

## Challenge 1 / Refactoring code for Horiseon's website

<https://stephcambria.github.io/Refactoring-for-Horiseon/>

In order to effectively refactor the source code I was given, my first step was to take note of the immediate issues I found. On the deployed site, there were broken links, images that would not load, and a lack of alternative text. In the source code, I noticed an abundance of div elements, and next to no organization. The easiest way to begin the refactoring process was to make the syntax actually readable, and the way I did this was by indenting a few lines in-between the sections I intended to create in the html file. For example, separating the navigation bar from the main content, and then each individual paragraph section from each other. Similarly, in the stylesheet, I dug through and moved the code around so that not only were all the styled sections together, but so that everything was placed in the order it would appear on the live site. For even further legibility, I added comments as I continued to clean up.

From there, I was able to chip away at the errors with ease. Now that I had the code relatively organized, I decided to keep the process simple and resolve the issues as they appeared in order. First the broken links in the navigation bar, which were fixed by adding the # anchor to the href links. Next was getting the missing images to load, which was a quick fix since the brackets simply were not closed. While I was fixing the images, I added the missing alternative text as I went to enable more accessibility. As I continued the refactoring process, I noticed it was marginally more efficient than I was expecting since I began by reorganizing the syntax to follow the overall page structure. Errors became glaringly obvious, and I could spend less time looking for them and more time troubleshooting them.

I decided to bypass changing all of the div elements into section elements for a while because I wanted to prioritize the core functionality over the details. As long as the code was legible enough, I could always continue to tidy it up as I went, which is exactly what I did.

Surprisingly, there wasn't much I had to troubleshoot as I replaced the <div>s with <section>s. It was an incredibly smooth process. I did take a step back and read up on when using <div> is appropriate, which is why it is used selectively in the syntax. Specifically, I kept it with the cover image, and the benefits sidebar to more easily maintain the style functionality.

To further separate all of the content in the html file, I added the <nav> tag to the navigation bar, and the <main> tag to the paragraph content. This way, the core content of the site is all together and divided accordingly, and the syntax didn't go from a mess of <div> tags to a mess of <section> tags.

Interestingly enough, the only real problem I encountered that stumped me was after I initially deployed the site. Before deployment, my html and css documents were running and displaying perfectly. But after deployment, suddenly my html file was no longer reading my css. I knew the reason why was going to be obvious in hindsight, but in the moment I was completely baffled. After a few hours of digging around online, reading as much as I could, and what felt like

endless trial and error, I finally figured it out. I had the syntax as `<link rel="stylesheet" href="style.css">`, when it actually needed to be `<link href="style.css" rel="stylesheet">`. Despite ensuring that the html and css were organized sequentially, I neglected the importance of making sure my stylesheet link was correct. It was so interesting to read about so many people encountering this problem, and trying so many suggestions that didn't work. Ultimately I think it's good to have encountered this issue, though, because I'm sure I'll never make this mistake again!

Below are screenshots of what the final syntax looks like:

```
1  <!DOCTYPE html>
2  <html lang="en-us">
3
4  <head>
5      <meta charset="UTF-8" />
6      <link href="style.css" rel="stylesheet">
7      <title>The Very Basics of Search Engine Optimization</title>
8  </head>
9
10 <!-- Here is the first section, with the header and list elements -->
11 <body>
12     <header class="header">
13         <h1>Hori<span class="seo">seo</span></h1>
14         <nav id="list">
15             <ul>
16                 <li>
17                     <a href="#search-engine-optimization">Search Engine Optimization</a>
18                 </li>
19                 <li>
20                     <a href="#online-reputation-management">Online Reputation Management</a>
21                 </li>
22                 <li>
23                     <a href="#social-media-marketing">Social Media Marketing</a>
24                 </li>
25             </ul>
26         </nav>
27     </header>
28
29 <!-- Here is the second section, with just the cover image -->
30 <div class="hero"></div>
31
32 <!-- Here is the third section, with the main content of the web page -->
33 <main class="content">
34     <section id="search-engine-optimization" class="search-engine-optimization">
35         
36         <h2>Search Engine Optimization</h2>
37         <p>
38             The dominance of mobile internet use means that users are searching for the right business as they travel, shop, or sit on their couch at home. Search Engine Optimization (SEO) allow
39         </p>
40     </section>
41
42     <section id="online-reputation-management" class="online-reputation-management">
43         
44         <h2>Online Reputation Management</h2>
45         <p>
46             The web is full of opinions, and some of these can be negative. Social media allows anyone with an internet connection to say whatever they want about your business. Online Reputatio
47         </p>
48     </section>
49
50     <section id="social-media-marketing" class="social-media-marketing">
51         
52     </section>
53 </main>
</body>
</html>
```

```

50
51
52 <section id="social-media-marketing" class="social-media-marketing">
53   
64   <div class="benefit-lead">
65     <h3>Lead Generation</h3>
66     
73     <h3>Brand Awareness</h3>
74     
81     <h3>Cost Management</h3>
82     
91   <h2>Made with ♥ by Horiseon</h2>
92   <p>
93     © 2019 Horiseon Social Solution Services, Inc.
94   </p>
95 </section>
96 </body>
97 </html>
98
99
100
101

```

```

1  /* Here is where I've moved all of the core formatting of the web page. If it's all together at the top, it will be easy to find and edit */
2
3  * {
4    box-sizing: border-box;
5    padding: 0;
6    margin: 0;
7  }
8
9  body {
10   background-color: #d9dcd6;
11 }
12
13 .float-left {
14   float: left;
15   margin-right: 25px;
16 }
17
18 .float-right {
19   float: right;
20   margin-left: 25px;
21 }
22
23 /* The Header section begins here */
24
25 .header {
26   padding: 20px;
27   font-family: 'Trebuchet MS', 'Lucida Sans Unicode', 'Lucida Grande', 'Lucida Sans', Arial, sans-serif;
28   background-color: #2a607c;
29   color: #ffffff;
30 }
31
32 .header h1 {
33   display: inline-block;
34   font-size: 48px;
35 }
36
37 .header h1 .seo {
38   color: #d9dcd6;
39 }
40
41 .header nav {
42   padding-top: 15px;
43   margin-right: 20px;
44   float: right;
45   font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
46   font-size: 20px;
47 }
48
49 .header nav ul {
50   list-style-type: none;
51 }
52
53

```

```

42 .header nav {
43     padding-top: 15px;
44     margin-right: 20px;
45     float: right;
46     font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
47     font-size: 20px;
48 }
49
50 .header nav ul {
51     list-style-type: none;
52 }
53
54 .header nav ul li {
55     display: inline-block;
56     margin-left: 25px;
57 }
58
59 /* Keeping the <a> tag up here because it's being used with the navigation bar */
60
61 a {
62     color: #ffffff;
63     text-decoration: none;
64 }
65
66
67 /* The cover image is here */
68
69 .hero {
70     height: 800px;
71     width: 100%;
72     margin-bottom: 25px;
73     background-image: url("https://unh.bootcampcontent.com/unh-coding-bootcamp/UBH-VIRT-FSF-PT-06-2022-U-LDLC/~raw/9695fa49f3da7654bfe8c8d97c381fd71c3987a4/01-HTML-Git-CSS/02-Challenge/Develop/assets/cover-image.jpg");
74     background-size: cover;
75     background-position: center;
76 }
77
78
79 /* Content section starts here */
80
81 .content {
82     width: 75%;
83     display: inline-block;
84     margin-left: 20px;
85 }
86
87
88 /* Moved the <p> tag closer to where the actual paragraphs are */
89
90 p {
91     font-size: 16px;
92 }
93
94

```

```

94
95 .search-engine-optimization {
96   margin-bottom: 20px;
97   padding: 50px;
98   height: 300px;
99   font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
100   background-color: #e0072bb;
101   color: #ffffff;
102 }
103 .search-engine-optimization img {
104   max-height: 200px;
105 }
106 .search-engine-optimization h2 {
107   margin-bottom: 20px;
108   font-size: 36px;
109 }
110
111
112 .online-reputation-management {
113   margin-bottom: 20px;
114   padding: 50px;
115   height: 300px;
116   font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
117   background-color: #e0072bb;
118   color: #ffffff;
119 }
120 .online-reputation-management img {
121   max-height: 200px;
122 }
123 .online-reputation-management h2 {
124   margin-bottom: 20px;
125   font-size: 36px;
126 }
127
128
129 .social-media-marketing {
130   margin-bottom: 20px;
131   padding: 50px;
132   height: 300px;
133   font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
134   background-color: #e0072bb;
135   color: #ffffff;
136 }
137 .social-media-marketing img {
138   max-height: 200px;
139 }
140 .social-media-marketing h2 {
141   margin-bottom: 20px;
142   font-size: 36px;
143 }
144

```

```

145
146 /* Benefits sidebar starts here */
147
148 .benefits {
149   margin-right: 20px;
150   padding: 20px;
151   clear: both;
152   float: right;
153   width: 20%;
154   height: 100%;
155   font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
156   background-color: #2589bd;
157 }
158
159 .benefit-lead {
160   margin-bottom: 32px;
161   color: #ffffff;
162 }
163 .benefit-lead h3 {
164   margin-bottom: 10px;
165   text-align: center;
166 }
167 .benefit-lead img {
168   display: block;
169   margin: 10px auto;
170   max-width: 150px;
171 }
172
173
174 .benefit-cost {
175   margin-bottom: 32px;
176   color: #ffffff;
177 }
178 .benefit-cost h3 {
179   margin-bottom: 10px;
180   text-align: center;
181 }
182 .benefit-cost img {
183   display: block;
184   margin: 10px auto;
185   max-width: 150px;
186 }
187
188
189 .benefit-brand {
190   margin-bottom: 32px;
191   color: #ffffff;
192 }
193 .benefit-brand h3 {
194   margin-bottom: 10px;
195   text-align: center;
196 }

```

```

173
174 .benefit-cost {
175     margin-bottom: 32px;
176     color: #ffffff;
177 }
178 .benefit-cost h3 {
179     margin-bottom: 10px;
180     text-align: center;
181 }
182 .benefit-cost img {
183     display: block;
184     margin: 10px auto;
185     max-width: 150px;
186 }
187
188
189 .benefit-brand {
190     margin-bottom: 32px;
191     color: #ffffff;
192 }
193 .benefit-brand h3 {
194     margin-bottom: 10px;
195     text-align: center;
196 }
197 .benefit-brand img {
198     display: block;
199     margin: 10px auto;
200     max-width: 150px;
201 }
202
203
204 /* And lastly, the footer. */
205
206 .footer {
207     padding: 30px;
208     clear: both;
209     font-family: 'Trebuchet MS', 'Lucida Sans Unicode', 'Lucida Grande', 'Lucida Sans', Arial, sans-serif;
210     text-align: center;
211 }
212 .footer h2 {
213     font-size: 20px;
214 }

```