Lappeenrannan-Lahden teknillinen yliopisto LUT

School of Engineering Science

Software Development Skills

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LEARNING DIARY, FRONT-END MODULE

**29.11.2020 – Starting off**

I was very excited to start the course and learn about HTML, CSS, and JavaScript since I have hardly any understanding with these subjects. I have previously (over 5 years ago) done couple of dull looking web pages with plain HTML but never actually included any dynamic styling elements with it. At this stage everything looks quite frightening but hopefully I manage through it as I have heard this course is not especially very hard.

Setting up the environment went quite nicely without too big problems. I am familiar with GitHub already and making a repository went fine without any guidance. Since I have never used Visual Studio Code for any projects, I decided to use it for this course as I have heard it is good for managing projects. Previously, I have used mostly SublimeText 3, but it is more of a plain text editor than a development environment.

I watched the first part *Introduction to workflow and sass* and tried to keep up with the video while installing all these things I have no idea of. I learned that sass is actually CSS extension that makes designing web pages easier. This was also my first time to anything related to Node.js, which I have heard in many places but never known what it is. Well, I still do not know what it is, but at least it has a package manager (npm) that needs to be used when working with sass. I liked that the video also introduced a few VS Code extensions that make developing the code easier.

One bigger problem I encountered during the first part was *npm* trying to run the “sass” script “node-sass -w scss/ -o dist/css/ --recursive”. At first, I found out that the folder structure of ./coursework/ was making difficulties for me but adjusting the file structure and opening the terminal in right folder fixed that problem. Then the script started acting up by telling me some of the scss-files are unreadable. Googling for a while resulted me into conclusion that it is a bug. I somehow managed to find a fix for the problem from node-sass GitHub discussion post from 2018, which I questioned a bit as I figured this would have been fixed after all this time. Anyway, I managed to change the background color after all, and I hope that the sass script will keep working when actually starting to create the web page.

**29.11.2020 – Getting started**

Because I was so excited to get on coding, I started the part 2 *Homepage and Core Sass/CSS* during the same day. The video went straight to coding and there were a lot of lines that just appeared on the screen. I managed to keep up as these HTML tags were familiar for me but still would have wanted some more explanations for the choices. That was basically a whole site I would have made years ago done in 5 minutes. Only thing I really managed to learn at this part was that one could just borrow icons straight from web, which is quite handy.

Then we stepped straight to deep waters, the CSS and SASS. All these tags started appearing on the screen just like the HTML code earlier and I could not process why these tags are there. Of course, I understand what each of these tags does, but there could be a whole lesson about each property instead of just displaying dozens of tags on the screen on a rapid fire. When running into rem -units the video finally explained what it means in a very good way; I understood the subject well when it was explained and shown with an example.

For the rest of the video, I just followed through and added tags to the main.scss -file. I still understand almost everything if I start to inspect the already written code, but if I were supposed to make something like this from scratch, I would not be able to at this stage. Every line of code I wrote was basically just copied from the video without any thinking of why this was made since the video did not explain many things more in depth.

I feel like I would learn more if there was an assignment to complete after watching every video instead of just copying what is already shown on the screen. Now the learning happens in kind of a reverse order: I write something and then wonder how it alters the web page, instead of figuring out how to style the page in a certain way and then writing the code for it. Hopefully, the project will make me think about my choices and make me learn more the other way around.

**1.12.2020 – Figuring out the menu**

Still being very excited about the course I continued following the provided tutorials. Today I did the parts 3 and 4 which included creating a menu and making the site responsive with media queries.

This was (kind of) my first touch in JavaScript as I have not written many lines of it before. It felt quite straight forward and reminded me of Android development as objects need to be fetched first to a variable and then later used as needed. I think I could learn JavaScript easily if I learned the syntax of the language first. Mostly arrow functions seem quite strange for me.

Overall, the tutorials today were quite straight forward, and I managed to start keeping up with them as I become more familiar with the code. The node package manager (npm) was giving me a headache as it could still only successfully read main.scss -file instead of all sass-files. However, it did not stop me for learning as everything was updated fine whenever I saved the main.scss.

**7.12.2020 – Finishing the tutorials**

Today I finished all the tutorials and finally published the site on GitHub pages. As I started to be more familiar with working with HTML, CSS, and SASS the tutorials began to be easier to follow.

I learned that layouts for the page can be made either with grids or flexboxes. The tutorials did not go very in depth of how to modify them to fit your needs, but I hopefully figure them out more precisely when doing the course project. I did not know previously that GitHub offers a free hosting service for webpages which could come handy sometime. Deploying the site was super easy and the site actually appeared on the web without any problems.

There were not any complications this time apart from the npm that kept still giving me an error of unreadable files. All in all, I think I can handle the project with the help of Google as I now understand the basic context of using these tools.

**15.12.2020 – Starting the project**

After a small break from front-end stuff, I started figuring out the project. At first, I had no idea about what kind of site I should be making and just started to modify the page made in the tutorials. After an hour or so I decide that I am not going to learn anything if I am not writing the code from scratch or at least thinking why the code needs to be there. Therefore, I deleted everything and created an empty project which a began to work on.

I decided to stick with a portfolio website as I could benefit from it sometime. At first, I needed to make the homepage which I was designing on the go while writing the code. The more I modified the looks, the more it started to look like what I was going after. I figured I could use the grid layout as the title is always displayed in a same way. To be honest, it took more than several tries to get the grid look like a grid but after many modifies both the code and the end result started looking reasonable.

I was so excited to create something actual and I zoned out with the code and suddenly realized in the middle of the night that I should be getting to bed soon before the sun rises again. It was not much I did during this long session, but I learnt a lot as I needed to write code on my own with some help from Google. Only snippet of code I copied from the internet was the typewriter effect on the lower title that I modified to fit this specific page.

I am actually writing this after finishing the project as I was so busy figuring out the code. I am quite precise when fiddling with small details and most of my time is usually wasted on figuring out something that is not even very necessary. An example of such a thing is that e.g. Firefox does not support CSS rule “zoom” or the font style I originally used for the home page, so I had to fix them although it would probably not be necessary for this course project.

**16.12.2020 – MORE CODE!!**

Straight after a good sleep I opened the project again and started coding. Today my goal was to create a menu for the site. I searched the web for inspirations and found a few sites that I really liked. I did not try to copy the code itself but create a similar look with my own code. I used the menu from the tutorials as a template and started modifying it for my needs.

In addition to the menu, I tidied up the previously created homepage as the grid still did not look very nice as the text blocks were arranged over the grid lines. A fresh look of the code really makes it easier to spot stupid coding mistakes that are just a huge mess although the page itself looked fine. Otherwise, I did not do much but finished the responsiveness for the homepage.

**17.12.2020 – Too high standards**

As I wrote before I pay too much attention to details and was not happy with the yesterday-made menu, so I completely redid it. The new design was actually simpler than the original but that is what menus should be: Only contain simple navigation elements. At this point I questioned my own attention to these details, but still continued on overperforming things that I would have already accepted myself if I had not the motivation to do so.

I started creating the about-page by taking pictures of myself leaning on a wall that I could use on the page and spending hour or so removing the background from the picture. I figured I could structure the page so that I would be leaning on a textbox on the page. I could not think of anything to say about myself, so I decided to leave the coding for the rest of the evening and continue tomorrow.

**18.12.2020 – Trying to finish the project**

Christmas was coming up and I had to finish the project before leaving for a couple of weeks. Only the work-page was left to do in addition to writing something on the about page. As I was becoming lazier, I recreate the work-page from the tutorials with my own touch. As one could guess, I was not happy with how the page looked and needed to completely rethink the design. I wanted to do the layout with flexbox as I already used grid on the homepage.

Most of the time went on learning the usage of flexbox and its properties. Each item on the page should scale on size when resizing the screen, but not enlarge too much. Also, they should not become too small when making the browser smaller. After many hours of struggle, I found the solution by allowing enlarging of flex items, but not allowing them to be smaller than 320px with property ”flex: 1 0 320px”. I also needed to add empty items with height of 0 to fill rows that are not full as otherwise the items would scale to fit the whole container. Overall, I spent so much time figuring out the flexbox that I think I understand it now very well.

The hardest part of the project for me was to find something I could display on the site. I am very bad at trying to introduce myself, but I managed to create a reasonable bio of myself. For the work-page I created a few cards with some projects I have been working on although I would have liked it to contain mostly coding projects, but I really do not have many.

At this point I called the project finished as I was quite happy with the result. There would have been a few improvements I would have liked to make on the page e.g., separate home button on the menu, but I have to draw the line somewhere as Christmas was closing up.

**19.12.2020 – Everything finished**

As I though in the beginning, most of the learning happens when doing the course project. The tutorials only gave me a brief introduction about styling HTML pages with CSS and SASS. I also learned that figuring out the design takes way more time than actually writing the code that modifies the page in particular way.

At last, I made final changes on the page, fixed some small issues, and published the page on GitHub Pages. Then I created a required video of me using the page and demonstrating the responsiveness of the page. This learning diary only takes my main thoughts into account and discusses what is on top of my mind as I did not spend very much time writing it as I was busy writing the code.

I really enjoyed the course as I was able to learn whatever I wanted myself.