

1. What is the difference between a web server and a web browser? [2 marks]

A web server is a combination of computer and software used to maintain web documents. A web browser is software which acts as a client to retrieve web documents from the web server.

2. What is the purpose of the scheme in a URL? [2 marks]

The scheme (the first part of the URL) indicates which protocol is to be used to access that resource. For example the http:// scheme denotes usage of the http protocol.

3. Who (which body) develops and sets the HTML standards? [2 marks]

The World Wide Web Consortium <http://www.w3.org/>

4. Who (which body) is the registrar for domain names in Canada? In the US? [2 marks]

For Canada it is CIRA. For USA it is InterNIC (or Network Solutions). I will accept IANA or Verisign as well though technically IANA does not act as the registrar for domain names.

5. What is the difference between a subdomain and a domain? [2 marks]



A domain name is a complete web address independent of other domain names, but a subdomain is dependent upon the domain. A domain of "myweb.com" has <http://myweb.com> and <http://www.myweb.com> as the domain name's address. The subdomain name is a given name within the domain name, similar to "admin.myweb.com". Its address would be: <http://admin.myweb.com>. Domains have to be registered; subdomains do not. Camosun's domain is "camosun.bc.ca" or "camosun.ca". The CST subdomain is cs.camosun.bc.ca.

6. What is the difference between static HTML and dynamic HTML? [2 marks]

Static HTML comes from an HTML document and the content does not change while the user is viewing it. Dynamic HTML is HTML generated by some script language such as JavaScript to alter some aspect of the HTML page before it is viewed or during (such as an event like mouse click or tab).

7. Give two examples of a block HTML element and two that are inline [2 marks]
block elements: table, h1, h2, h3, h4, h5, h6, div, dl, fieldset, form, hr, ol, p, pre, ul

inline elements: b, big, code, em, strong, a, br, img, q, span, input, label, select, textarea

8. Tables. In order: 3 1 5 2 4 [5 marks]
9. The following folder tree display shows folders as  and HTML documents as . Folders **admin** and **reports** are both subfolders of **public_html**. If you need help, review the sample URLs at this link: http://www.cs.camosun.bc.ca/~langs/comp140-12/tests/Quiz01/public_html/ [4 marks]

```

public_html
├── index.html
├── admin
│   ├── details.html
│   └── briefing.html
└── reports
    ├── summary2011.html
    └── summary2012.html
```

- a. Within the file **index.html** the text “Details” needs to be enabled as a hypertext reference to the file **details.html**. Define the HTML to do this using a relative URL.

```
<a href= "admin/details.html">
```

- b. Within the file **summary2012.html** the text “Briefing” needs to be enabled as a hypertext reference to the file **briefing.html**. Define the HTML to do this using a relative URL.

```
<a href="../admin/briefing.html">
```

The “..” notation means go “up” to the parent folder (here the **public_html** folder). The **/admin** is the reference to the **admin** subfolder in the parent folder.

- c. Within the file **summary2011.html** the text “Main page” needs to be enabled as a hypertext reference to the file **index.html**. Define the HTML to do this using a relative URL.

```
<a href="../index.html">
```

- d. This `public_html` folder is located in the account `c0123`. Within the file `index.html` the text “Summary 2012” needs to be enabled as a hypertext reference to the file `summary2012.html`. Define the HTML to do this using an absolute URL.

```
<a href="http://deepblue.cs.camosun.bc.ca/~c0123/reports/summary2012.html">
```

Never use `public_html` in a URL (unless you have another folder named `public_html` inside your `public_html` folder).

Note the differences between

```
<a href= "/index.html">  points to the web server root folder
<a href= "../index.html"> points to the parent folder
<a href= "./index.html">  points to the current folder
```

10. What is the purpose of the DOCTYPE tag? [1 mark]

The DOCTYPE is not a real HTML tag but a declaration. It is used to help some browsers identify what type of HTML will follow in the HTML document. There are currently three types: strict, transitional and frameset. Strict is used for pure XHTML, transitional is used for a mix of HTML and XHTML, and frameset is used for frames.

11. Name three ways a browser can “clue” that something in its window is a hypertext reference. [2 marks]

- The cursor changes appearance from an arrow to a hand
- The status bar at the bottom of the window indicates the URL to the link
- The reference is displayed by default in blue text and underlined
- If an image is a hypertext reference, the image may be bordered in a blue box.

12. What is the key difference between the JPEG image format and the PNG image format? [2 marks]

- JPEG is an image format that is mostly lossy, supports photorealistic images (millions of colours) along with a larger file size, and may introduce ‘artifacts’ into the image each time it is edited
- PNG is an image format that is lossless, supports at most 256 colours (but PNG-24 uses 24 bit and can support millions of colours), is ideally suited to simple line art, supports transparency options, and has a smaller file size. PNG was created to improve and replace the GIF format, which requires a patent license to use.
- What JPEG and PNG have in common: both are bitmapped image formats, both do not support animation, both are open standards (W3C for PNG, ISO for JPEG)

13. What HTML is needed to display the image file name robin.png assuming this image file is in the same folder as the HTML file? [2 marks]

`` for HTML4 or HTML5
`` for XHTML

14. What is the purpose of the browser's cache ? [2 marks]

Browsers download material such as files and images from web sites and save them in a temporary location on the host computer in a cache. This allows for much speedier retrieval of those materials when revisiting the same web sites rather than having the browser request them again from the web servers.

15. Which browsers use the Gecko rendering engine ? [1 mark]

Gecko is used by Firefox, Mozilla, Flock, Netscape, Camino, SeaMonkey

<https://developer.mozilla.org/en-US/docs/Gecko>

16. What is the difference between HTML and XHTML? [1 mark]

HTML is an extension of an earlier mark-up language called SGML (Standard Generalized Markup Language) and permits the omission of certain end tags. Also, HTML supports minimizing attributes within the tags. XHTML is an application of XML, which allows for a shorthand notation for missing end tags (e.g. self-closing tags as in `
`). In addition HTML tags are case insensitive and the rules regarding tag nesting are not strictly enforced.

17. Identify two purposes of a proxy server. [1 mark]

[From the notes on Internet] proxy server:

- Can **cache web content** speeding access time
- Can **hide your IP address** from outside servers
- Can apply **access policy** to network (blocking sites)
- Can **log or audit internet usage** within company
- Can scan transmitted resources for malware
- Can allow you to bypass regional restrictions

18. What is an advantage of a CDN? [1 mark]

CDN – content delivery network

Store copies of downloadable content such as videos, software updates, streaming media and documents on other servers (nodes) **within the same network**

Advantage is faster access to the content and redundancy

19. In Canada what governing body regulates and supervises telecommunications? [1 mark]

CRTC

20. Which HTML element defines alternative content such as Shockwave, Java applet, or ActiveX files? [1 mark]

`<object>`