

Web Research: Chapter Ten

Testing on: (<http://csisweb.palomar.edu/~Ast29895/>)

Question One

<http://validator.w3.org>

The **W3 Validator** site I used during the Java Jam CSS case study where I ran into trouble with my <div> set up and structure and it helped me identify a stray div tag that was ruining my code, so I'm quite familiar with it. The report on my class site came back with 7 **errors** and 2 **warnings**. The errors were obsolete HTML tags where I had used inline coding, <center> that it was recommending I use in CSS instead, along with some stray
 tags. The warnings were about my table <tr> and could be fixed easily. This is a useful site for issues in your code structure and presents it in a way which makes it easy to debug when you have a lot of code on your page.

1. **Error** Element `center` not allowed as child of element `h1` in this context.
(Suppressing further errors from this subtree.)
From line 12, column 5; to line 12, column 12
`ody><h1><center>CSWB11`

2. **Error** The `center` element is obsolete. Use CSS instead.
From line 12, column 5; to line 12, column 12
`ody><h1><center>CSWB11`

3. **Error** End tag `br`.
From line 12, column 78; to line 12, column 82
`nter></h1></br><nav`

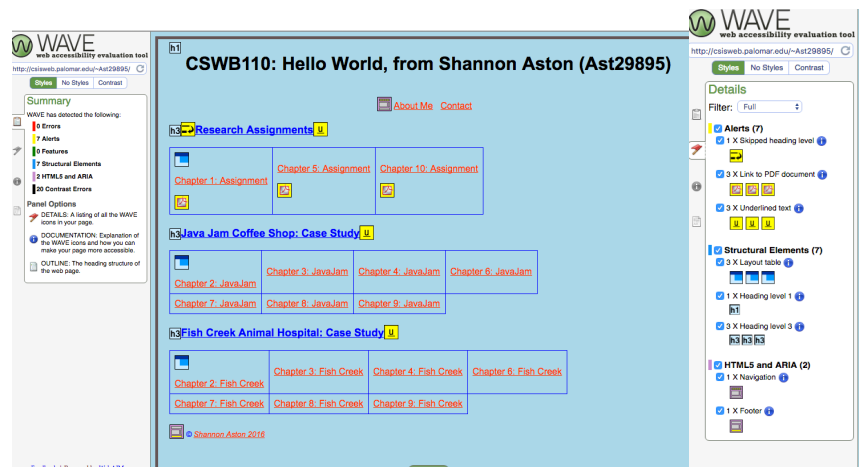
4. **Error** End tag `br`.
From line 18, column 1; to line 18, column 5
`a> </br></nav`

5. **Warning** A table row was 3 columns wide, which is less than the column count established by the first row (4).
From line 45, column 83; to line 47, column 5
`</td></tr></t`

Question Two

<http://wave.webaim.org>

I used the **Wave** site to run the test on my class site, and the report came back with (0) **errors**, (7) **alerts** (links to my PDF files which have been known to have accessibility issues), (2) **HTML & Aria** and (20) **contrast errors**, based on my simplistic color scheme (red on light blue) which it classified as very low contrast. Some text was underlined that was not a link, which the site found confusing and I would have to change this. I would have to change all these issues to optimize the site. A good place to start the tidy up process.



<http://www.achecker.ca/checker>

The **A Checker** site gave me a report broken into known problems (19), likely problems (0) and potential problems (62). The Fixed size example: **color contrast example** was common through the test and again, my simple color scheme was again a problem. It would have to be changed. The potential problems list was large (62) and were a range of grammar, code set up, table structure, text size, link meaningfulness and a host of others. It would take some time to address all these issues, but some could be dealt with right away. Again, the specificity of the report helped me understand the limitations of my code and where I could take steps to improve it

Accessibility Review

Export Format: PDF | Report to Export: AI | Get File

Accessibility Review (Guidelines: WCAG 2.0 (Level AA))

Known Problems(19) | Likely Problems (0) | Potential Problems (62) | HTML Validation | CSS Validation

1.3 Adaptable: Create content that can be presented in different ways (for example simpler layout) without losing information or structure.

Success Criteria 1.3.1 Info and Relationships (A)

Check 241: Tabular information may be missing table markup.

Line 10, Column 1:

```
<body>
<h1><center>CSWB110: Hello World, from Shannon Aston (Ast29895)</center></h1></br></br>
<div ...
```

Check 248: Visual lists may not be properly marked.

Line 10, Column 1:

```
<body>
<h1><center>CSWB110: Hello World, from Shannon Aston (Ast29895)</center></h1></br></br>
<div ...
```

Check 270: Unicode right-to-left marks or left-to-right marks may be required.

Line 10, Column 1:

```
<body>
<h1><center>CSWB110: Hello World, from Shannon Aston (Ast29895)</center></h1></br></br>
<div ...
```

Check 271: dir attribute may be required to identify changes in text direction.

Check 136: Data table may require sa elements.

Line 23, Column 1:

```
<table>
<tr>
<td><a href = "Ch1_Research.pdf"> <p>Chapter 1: Assignment</p> </a> </td>
<td><a href ...
```

Line 33, Column 1:

```
<table>
<tr>
<td><a href = "javaJam/tutorial2/index.html"> <p>Chapter 2: JavaJam</p> </a></td>
<td ...
```

Line 54, Column 1:

```
<table>
<tr>
<td><a href = "fishCreek/tutorial2/index.html"><p>Chapter 2: Fish Creek</p> </a></td> ...
```

Success Criteria 1.3.3 Sensory Characteristics (A)

Check 250: Text may refer to items by shape, size, or relative position alone.

Line 10, Column 1:

```
<body>
<h1><center>CSWB110: Hello World, from Shannon Aston (Ast29895)</center></h1></br></br>
<div ...
```

Check 133: Layout table may not linearize.

Line 23, Column 1:

```
<table>
<tr>
<td><a href = "Ch1_Research.pdf"> <p>Chapter 1: Assignment</p> </a> </td>
<td><a href ...
```

Line 33, Column 1:

Question Three

<http://www.websiteoptimization.com/services/analyze>

The **Web Site Optimization** site ran a fast test on my site which was an audit of what the site contained and download speeds with various internet connections. The analysis and recommendations for my site were all green and therefore positive, offering *congratulations* on Total **HTML**, **OBJECTS**, **CSS**, **SIZE**, **MULTIM** **SIZE**. Because the site is so simple it seemed to give the test no trouble and it appeared to operate well on all platforms/speeds.

Web Page Speed Report

URL:	http://csisweb.palomar.edu/~Ast29895/
Title:	CSWB110
Date:	Report run on Thu Jul 28 23:49:01EDT2016

Diagnosis

Global Statistics

Total HTTP Requests:	2
Total Size:	3579 bytes

Object Size Totals

Object type	Size (bytes)	Download @ 56K (seconds)	Download @ T1 (seconds)
HTML:	2470	0.69	0.21
HTML Images:	0	0.00	0.00
CSS Images:	0	0.00	0.00
Total Images:	0	0	0
Javascript:	0	0.00	0.00
CSS:	1109	0.42	0.21
Multimedia:	0	0.00	0.00
Other:	0	0.00	0.00

External Objects

Page Objects

QTY	SIZE#	TYPE	URL	COMMENTS
1	2470	HTML	http://csisweb.palomar.edu/~Ast29895	Header size = 506 bytes Up to 1683 bytes could have been saved through compression. View a formatted version of this HTML file
1	1109	CSS	csisweb.palomar.edu ... /~Ast29895/styleSheet.css	Header size = 242 bytes Up to 605 bytes could have been saved through compression. View a formatted version of this CSS file
2 ^	3579*		Total (^unique objects)	

This site is not using HTTP compression, otherwise called content encoding using gzip. Consider compressing your textual content (XHTML, JavaScript, etc.) with mod_gzip or similar products.

* CSS alternate stylesheets may be referenced in the HTML but are not actually downloaded until they are needed and are therefore not included in the total page size.

Analysis and Recommendations

- TOTAL HTML** - Congratulations, the total number of HTML files on this page (including the main HTML file) is 1 which most browsers can multithread. Minimizing HTTP requests is key for web site optimization. Y
- TOTAL OBJECTS** - Congratulations, the total objects on this page (including the HTML) is 2 which most browsers can multithread in a reasonable amount of time. Minimizing HTTP requests is key to minimizing object overhead (see Figure II-3: [Relative distribution of latency components showing that object overhead dominates web page latency](#) in [Website Optimization Secrets](#) for more details on how object overhead dominates web page latency.
- TOTAL CSS** - Congratulations, the total number of external CSS files on this page is 1 . Because external CSS files must be in the HEAD of your HTML document, they must load first before any BODY content displays. Although they are cached, CSS files slow down the initial display of your page. Remember to place CSS files in the HEAD and JavaScript files at the end of the BODY to enable progressive display.
- TOTAL SIZE** - Congratulations, the total size of this page is 3579 bytes. This page should load in 1.11 seconds on a 56Kbps modem. Based on current [average web page](#) size and composition trends you want your page to load in less than 20 seconds on a 56Kbps connection, with progressive feedback. Ideally you want your page to load in 3 to 4 seconds on a broadband connection, and 8 to 12 seconds for the HTML on a dialup connection. Of course, there's always room for improvement.
- HTML SIZE** - Congratulations, the total size of this HTML file is 2470 bytes, which less than 50K. Assuming that you specify the HEIGHT and WIDTH of your images, this size allows your HTML to display content in under 10 seconds, the average time users are willing to wait for a page to display without feedback.
- CSS SIZE** - Congratulations, the total size of your external CSS is 1109 bytes, which is less than 8K.
- MULTIM SIZE** - Congratulations, the total size of all your external multimedia files is 0 bytes, which is less than 10K.

External Objects

External Object:	QTY
Total HTML:	1
Total HTML Images:	0
Total CSS Images:	0
Total Images:	0
Total Scripts:	0
Total CSS imports:	1
Total Frames:	0
Total Iframes:	0

Download Times*

Connection Rate	Download Time
14.4K	3.17 seconds
28.8K	1.79 seconds
33.6K	1.59 seconds
56K	1.11 seconds
ISDN 128K	0.62 seconds
T1 1.44Mbps	0.42 seconds

*Note that these download times are based on the full connection rate for ISDN and T1 connections. Modem connections (56Kbps or less) are loss factor of 0.7. All download times include delays due to round-trip latency with an average of 0.2 seconds per object. With 2 total objects computes to a total lag time due to latency of 0.4 seconds. Note also that this download time calculation does not take into account delays du and rendering.

Page Objects

QTY	SIZE#	TYPE	URL	COMMENTS
1	2470	HTML	http://csisweb.palomar.edu/~Ast29895	Header size = 506 bytes Up to 1683 bytes could have been saved through compression. View a formatted version of this HTML file
1	1109	CSS	csisweb.palomar.edu ... /~Ast29895/styleSheet.css	Header size = 242 bytes Up to 605 bytes could have been saved through compression. View a formatted version of this CSS file
2 ^	3579*		Total (^unique objects)	

This site is not using HTTP compression, otherwise called content encoding using gzip. Consider compressing your textual content (XHTML

Question Four

<http://watson.addy.com>

The Watson Addy site found no major issues with my site, although it amusingly found a (404: not found) error for an empty link for this assignment I am writing which I have yet to post so I enjoyed the irony. It said I had no meta tag for a search engine or linking sites, but I don't want my site to be that public on the internet anyway. There were no spelling errors and it seemed to be all OK. Again, it was another barrier of protection for a fledgling site which I will run in future.

Checking server response on
Server response

Response code from <http://csisweb.palomar.edu/~Ast29895/>
OK (code 200)

Analyzing HTML...
Comparing theoretical capacity
Estimated download speed

These download times are estimates and should only be used as a general guideline. Many factors, such as your modem, quality of connection, ISP load, server responsiveness, and Internet routing can greatly impact the actual download times experienced by your visitors.

Object type	Number	Size in bytes	14.4	28.8	33.6	56k	128K	T1
HTML	1	2470	1.80	0.99	0.82	0.71	0.31	0.12
Total	1	2470	1.80	0.99	0.82	0.71	0.31	0.12

Analyzing HTML syntax...
Syntax and style analysis
(clicking on the line # takes you to that line in the code)

Congratulations! I found no problems.

Comparing word counts...
Word counts:

Words: 88
Average word length: 5.3
Unique words: 38

Checking spelling...
Spelling Check
(clicking on the line # takes you to that line in the code)

No spelling errors found.

Ch1_Research.pdf

Result: (200: OK)
Link found on line: [25](#)

Ch5_Research.pdf

Result: (200: OK)
Link found on line: [26](#)

Ch10_Research.pdf

Result: (404: Not Found)
Link found on line: [27](#)

javaJam/tutorial2/index.html

Result: (200: OK)
Link found on line: [35](#)

javaJam/tutorial3/index.html

Result: (200: OK)
Link found on line: [36](#)

javaJam/tutorial4/index.html

Result: (200: OK)
Link found on line: [37](#)

javaJam/tutorial6/index.html

Result: (200: OK)
Link found on line: [38](#)

Conclusion

In future, I will use all these sites to run testing on the sites I develop. I intend to write personal websites, so these resources will be invaluable to me when I

work on more complex site structure and with a deeper hierarchy. Each site was functional and useful in its own way and gave you a way of seeing the site in a way you could never see on your own.

I am currently writing new code for a personal website using a Bootstrap code source to get me started. I have set it up with my hosting service and will use these testing sites when I am done to double check it all before it's live. Useful exercise.