Lappeenrannan teknillinen yliopisto
LUT School of Engineering Sciences

Software Development Skills Front-End, Online course

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LEARNING DIARY, FRONT-END MODULE

22.6.2024

First day of starting the course. After reading about the general course information page on Moodle I seems the course structure is the same as in the Full-Stack Course that I have already completed previously. I chose the frontend module this time around specifically because I feel like in web developing, I currently lack the most in front end and I thought this would be a great course to improve this weaker side of mine. I already have some prior experiences using Git and the code editor Visual Studio Code from other courses. That's why I will be choosing the Visual Studio Code as my code editor for this course. I still checked out the intro to GIT to make sure I wasn't missing out on anything. Hopefully, by the end of the course, I will have more experience and knowledge on the front-end side of web development.

23.6.2023

I watched the first video on YouTube about the Responsive Portfolio Website Project. I didn't have to install anything since I already have installed NodeJS, Visual Studio Code, and Git for previous courses so that's a great start. I still managed to install a bunch of new quality-of-life addons/extensions like live server and prettier on Visual Studio Code, which look quite useful, and I wish I had discovered them earlier because of their handiness. The third extension Bracket Pair Colorizer is now apparently a part of Visual Studio Code and doesn't need to be installed separately. I also learned how to be more efficient in Visual Studio Code, for example, I learned a few shortcuts that I can use to remove tedious parts like starting a new index.html I can use '!' and press tab or enter to automatically create a template for an HTML page. Another shortcut I learned is that I can create new divs with

id using ‘#’ or ‘.’ and then type the id I wish the div to have. This saves a ton of time compared to adding the id in more traditional way. I also learned about npm and Sass and how they can be used for front-end development. I previously have never used Sass and its quite interesting compared to just using CSS and I’m glad I have the chance to learn it. Unfortunately, I ran into a big issue. When I tried to use npm install node-sass command like displayed in the tutorial it didn’t seem to work at first. After some research and reading the node-sass GitHub node version support policy (sass/node-sass: :rainbow: Node.js bindings to libsass (github.com)) I found out that the problem was with Ubuntu due to the node being registered to another package and read more about this issue and in the end, I found a solution by installing node using Ubuntu command (curl -fsSL https://deb.nodesource.com/setup_20.x | sudo -E bash - &&\
sudo apt-get install -y nodejs). Thankfully I got this resolved and I can now continue with the series.

25.6.2024

I have moved onto the second video of the series. In this video I learned about more about HTML and Sass. HTML part was quite simple and nothing new that I haven’t previously known. The Sass part was quite educational for me personally and I learned new stuff that I didn’t even know you could do in CSS. For example, nesting elements and using “:after”. Also, previously I hadn’t that much used images for front end, so this was also quite new for me. I also learned what “rem” meant which can be found in both Sass and CSS. I also learned how to import other Sass files to your main one to for example store variables. Other than that, I knew most of the other things showcased such as making animations and hover effects. I also got more efficient in both my HTML and Sass workflow. I’m becoming much quicker and more efficient in typing in both of these languages. Moving on to the third part of this series.

26.6.2024

I have finished the third part of the series. During the video I only ran into some minor issues like having wrong variable names. Something I learned more about and got more practice in this video is JavaScript “querySelector” and “querySelectorAll” functionalities. I already knew how they work beforehand but I usually don’t use these, and use select element by id. Another functionality that I used in this video is the “forEach” functionality. I know what it does, but I still usually prefer to traditional for-loop like I would in C for example. Something new to me that I don’t remember using before is the “classList” which allows to add and remove classes from element. Other than that, I’m getting quite used to Sass by now. Something new in Sass/CSS was the “:nth-child()” functionality. It allows to choose child of an element in order. It was interesting how this could be used to create the menu icon transition which looked smooth and professional. I also learned a new command in Visual Studio Code by selecting a word and pressing Ctrl and D you can change modify the selected word everywhere at once which could be useful if you for example need to change the name of a variable everywhere in the code so instead going on one by one

modifying the name you can just modify all of them at once thus speeding up the process by significant amount. Tomorrow I will be going onto the part four.

27.6.2024

Today, I will be getting into the fourth part of the Traversy Media series on building a website portfolio. After watching the video, I was introduced the concept of media query Sass mixins, which allow for more efficient and organized management of responsive design. This involved setting breakpoints for different screen sizes to ensure optimal display across various devices.
Then I learned about creating a menu overlay. This feature enhances user accessibility by providing a clean and intuitive navigation menu that appears as an overlay when triggered, typically by clicking a menu button or icon. Implementing this overlay involved using CSS for styling and JavaScript for functionality, ensuring a seamless user experience.
After I incorporated branding elements such as a logo and navigational links into the site's header. This not only enhances the site's aesthetic appeal but also improves usability by providing clear pathways for users to explore different sections of the portfolio.
By applying these techniques, I've not only expanded my knowledge of Sass/CSS but also enhanced the functionality and design of my website portfolio, making it more user-friendly and visually appealing. These updates reflect my commitment to creating a professional and accessible online presence.

28.6.2024

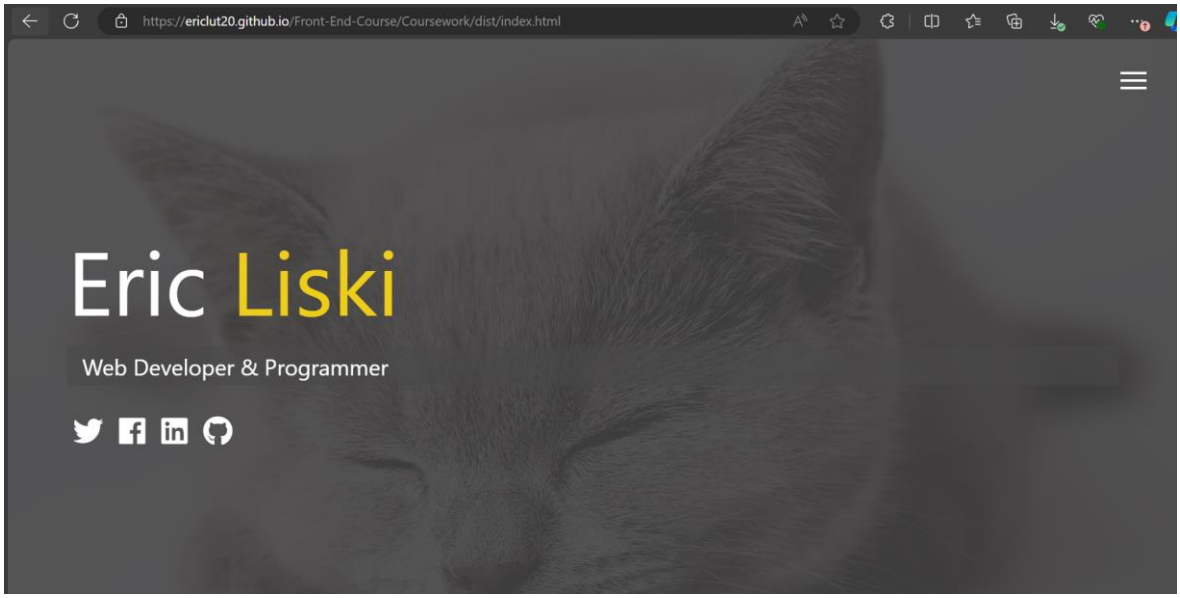
Today, I watched the fifth part of the course and learned several new concepts and techniques that will enhance my front-end development skills. I discovered as a part of the video that in Visual Studio Code you can type “Lorem” and then the number of words you want afterwards like for example “Lorem30” so that it will paste in this case the first 30 words of the Lorem ipsum placeholder text. I find this quite useful since often it is quite useful to write some placeholder text while web developing especially front-end to see how each element interacts with each other and with larger amounts of text.
Additionally, I learned how to create and use functions in Sass. This is quite useful feature since it enables me to effectively reuse code more efficiently and avoid repeating myself to make cleaner and clearer code. I also learned that in Sass you can move the “@import” rule to the end of the code so that it loads after all the other CSS/Sass. This ensures that the imported styles are applied correctly and avoids any unexpected overrides.
I learned about Footers in HTML as well as practiced making them. Footers are critical component of web pages since they can provide additional navigation and additional information at the bottom of the page like copyright. As a part of learning about footer I also learned about “calc()” function which allows to perform calculations directly in CSS/Sass which allows to create more dynamic and responsive layouts like in this case sticking a footer to the end of the page regardless of the size of the page.
And finally, I also learned about Sass/CSS Grid Layout and specifically focused on grid areas. This feature was by far the most useful one for front-end development. This feature allows to divide web page into areas of grids and then place items within these areas. This helps immensely in creating layout design more intuitive and manageable. Tomorrow I will be moving on to the sixth part of the course.

29.6.2024

Today I will be watching the sixth part of the course which is the 2nd last part of the course. After watching the sixth part of the course I learned more about CSS/Sass once again. First, I learned about the "@extend" in Sass, which allows one class to inherit the styles of another. This is a great way to share styles between different classes and reduce code repetition for example. This allows me to write more efficient and maintainable code, ensuring that styles are consistently applied across different elements.
Another thing I explored in this video is the usage of Font Awesome icons in my projects. I have previously used Awesome Font already but it quite nice revisitation of the topic.
Also, I learned the importance of setting up proper grid area templates for various of different screen sizes, allowing for better user experience on any device. Tomorrow I will be finishing the course series about Web Portfolio.

30.6.2024

Today I will be finishing up the course series about web portfolio. I will be now watching the seventh part which is also the last part of the series. From my understanding this video is about uploading your website to the internet which is quite exciting since I haven't ever uploaded a website to the internet before.
After watching the video, I can say that I firstly learned some essential skills of using Git through the terminal. I usually just use the built in Git UI in Visual Studio Code but today I got to learn and experiment using Git through the terminal in Visual Studio Code. Git is definitely quite a powerful tool in any software development, allowing to track the changes and different versions of the projects as well as to easily collaborate with others. Some of the Git terminal commands I learned are "git init", "git add", "git commit", "git push", and "git pull".
I also most importantly learned how to upload a website to the internet which was the topic of the video today. I uploaded my website using GitHub Pages which is a GitHub service that allows to host website directly through GitHub repository which is really convenient and effective way to publish my projects online to show others for example. I had some issues with the uploading of the website. For some reason it wouldn't work for me at first. After some googling and looking around the GitHub repository I found that there is "GitHub Pages" tab in the settings and after setting main branch for the build and deployment from there it finally let me publish my website when using "npm run deploy" like displayed in the video by Brad Traversy.
I also learned about different website hosting websites like Namecheap and InMotion hosting for example. Namecheap for example allows for domain registration which allows to use custom domain for your website and web hosting services which allows you to host your website to the internet.



(Figure 1: Website working on GitHub Pages)

1.7.2024

Today marks the beginning of my project, building upon the coursework from the Traversy Media Website Portfolio YouTube course. Following the course guidelines, I started by refining the example code, making minor adjustments to colors and tweaking the layout for better coherence. Personalizing the text content was another crucial step, replacing generic Lorem Ipsum placeholders with meaningful and relevant information. I also changed social media icons little bit by changing Facebook to YouTube and I also added links to the buttons, so they take it the user to my actual social media accounts instead of doing nothing.

To expand my skills further and bring life to my project, I immersed myself in Traversy Media's tutorial on creating Parallax Websites using HTML and CSS. This tutorial provided a deep dive into the intricacies of parallax design, demonstrating how to achieve dynamic visual effects that enhance user engagement and aesthetics. Inspired by these insights, I integrated parallax scrolling into my project, utilizing techniques learned to create a more interactive and visually compelling web experience. I also learned about Pexels from the video which offers is a website that offers free stock photos and videos you can use royalty free.

2.7.2024

Today I will continue my project and hopefully get it finished. After implementing parallax scrolling and refining the design of my project yesterday, today I proceeded to enhance the functionality by integrating my GitHub projects into the portfolio. Initially, I had included images for each project on the work.html page, but I realized that plain text descriptions would be more concise and effective in conveying information t visitors. This decision stemmed from the belief that detailed textual descriptions provide a clearer understanding

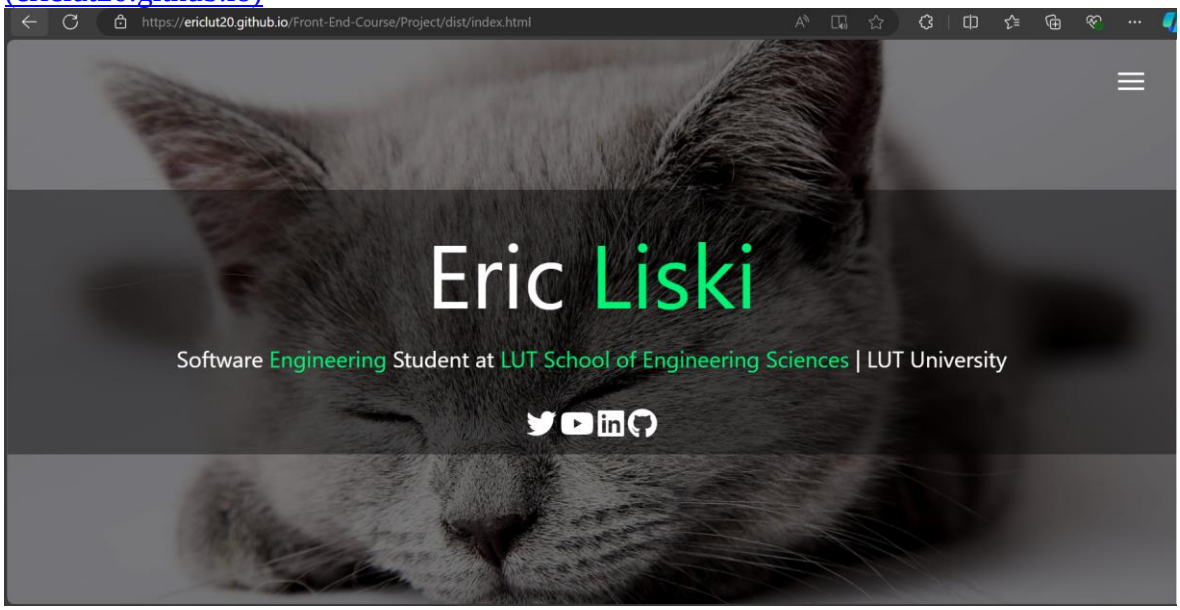
of each project's objectives and accomplishments without the unnecessary clutter of images.

Each project is now listed with a name and a brief description, linking directly to its respective GitHub repository. This approach not only streamlines the user experience but also underscores the technical aspects and achievements of each project more effectively. By linking directly to GitHub, visitors can explore the codebase, review documentation, and understand the project's scope and impact in a more comprehensive manner. This integration ensures that my portfolio not only showcases visual design skills but also highlights my proficiency in project development and management.

In refining my about.html page, I focused on enhancing user experience by improving the clarity and functionality of links and buttons. Initially, the links and buttons appeared cluttered and lacked user-friendly design elements. The buttons were hard to hover sometimes since they changed sizes when they were being hovered which led to poor user experience when trying to click on these buttons. I fixed this by ensuring that the buttons would stay the same size and also changed their appearance a bit by making them rounder. I also made it so each link to my email, GitHub, and LinkedIn profiles was clearly labeled and easily accessible. This included replacing generic labels like "Address," "Phone," and "Email" with specific labels such as "Email," "GitHub," and "LinkedIn."

By implementing these changes, the usability and navigation of the about.html page were significantly improved. Visitors can now quickly identify and interact with the links that are most relevant to them, whether they want to connect via email or explore my professional profiles on GitHub and LinkedIn. This adjustment not only enhances the overall aesthetic of the page but also ensures a smoother and more intuitive browsing experience for anyone visiting my portfolio.

The website also works on GitHub Pages. Link: [Welcome To My Portfolio (ericlut20.github.io)]



(Figure 2: My Website Portfolio Project working on GitHub)