Ryerson University
Faculty of Engineering & Architectural Science

Department of Mechanical and Industrial Engineering

Program: Mechanical Engineering

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

Instructor	Dr. Ghassem Tofighi

Report NO.	2

Report Title	HTML

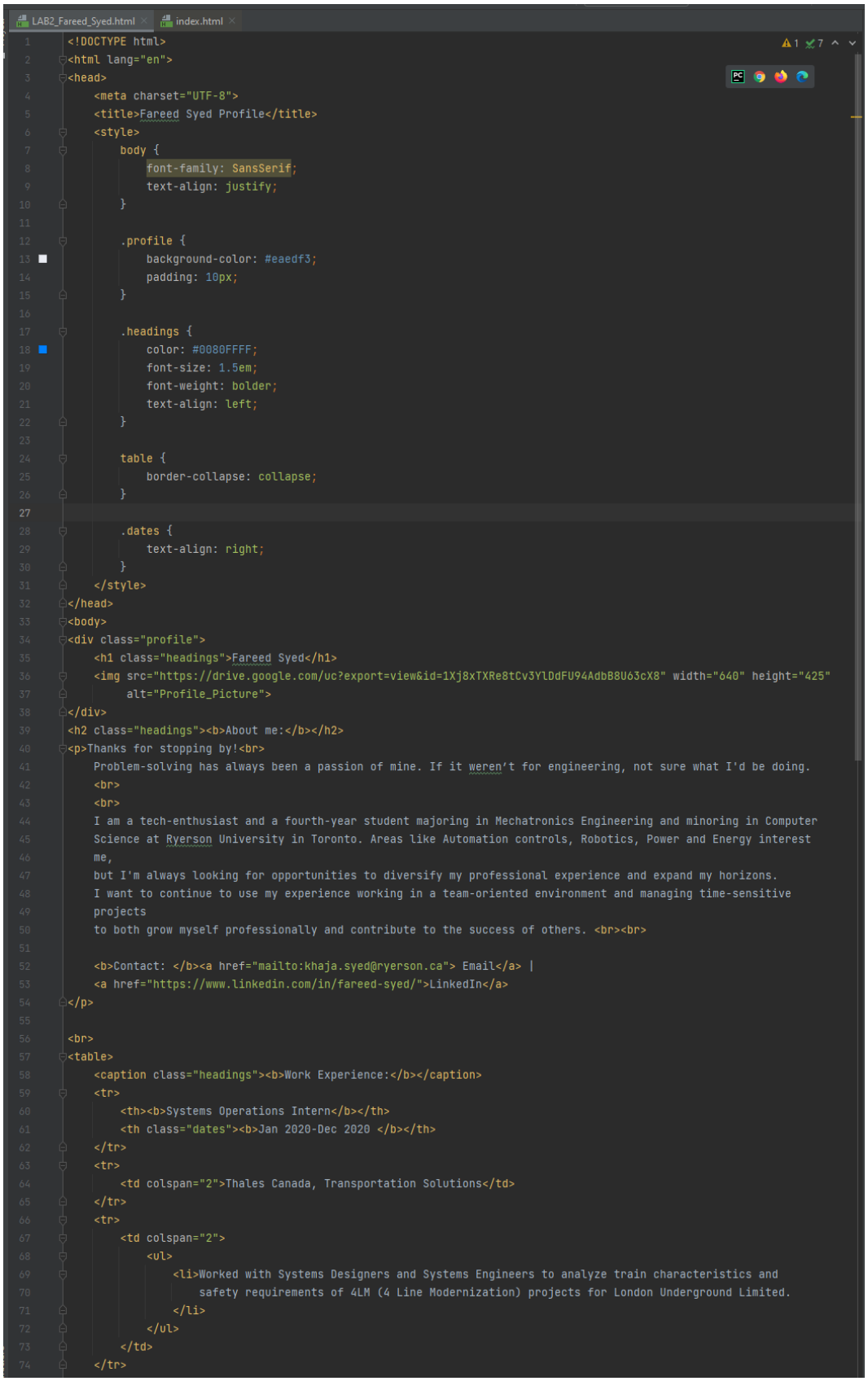
Group No.	N/A
Submission Date	October 12, 2021
Due Date	October 12, 2021

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 LAB2



LAB2_Fareed_Syed.html | index.html

```
    <tr>
        <td colspan="2">
            <ul>
                <li>Performed system analysis, modeling, and simulation to achieve 100% performance of train control
                    systems running on CBTC technological signal requirements using OPSIM (Operational Simulation)
                    software.
                </li>
            </ul>
        </td>
    </tr>
    <tr>
        <td colspan="2">
            <ul>
                <li>Designed and implemented over 100 Safety Requirements checks on data of 14 VCCs provided by Systems
                    Designers using Python graph traversals and released 8-10 check results on repositories like
                    Bitbucket and Jira every month.
                </li>
            </ul>
        </td>
    </tr>
    <tr>
        <td colspan="2">
            <ul>
                <li>Introduced automated Excel Macros in Test case reports for testing and comparing base cases with
                    test
                    cases which resulted in increase of 200% of productivity in validating check results testing
                    process.
                </li>
            </ul>
        </td>
    </tr>
    <tr>
        <th><b>Projects Management Assistant</b></th>
        <th class="dates"><b>May 2019-Dec 2019 </b></th>
    </tr>
    <tr>
        <td colspan="2">Centre for Urban Energy, Ryerson University</td>
    </tr>
    <tr>
        <td colspan="2">
            <ul>
                <li>Assisted in renewable energy research projects management by gathering data on city GHG
                    emissions and drafting monthly progress reports.
                </li>
            </ul>
        </td>
    </tr>
    <tr>
        <td colspan="2">
            <ul>
                <li>Performed document control through tracking and distributing project documentation, including
                    database updates, documentation of RoHS standard electrical equipment used in Smart Gird Lab.
                </li>
            </ul>
        </td>
    </tr>
    <tr>
        <td colspan="2">
            <ul>
                <li>Automated Macros to generate progress graph of all 28 research energy projects achieving
                    accuracy to 90%.
                </li>
            </ul>
        </td>
    </tr>
    <tr>
        <td colspan="2">
            <ul>
                <li>Maintained liaisons with the research network community and the Center for Urban Energy.
                </li>
            </ul>
        </td>
    </tr>
</table>
</body>
</html>
```

HTML Tags and Usage

The following HTML tags were used in writing the HTML code for LAB1.

1. **<!DOCTYPE>:** This was used to let the browser know what version of HTML doc is written.
2. **<html>:** This tag was used to set a container for other elements to be used in HTML documents.
3. **<head>:** This tag was used to define the head portion of the document containing info of HTML doc.
4. **<meta>:** This tag was used to set the info about the website for search engines.
5. **<body>:** This tag was used to define the main content of the HTML doc to display on the web browser.
6. <**style>:**This tag was used to set the font size and color of text on the HTML web page.
7. ** :** This tag was used to make divisions of content in the web page like (text, image, etc)
8. **<h1> :** This tag was used to set the name of the developer on the web page as Heading 1.
9. **<h2> :** This tag was used to set the profile and work experience on the web page as Heading 2.
10. **<img>:** This tag was used to set the image on the web page and edit the size of the image used.
11. **<p>:** This tag was used to create a paragraph of text in the body of the HTML code.
12. **<a>:** This tag was used to define the hyperlinks used to link from one page to another page.
13. **<b>:** This tag was used to bold the text within the tag range.
14. **
:** This tag was used to break the text to a new line within the paragraph of text.
15. **<ul>:** This tag was used to create an unordered list within the <h2> tag used for work experience.
16. **<li>:** This tag used to to create lists within the unordered list to specify details of work experience.
17. **<table>:** This tag is used to define HTML table which contains other tags that define structure of table.
18. **<caption>:** This tag is used to define a table caption.
19. **<tr>:** This tag is used to define rows in a table which depict work experience in the HTML page.
20. **<th>:** This tag is used to define the header cells in the table displayed as bold, center-aligned text
21. **<td>:** This tag is used to define standard cells in the table displayed as normal-weight, left-aligned text

tags vs <table> tags

TABLEs are the correct technology for tabular data. DIVs(division) are the correct technology for page layout and defining objects on the page (along with other block-level objects, i.e. heading, paragraphs, ul tags etc.). It is always advised to use them both and to use them well. Furthermore, each element has a clear purpose and should be used appropriately. DIVs are for page layout and TABLEs are for tabular data representation. In addition, good semantic design (which means no TABLEs for layout) offers many benefits for maintainability and adaptability. These benefits are not as noticeable when you first build your site, but any changes or even a complete redesign to be made later will be much easier.

CSS Features

The following CSS features have been used as Globals CSS class inside the <style> tag in HTML code.

```
<style>
    body {
        font-family: SansSerif;
        text-align: justify;
    }

    .profile {
        background-color: #eaedf3;
        padding: 10px;
    }

    .headings {
        color: #0080FFFF;
        font-size: 1.5em;
        font-weight: bolder;
        text-align: left;
    }

    table {
        border-collapse: collapse;
    }

    .dates {
        text-align: right;
    }
```

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 Module3, 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

J. Deb, “Tables vs. DIV/CSS Layout: SEO Point of View,” *Searchenginepeople*, 02-Nov-2011. [Online]. Available: https://www.searchenginepeople.com/blog/css-tables.html. [Accessed: 12-Oct-2021].