Lappeenrannan teknillinen yliopisto

School of Business and Management

Sofware Development Skills

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LEARNING DIARY, FRONT-END MODULE

LEARNING DIARY

Start of the course 2.11.2021

2.11.2021

I chose to enroll on this course, because I wanted to learn how to make websites to improve my skills as an upcoming software developer. The front-end module was also the most interesting one of them all so I started with this course. I have wanted to learn how to make my own websites for a little time now and now I have finally enrolled to this course.

I started this course on Monday and I read through the general information about the course and how to complete it. After this I checked some of the materials that were given to me. I did not do any of the work on the first day. I got the general idea that in this course I must watch different kinds of videos and make own portfolio website and a project using the techniques that I will learn from the videos. This course is also using GIT and I will be using GitHub with it. This way I can improve my GIT skills as I have forgotten some of the main things.

Part 1 – Introduction to workflow and sass

3.11.2021

I started the day by watching the first video which was about introduction to workflow and sass. I chose to use VS Code as my IDE and I installed the suggested add-on called "Live server" to it, which automatically refreshes the website when I save a file in VS Code. I also installed an add-on called "Prettier" to help me format my code better. The video also said to download node.js to my computer so I did it.

I downloaded sass and made a package.json file where I told the .json file that the script will run a script called "sass". This script will compile a .css file to the right directory without me needing to make it manually. This means that I can write all the .css code in to a one file and it will save to the right .css file when I save. Sass is a stylesheet language that I am using for this.

Before I watched the first video I already knew that responsive design is a way to make the design to look good with any size device. This way the design will move depending on the screen size of the computer you are using.

After watching the first video, I learned that how the different kinds of elements can be used to make the responsive design like in the video website there are boxes that move depending on the window size.

Part 2 – Homepage and Core Sass/CSS

12.11.2021

I started doing the part 2 by watching the video and at the same time trying to code my own webpage with the same style as the tutorial. This part was about coding the html and making the first edits to the sass file. In this part I got to create the javascript file, but I didn't add anything to it just yet. I made some changes to the html file and used classes to distinguish different objects on the page. Divs were a new thing to me and there was couple of problems with them at first like forgetting to place the contents between the DIV, but after a while I got the hang of it. The classes were used in the sass file to make custom styling to only the right class. For example, I changed the sass/css to style two heading classes named "lg-heading" and "sm-heading". Using classes I could for example change the color of only one header. While doing the sass/css, I also learned about paddings and margins and the different ways to use them like "rem" units, where 1 rem means the font size of the html element(this is usually 16).

I got to add some animation with fading the color in whenever someone is hovering over the social media icons on the page. This way the color doesn't appear instantly but it takes 0.5seconds to be fully colored.

In the end of the lecture video, I added a background image to the site.

Part 3 – Rotating menu button

16.11.2021

In this part I got introduced to JavaScript and to some responsive design with css. I made a responsive button to my webpage which transforms to a X shaped button after pressed. This is the same kind of button that was made in the tutorial. Before making this button, I didn't know that css can be used to animate things on the webpage and I thought that the animations were made by JavaScript.

While making the JavaScript file, I encountered a problem that was about the JS file not working when pressing the button. After a while I found out why it wasn't working and it

was because I used syntax "variable != false" but this isn't apparently right syntax even though the console did not give any errors to me. I fixed this by using syntax "!variable".

Other problem that I encountered was the menu button placement. The button was placed on the top left corner of the site even though it was supposed to be in the top right corner. I fixed this by using position "fixed" instead of "absolute" in the scss file for class "menu-btn".

After this part I also created a GitHub repo for this project and pushed all of my previous commits to the repository. This was pretty straight forward since I have used GIT and GitHub on my previous courses.

Part 4 – Menu overlay & responsiveness
17.11.2021

In this part I got to use the transform function again to create a menu where the two sides come from left and right to the screen when the menu button is pressed.

I also learned a little bit about responsiveness with scss. This is done by different mixins and the screen sizes are categorized for example by max-width or min-width. This way if the site notices that someone is accessing the page with a smartphone, it will know the sreensize and use the right mixin for it.

I also learned sass for-loop syntax and how to use it, since I had to animate the navigation texts so that every link does not come in at the same time.

I didn't have any major problems during this part.

Part 5 – Page with CSS Grid
20.11.2021

Part 5 was about making the colors responsive, depending on the background color so that the text color changes automatically if primary color for example changed black, the text would be white. After this I created the "about me" page, where I would display my previous jobs and such. This was done with CSS grids, which was also a completely new thing to me. I learned how to make the grid and add divs to use the grids. Grids allow me to make columns and rows of the page. This way I can display for example 3 different divs that all have the same space occupied on the page. This was done in the main.scss.

I also learned a way to paste lorem ipsum to fill the text fields just by typing "lorem10" for example. The number 10 means that it will be 10 sentences long. This will make me save some time while programming, since I don't have to copy and paste it from the web anymore. I had no major problems during this part.

Part 6 – Work and Contact Pages
23.11.2021

In this part I got to make the "my work" and "contact" pages to my webpage. The work page used grids like the previous pages too, but the contact page was done by flexbox. I did not know what flexbox was before going through this video, but now I know that it is like the grid and I can move content and place content to where I want with it. Flexbox felt a little bit easier to understand than grids, because flexbox does the screensize correction automatically, which with grid I had to make the media queries to make it adjust to the screensize. With flexbox, I had to use "justify content" in the scss code to space the contents evenly. This means that the divs or in this case the boxes are spaced evenly on the screen with the same space in-between of them.

I didn't have any major issues during this part and I got everything done with ease.

Part 7 – Website Deployment
24.11.2021

This was just about making a github repository and deploying the website using github pages. I did not know about this feature beforehand but this is really useful when making own websites to test them or share with friends or other people. The deploying process was easy and I had no problems during it.

After going through all of the lecture videos, I have learned a lot. I didn't know how to code scss or anything webpage related. Now I can say that I know the basics of scss and html. I also learned a little bit of javascript, which I will be studying more after this course, because I found that making websites is a lot of fun and I want to get better at it. I haven't decided what I will do for the final project yet, but I have couple of ideas.

Note of the tutorials:

I didn't add any pictures to the tutorial page(only the backgrounds) since I didn't have any good pictures of myself to put in there.

Project portion:

30.11.2021

I decided that I will be making a webpage for an imaginary construction company. It will showcase some of the imaginary buildings that they have made before and it will also have a page for contact information and somekind of responsive menu made with scss and javascript.

3.12.2021

I made the frontpage with flexbox and I had problems getting the frontpage modules to wrap but I figured it out and it was because I restricted their witdh and they couldn't wrap. Now the problem is that the website looks really different on my macbook where I do all of my coding and on my desktop PC. At the moment I don't know how to fix this but I hope that I can find a fix or something. I think this is because of screen resolutions.

I also added couple of pictures from pixabay, which are free to use. The links for these pictures are at the end of this document.

6.12.2021

Today I made the navigation for the site. I used the same style as in the tutorial videos, but I made it to take up only about half of the screen and the animation on the icon are different. I also fixed somewhat the problem I had before by making a div for the other picture on the homepage.

7.12.2021

I made the gallery site but I didn't have time to add anything to there yet and also made some changes to the site colors.

13.12.2021

I made the gallery with grid with multiple pictures. Currently I have an issue with the pictures being too large and not fitting to the screen very well.

22.02.2022

A lot of time has passed since the last entry but today I finally got to do the website more. I had to make compromises so that I could even get this project ended. I decided to only make two sites, homepage and gallery. Homepage uses flexbox and gallery uses grid. I haven't yet figured out why the page looks really bad on my desktop computer, but on my macbook it looks like how I wanted it to look. Since this was my first website I didn't know how to make almost anything but the basics at the start. At the end, I now know more of the basics and some css and sass that I didn't know before.

23.02.2022

I made some finishing touches to the website regarding gallery image sizes.

26.02.2022

I made the preview video and readme to the github. Submitted the project.

Links to the pictured used in this project:

https://pixabay.com/photos/house-garage-driveway-architecture-1867187/

https://pixabay.com/photos/mountains-lake-house-lake-house-1587287/

https://pixabay.com/photos/lake-cottage-jetty-dock-water-192990/

https://pixabay.com/photos/school-house-building-desert-6982073/

https://pixabay.com/photos/architect-people-plan-construction-3979490/

https://pixabay.com/photos/building-to-build-framework-1210677/