Lappeenrannan teknillinen yliopisto

School of Business and Management

Sofware Development Skills

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LEARNING DIARY, **Full-Stack 2024-25** MODULE

**LEARNING DIARY**

27.11.2024  
Checked out the main page, required environment, tools and criteria to pass the course. Course seems to align well with some of the foundations that I already know and allows me to explore more at my own pace and possibly build my own interesting project at the end.

17.12.2024  
Started following along to the first NodeJS video. NodeJS is somewhat familiar for me, but following along and messing around with the code, especially in the http server creation without express was good foundational knowledge. Really helps you learn and appreciate these libraries and frameworks more and how they really work and save you time.

18.12.2024

Watched the MongoDB video. I have personally already interacted with MongoDB so there wasn’t that much new information, except for the server side interaction/setup. But since I’ve used and we will use it as a service locally, I knew the basics at least. I am doing this on a different computer so took some time to install it again, downloaded MongoDB Compass as well to make viewing and interacting with it easier.

19.12.2024

Following along the Express Crash course video. Learned some new valuable information about the more modern version of Node and using Express. I’ve used some external packages for stuff like auto-listening for changes in the file and to get the .env file recognized, but with modern versions it seems much of it is built in, so there is no need to start hassling with dependencies in many cases. Learning about how to properly manage and clean up your file and folder structures helps me keep working on bigger projects, without getting bogged down with unmanageable, giant files. Having at least one example of how to do it in this context is great.

20.12.2024

Today, I’ll be diving into the React crash course. I’ve yet to interact with React myself, but I’ve heard about it constantly and been meaning to experiment with it myself, so this is a great place to start. The course page linked to older, 3 years ago made video, but the same channel had a newer React Crash course video, twice as long but seemingly quite similar version, so I decided to watch it just to snag the latest information package. There was a small problem in the initialization setup, apparently I had just downloaded a new esbuild version and had to revert back to a older version to get everything to work.

The video helped to give a great overview of React and its usage. I specifically like the way to make everything into a much neater, individual component, which helps to clean up a lot of the mess that you would be dealing with in regular JS/HTML, goes along with my own style of programming as well.

21.12.2024

Today I’ll start working on the actual project, the MERN stack. My idea is to build a template, online store demo project. You will be able to browse all the products in the database, view their details and “buy” them. I’ll start with making the backend, and the initial CRUD functionality, testing with Postman to make sure my backend is working well enough.

22.12.2024

Got finished today with the backend and the initial CRUD functionality, along with JWT token authorization, to protect certain backend routes from being used without proper authorization. The JWT authorization took a little extra work since I was not that familiar with it.

23.12.2024

Just initialized React with Vite today and made sure that the frontend part was working with the provided template.

27.12.2024

Today, I got to building the initial Home Page along with the Products and individual Product Page. The Home Page will show the latest items added to the database, while the Products Page will show all the items. I plan on adding additional filtering and sorting options in the future. Also, I will have a Product page, that will show the individual item, that the user clicked View Detail on. Figuring out the best practices with React is a little bit of a challenge, I really like the component style building, but being so new to this it definitely is a bit hard to “plan ahead”, so some rework and additional work in making things into their own individual and modular components is needed.

28.12.2024

Today, added the Shopping Cart, to keep track what the user has added to their cart. Also, added filtering options, so the user and filter by all the unique categories that exist in the database. Also, sorting options will be sorting by price. Made some additional reworks and code cleanup, like making a central utility file for the API call functions. Also, made the initial version of the Profile Page, utilizing existing backend API functionality. The frontend looks pretty good and near final to me, I still want to add the ability to add images when creating OR editing products.

29.12.2024

For today, I added the ability to add images. I added multer middleware to the backend to be able to handle file uploading. This took some time to figure out as well, but managed to get it working quite nicely. For the frontend, I added a preview image for the product cards, that will show just the first image. Then, for the Detailed Cards, I added a slidescroller to hold all the images, and a way to click the image to enlarge it. I am personally very happy with how it looks and works.