

1) The first part of this assignment is to run a validation check on my website, using the W3C validation service (<https://validator.w3.org>). I chose the top level page for my web site, this being started before we knew about this tool, and having more stuff to fix than later efforts. The results of this can be seen from link in the Chapter 10 Research page, along with the results from several other well-known sites.

2) What can we do about this problem? We will ATTACK the errors, one by one:

1. **Error** Bad value `CSWB110\index.html` for attribute `href` on element `a`: Backslash ("") used as path segment delimiter.
From line 14, column 2; to line 14, column 30

```
<a href="CSWB110\index.html">CSWB11
```

Ok, no backslashes, I've been corrupted by Windows/DOS.

3. **Error** Stray end tag `b`.
From line 17, column 3; to line 17, column 6

```
&nbsp;</b></nav>
```

Ditch the offending ``

4. **Error** Saw `<` when expecting an attribute name. Probable cause: Missing `>` immediately before.
At line 25, column 1

```
<img src=""</main><foote
```

Left out `>`

5. **Error** A slash was not immediately followed by `>`.
At line 25, column 3

```
<img src=""</main><foote
```

Above correction fixed this.

6. **Warning** Attribute `<` is not serializable as XML 1.0.
From line 24, column 1; to line 25, column 7
e. `</div><img src=""</main><foo`

Fixed by previous correction.

7. **Error** Bad value `<` for attribute `src` on element `img`: Must be non-empty.
From line 24, column 1; to line 25, column 7
e. `</div><img src=""</main><foo`

Syntax of URL:
Any URL. For example: `/hello`, `#canvas`, or `http://example.org/`. Characters should be represented in [NFC](#) and spaces should be escaped as `%20`. Common non-alphanumeric characters other than `! $ & ' () * + - . / : ; = ? @ _ ~` generally must be [percent-encoded](#). For example, the pipe character (`|`) must be encoded as `%7C`.

Either add image or delete image tag. I added image.

8. **Error** Attribute `<` not allowed on element `img` at this point.

From line 24, column 1; to line 25, column 7

```
e. </div>-<img src=""-></main>-<<foo:
```

Fixed by previous correction.

9. **Error** Attribute `main` not allowed on element `img` at this point.

From line 24, column 1; to line 25, column 7

```
e. </div>-<img src=""-></main>-<<foo:
```

Fixed by previous correction.

10. **Error** An `img` element must have an `alt` attribute, except under certain conditions. For details, consult [guidance on providing text alternatives for images](#).

From line 24, column 1; to line 25, column 7

```
e. </div>-<img src=""-></main>-<<foo:
```

Fixed by previous correction. One miscue can generate multiple errors.

11. **Error** End tag for `body` seen, but there were unclosed elements.

From line 37, column 1; to line 37, column 7

```
</footer>-</body>-<</htm:
```

Fixed by previous correction.

12. **Error** Unclosed element `main`.

From line 19, column 1; to line 19, column 6

```
b>-</nav>-<main>-<<p>
```

Fixed by previous correction.

Document checking completed. No errors or warnings to show.

Victory!!!

3) Why are validation, analysis and accessibility important? There are several aspects to the answer. The immediate benefit is as a quick self-assessment, a QA tool to indicate whether your code will function and render an acceptable page. Broken syntax can cause the results to fall short of what you want, and invalid code can cause the browser to render pages slower. Code that is not compliant with W3C standards can yield unexpected results. Code that is compliant with W3C standards is more likely to give more predictable results in various web browsers and operating systems. Errors that may give acceptable results in one browser or platform may show up differently in another. Finally, W3C compliant code is more likely to provide consistent search engine visibility.