

**Program: Mechanical Engineering**


Course Number	CCPS 530
Section Number	01
Course Title	Web Systems Development
Semester/Year	Fall 2021

Instructor	Dr. Ghassem Tofighi
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<b>Report NO.</b>	<b>3</b>
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Report Title	HTML
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Group No.	N/A
Submission Date	October 23, 2021
Due Date	October 26, 2021

Name	Student ID	Signature*
Fareed Syed	xxxx19438	

(Note: Remove the first 4 digits from your student ID)

*\*By signing above you attest that you have contributed to this submission and confirm that all work you have contributed to this submission is your own work. Any suspicion of copying or plagiarism in this work will result in an investigation of Academic Misconduct and may result in a "0" on the work, an "F" in the course, or possibly more severe penalties, as well as a Disciplinary Notice on your academic record under the Student Code of Academic Conduct, which can be found online at <http://www.ryerson.ca/senate/policies/pol60.pdf>.*

# HTML Code of LAB3

```
LAB3_Fareed_Syed.html x main.css x
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <title>Fareed Syed Profile</title>
6   <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css"
7     integrity="sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T" crossorigin="anonymous">
8   <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
9   <link rel="stylesheet" href="main.css">
10
11 </head>
12 <body>
13 <nav class="navbar navbar-expand-sm navbar-0080FFFF bg-light">
14   <a href="LAB3_Fareed_Syed.html" class="navbar-brand headings">Fareed Syed</a>
15   <button class="navbar-toggler" data-toggle="collapse" data-target="#navbarMenu">
16     <span class="navbar-toggler-icon"></span>
17   </button>
18   <div class="collapse navbar-collapse" id="#navbarMenu">
19     <ul class="navbar-nav mr-auto">
20       <li class="nav-item"><a href="#About" class="nav-link">About</a></li>
21       <li class="nav-item"><a href="#Work" class="nav-link">Work Experience</a></li>
22       <li class="nav-item"><a href="#Education" class="nav-link">Education</a></li>
23       <!-- <li class="nav-item"><a href="#" class="nav-link">Volunteer Experience</a></li>-->
24       <!-- <li class="nav-item"><a href="#" class="nav-link">Skills</a></li>-->
25       <!-- <li class="nav-item"><a href="#" class="nav-link">Projects</a></li>-->
26       <li class="nav-item"><a href="#Contact" class="nav-link">Contact</a></li>
27     </ul>
28   </div>
29 </nav>
30 <div class="container my-container">
31   <div class="row gx-5">
32     <div class="col-md-2">
33       
36     </div>
37   </div>
38   <div class="row my-row justify-content-left">Research Assistant at Ryerson University | Former Intern - Thales,
39     Centre for Urban
40     Energy | Mechatronics Engineering Student
41   </div>
42 </div>
43 <br>
44 <div class="container my-container border rounded">
45   <div class="row my-row gx-5">
46     <h2 class="headings" id="About"><b>About</b></h2>
47     <p>Thanks for stopping by!<br>
48       Problem-solving has always been a passion of mine. If it weren't for engineering, not sure what I'd be
49       doing.
50       <br>
51       <br>
52       I am a tech-enthusiast and a fourth-year student majoring in Mechatronics Engineering and minoring in
53       Computer
54       Science at Ryerson University in Toronto. Areas like Automation controls, Robotics, Power and Energy
55       interest
56       me,
57       but I'm always looking for opportunities to diversify my professional experience and expand my horizons.
58       I want to continue to use my experience working in a team-oriented environment and managing time-sensitive
59       projects
60       to both grow myself professionally and contribute to the success of others. <br>
61     </p>
62   </div>
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62 </p>
63 </div>
64 </div>
65 <br>
66 <div class="container my-container border rounded">
67 <div class="row my-row">
68 <h2 class="headings" id="Work"><b>Work Experience</b></h2>
69 </div>
70 <div class="row">
71 <div class="col-md-2 justify-content-center"><a href="https://www.thalesgroup.com/en"></a></div>
74 <div class="col-md-10 justify-content-center">
75
76 <div class="row">
77 <div class="col-sm"><b>Systems Operations Intern</b></div>
78 <div class="col-sm dates"><b>Jan 2020-Dec 2020 </b></div>
79 </div>
80 <div class="row">
81 <div class="col">Thales Canada, Transportation Solutions</div>
82 </div>
83 <div class="row">
84 <div class="col">
85 <ul>
86 <li>Worked with Systems Designers and Systems Engineers to analyze train characteristics and
87 safety requirements of 4LM (4 Line Modernization) projects for London Underground Limited.
88 </li>
89 <li>Performed system analysis, modeling, and simulation to achieve 100% performance of train
90 control
91 systems running on CBTC technological signal requirements using OPSIM (Operational
92 Simulation)
93 software.
94 </li>
95 <li>Designed and implemented over 100 Safety Requirements checks on data of 14 VCCs provided by
96 Systems
97 Designers using Python graph traversals and released 8-10 check results on repositories like
98 Bitbucket and Jira every month.
99 </li>
100 <li>Introduced automated Excel Macros in Test case reports for testing and comparing base cases
101 with
102 test
103 cases which resulted in increase of 200% of productivity in validating check results testing
104 process.
105 </li>
106 </ul>
107 </div>
108 </div>
109 </div>
110 </div>
111 <div class="row">
112 <div class="col-md-2 justify-content-center"><a href="https://www.ryerson.ca/cue/"></a></div>
115 <div class="col-md-10 justify-content-center">
116
117 <div class="row">
118 <div class="col"><b>Projects Management Assistant</b></div>
119 <div class="col dates"><b>May 2019-Dec 2019 </b></div>
120 </div>
121 <div class="row">
122 <div class="col">Centre for Urban Energy, Ryerson University</div>
123 </div>
124 <div class="row">
125 <div class="col">
126 <ul>

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126         <ul>
127             <li>Assisted in renewable energy research projects management by gathering data on city GHG
128                 emissions and drafting monthly progress reports.
129             </li>
130             <li>Performed document control through tracking and distributing project documentation,
131                 including
132                 database updates, documentation of RoHS standard electrical equipment used in Smart Grid
133                 Lab.
134             </li>
135             <li>Automated Macros to generate progress graph of all 28 research energy projects achieving
136                 accuracy to 90%.
137             </li>
138             <li>Maintained liaisons with the research network community and the Center for Urban Energy.
139             </li>
140         </ul>
141     </div>
142 </div>
143 </div>
144 </div>
145 </div>
146 <br>
147 <div class="container my-container border rounded">
148     <div class="row my-row">
149         <h2 class="headings" id="Education"><b>Education</b></h2>
150     </div>
151     <div class="row">
152         <div class="col-md-2"><a href="https://www.ryerson.ca/"></a></div>
155         <div class="col-md-10">
156             <div class="row">
157                 <div class="col"><b>Ryerson University</b></div>
158                 <div class="col dates"><b>Sep 2017-Apr 2022 </b></div>
159             </div>
160             <div class="row">
161                 <div class="col">Major: Bachelor of Engineering - BE, Mechatronics Engineering</div>
162             </div>
163             <div class="row">
164                 <div class="col">Minor: Computer Science</div>
165             </div>
166         </div>
167     </div>
168 </div>
169 </div>
170 <br>
171 <footer>
172     <div class="container my-container border rounded">
173         <div class="row my-row">
174             <h2 class="headings" id="Contact"><b>Contact</b></h2>
175         </div>
176         <div class="row">
177             <div class="col-12">
178                 <div class="gk-social">
179                     <a href="mailto:khaja.syed@ryerson.ca" target="_top"><i class="fa fa-envelope"
180                         aria-hidden="true"></i></a>
181                     <a href="https://www.linkedin.com/in/fareed-syed/" class="fa fa-linkedin"></a>
182                     <a href="https://www.instagram.com/fareed.syed.31/" class="fa fa-instagram"></a>
183                 </div>
184             </div>
185         </div>
186     </div>
187 </div>
188 </div>
189
190 <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"
191     integrity="sha384-q8i/X+965Dz00rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abTTE1Pi6jizo"
192     crossorigin="anonymous"></script>
193 <script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.7/umd/popper.min.js"
194     integrity="sha384-U02eT0CpHqdsJQ6hJty5KVphtPhzWj9WO1cLHTMga3JDZwnnQq4sF86dIHNDz0W1"
195     crossorigin="anonymous"></script>
196 <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"
197     integrity="sha384-JjSmVgyd0p3pXB1rRibZUAYoIIy60rQ6VrjIEaFf/nJGzIxFOsf4x0xIM+B07jRM"
198     crossorigin="anonymous"></script>
199 </body>
200 </html>

```

## Bootstrap vs CSS

This LAB is a combination of styles used from CSS as well as Bootstrap. CSS and Bootstrap are free, front-end development frameworks designed to help developers build websites faster and easier. Major differences are that CSS3 is a less widely used framework that only uses CSS, while Bootstrap is a more widely used framework that uses CSS and JavaScript. CSS3 is considered an easier framework to learn and use for a few reasons. First, it is built only with HTML and CSS, which are easier to learn than other programming languages. Second, to load the CSS3 library on your site, you simply have to add a reference to the stylesheet in your index.html file.

With Bootstrap, you can choose not to use its JavaScript library and simply not load the JavaScript files on your site. The process of loading the CSS files is still more complicated than W3.CSS. Not only do you have to include a reference to the stylesheet, you also have to either load BootstrapCDN locally or download Bootstrap on your server. If you go with the latter, the download process is different depending on if you choose the pre-compiled or source code version.

## Web Browsers Used

The web browsers used during this Lab were Google Chrome and IntelliJ IDEA built in preview web browsers. When a web page is loaded, the browser first reads the HTML text and constructs a DOM Tree from it. Then it processes the CSS whether that is inline, embedded, or external CSS and constructs the CSSOM Tree from it. After these trees are constructed, then it constructs the Render-Tree from it. Different browsers use different rendering engines: Internet Explorer uses Trident, Firefox uses Gecko, Safari uses WebKit. Chrome and Opera (from version 15) use Blink, a fork of WebKit.

## Conclusion

Total time spent on this LAB was around 4-5 hours. 2 hours were dedicated to readings, researching and learning using the Module4, Stack Overflow and blog posts. An hour was spent in writing the code. Majority of the text information used was taken from developers personal LinkedIn. Another 30 minutes was spent on debugging the code to make sure the HTML web page validated for HTML5 and CSS3 compliance. Approximately 45 Minutes were spent on writing the report for this LAB. Over all the Lab was a successful and fun learning experience.

## References

- A. Fitzgerald, "W3.CSS vs. Bootstrap: A Head-to-Head Comparison," *hubspot*, 02-Nov-2011. [Online]. Available: <https://blog.hubspot.com/website/w3-css-vs-bootstrap>. [Accessed: 23-Oct-2021].