware can route multiple requests to any partition. It routes incoming requests as well as internal requests to jump to other partitions. (i.e. google.com to maps.google.com)
- Think of millions of requests seeking millions of partitions coming from thousands of ISPs.
- Routing and handling all of these requests requires very special hardware – THINK CISCO!

A blue rectangular box with a white border containing the text "http://" in a white, sans-serif font. The background of the box has a subtle, wavy pattern.

Steps to Create a Simple Website

1. Sign up with an Internet Hosting Service to get some space on their Server. Examples are GoDaddy, HostMonster, 1&1 Internet, etc. (These companies may rent space from Google, IBM, etc.)
2. Select a unique Domain name (internet address) so that people can link to your website (myname.org, etc.)
3. Write a program that will present a website when your viewers' link to your Domain address
4. Upload your program via an FTP program (File Transfer Protocol) to your assigned server space.

Sounds Difficult but it's Not! That is why there are millions or billions of websites available.



Step 1 – Sign Up with an Internet Hosting Service

- There are many Internet Hosting Services looking for your business. Space is cheap, so you can get 5 GB or more for \$5/month.
 - Branch 116 uses 1&1 Internet.com and pays about \$7 per month.
 - That covers the Branch website, Golf website, CAT Website and Newsletter website with lots of remaining space.



Step 2: Select a Domain Name

- The Internet Host Provider will ask you select a Domain Name. It must be a unique combination of characters.
- Your domain name will likely end in “.org” An example would be NancyPelozzi.org
- Simple ones are better, but hard to find unique simple names.
- The Branch 116 Big SIR selected “116-web.org” as our domain name. We could change it to something simpler but we would have to notify everyone.



Step 3: Write a Program

This is the Hard Part.

- All websites are coded in a language called HTML (Hypertext Markup Language)
- Most programmers understand HTML and can easily code a simple webpage.
- Next slide is an example of a simple web page coding using HTML.



Step 2: Sample HTML Coding

```
<!--Page Head-->  
<!--Master Page Head-->  
<!--Header code for Quick Rectangle qs_4 -->  
<!--Header code for HTML Frame - If you are retired from txt_2 -->  
<!--Header code for Converted 1.jpg - Emb. Bitmap pic_12 -->  
<!--Header code for SpecEvents-100.jpg - Emb. Bitmap pic_14 -->  
<!--Header code for Cards-100.jpg - Emb. Bitmap pic_16 -->  
<!--Header code for Computer-100.jpg - Emb. Bitmap pic_7 -->  
<!--Header code for Tennis-100.jpg - Emb. Bitmap pic_8 -->  
<!--Header code for HTML Frame - Computers txt_13 -->  
<!--Header code for HTML Frame - Golf txt_8 -->  
<!--Header code for HTML Frame - Parties txt_10 -->  
<!--Header code for HTML Frame - Fishing txt_9 -->  
<!--Header code for HTML Frame - Cards txt_19 -->  
<!--Header code for HTML Frame - Tennis txt_12 -->
```

Isn't there an Easier Way to Design a Web Page?



WYSIWYG Editors to the Rescue

WYSIWYG means “What You See Is What You Get”

- Companies have seen the problem and developed products that will write the HTML code for you.
- You design the page with pictures, text, etc and then the WYSIWYG program writes the HTML code.
- Examples are Microsoft’s Web Expressions, Adobe’s Dreamweaver, Serif WebPlus, Komposer (free) and many more.
- You can even use MS Word, Excel, or Publisher and they will convert your page into HTML code.



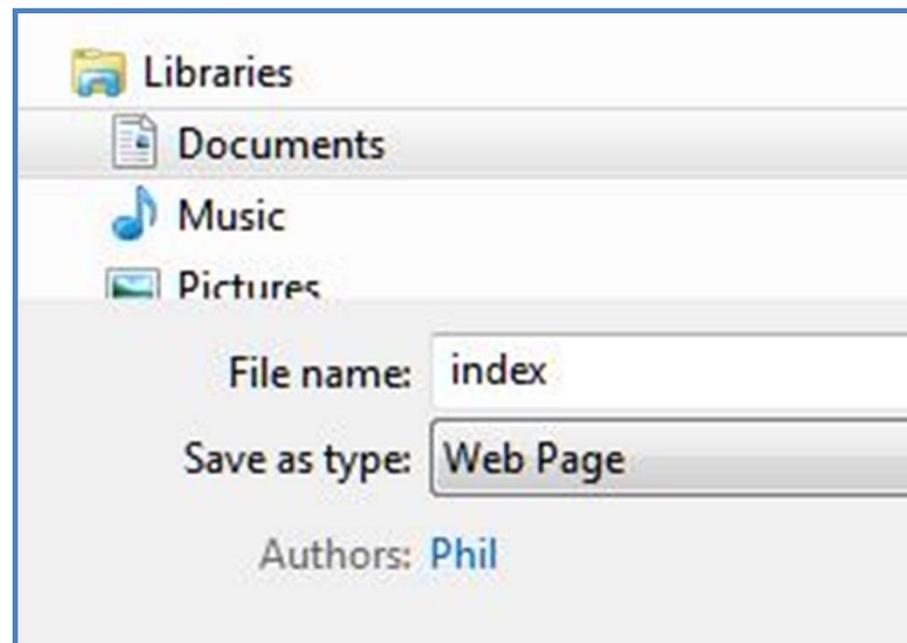
Additional Options to Create the Code

- Internet Host Providers like GoDaddy, HostMonster etc, also have proprietary programs to help you build a web page.
- Providers also offer pre-formatted templates where you just insert your text and or pictures.



Create a Web Site with MS Word

- Open a blank word document and write text with pictures, etc.
- Under the SAVE AS command call the document “index” and Save as type Web Page (Index is the default name of your Home web page)





Upload your File to your Web Space

So Far You Have:

- **Signed up for some web space**
- **Selected a Domain Name**
- **Created and Saved an HTML code file called “index”**

- Uploading your file is like copying it to another hard drive.
- You need a FTP program to do this, but they are very simple.
Note: Some Internet Host Providers offer special upload processes.

- Filezilla is a free FTP program and works well.



Upload your File to your Web Space via FTP

Files on Your Hard Drive

Upload to Files on your Web Host

The screenshot shows an FTP client interface with two panels. The left panel, titled 'Files on Your Hard Drive', shows a local directory listing with columns for 'Filename', 'Filesize', and 'Filetype'. It contains folders for years 2003 through 2010. The right panel, titled 'Upload to Files on your Web Host', shows a remote directory listing with columns for 'Filename'. It contains folders for years 2003 through 2010, plus a folder named '2008_Survey_Web_v2.1'. Below the panels is a table with columns: 'Server/Local file', 'Direction', 'Remote file', 'Size', and 'Priority'. The table shows a transfer from the local drive to the remote host.

Server/Local file	Direction	Remote file	Size	Priority
u35780974-computer@sir-...				
<input type="checkbox"/> D:\CAT Web\2011_present...	-->	/2011_presentations/mar_201...	42,568,487	Normal



How Do You Link to Other Pages?

- Web Site programming is full of tricks. Commercial programmers insert code written in other languages such as Flash, Javascript, etc.
- The most commonly used process is a “hyperlink.”
- When you click on a hyperlink, you are directed to another webpage.
- To program a hyperlink in a WYSIWYG program (like MS Word), just highlight the text or image, right click, select “hyperlink” and then give the address of the new page.



Your Website is Online

When your “index” file is uploaded, your website is online.

Things to Remember:

- Your Home page is called “index”
- Sub pages (accessed by hyperlinks) can be named whatever you like
- All Internet Host Providers have proprietary software and free templates to help you design your web site.
- Many Host Providers advertise “free space” but it is extremely limited and usually comes with advertising.
- Personal websites used to be very popular but people are using Facebook instead.



Final Comments

- I create the Branch 116 and CAT websites without writing any HTML code.
- I use a WYSIWYG program called Serif Webplus. (Its written and sold in Britain but it seems to work anyway)
- Derek Southern uses Wordpress for his Branch Website
- You can have fun building a personal website by paying as little as \$3 per month for space. There may be a free provider that works but they are very limited.