

Lappeenranta teknillinen yliopisto  
School of Business and Management

Software Development Skills

**Olli Rönkkö, 001282898**

**LEARNING DIARY, FULL-STACK 2022-23 MODULE**

## LEARNING DIARY

22.01.2023

I went through all the general course information and got an understanding about what is needed to pass the course. The main task is to create a project that combines MongoDB, Express, Node.js and Angular in a MEAN-stack project. Thus, this course provides very useful information for the future job positions in development field.

I also set up my Git account for the course and created a bitbucket account. I will use Visual Studio Code as a code editor since I like using it the most. I have used Git to some degree, but it still needs practice. Started watching the longer and newer version of Node.js Crash Course tutorial and coded coursework according to that video. At the end, I also committed the progress that I made, and pushed it to Git without any issues.

24.01.2023

Today I completed the rest of the Node.js Crash Course tutorial video (1.5 hours total) and learned a lot about server's communication to the client and how to implement it inside the code. I did not have much experience using *.html* files or *.css* files and implementing those was very interesting. I also think that when implementing my own server, I probably will have issues using those arrow functions in JavaScript since I am not experienced user in that language, however, I want to be.

Also, I committed and pushed every task that I implemented to my Git account under coursework folder.

25.01.2023

I completed the MongoDB module of tutorials today. This was actually very new topic for me, but I was able to setup my Mongo database as a service without any issues. However, I installed a newer version of Mongo (6.0.4) which was the default, and this gave me some difficulties since the instructions were little bit different for some commands. For example, updating collections was slightly different in this newer version than the older one and I struggled a little at first. But after all, I was able to finish this section in the end. This time I had nothing to push to Git since all tasks were completed inside Terminal or some text editor (Sublime Text), or GUI application Compass.

26.01.2023

Today I started and finished the ExpressJS module. Almost all things that were learned in this module were completely new to me. For example, I learned about middleware layer and how to parse message's body with it (e.g., `app.use(express.json());`). Also, handlebars were presented to me for the first time, and I would like to know more about those regarding how to apply them into use.

I think that this module gave me more information about using different routes and http addresses than the nodeJS module since this was a lot simpler way to create those paths.

30.01.2023

I started working with the Angular module of the course. This start-up included: setting up the environment, watching some tutorial video from YouTube (this was easier for me to get to know more about Angular), and generating the project folder for the task. I think that this is the most difficult module of the course since there was so much new information to study.

31.01.2023

Today I really dived into the tutorial's tasks, and I was right the last time that this module was indeed the most difficult one. I learned so much about Angular in general and started to get somewhat familiar with the different components and their interaction between different files. I am still far from understanding every single detail about what's going on, but I am trying my best to catch up.

I also committed my progress that I have made this far in the tutorial.

02.02.2023

Finally, I completed the tutorial of 'Tour Of Heroes', and I started to understand more about connecting different files (e.g., .html and .ts) in to use. Many times I had to stop for a second to actually understand why something is happening, and what command triggers another one from different place. In my opinion, the hardest aspect was understanding how the 'HeroService' works, but I think that I managed quite well to follow the code in general. I committed and pushed my version of the 'Tour Of Heroes' to Git, but I was not sure that what files should I ignore, so I pushed all the default ones.

06.02.2023

Today I started with the MEAN-stack module's tutorial videos. I learned to use and initialize MongoDB database inside a code and not only manually from shell.

I completed exercises all the way to video number 4 and did not encounter any major issues.

14.02.2023

Issues awaited me in the video number 5, and I was not able to install or run the needed Angular CLI version since the course instructions told me to use NodeJS version 12. This NodeJS version caused me very much problems:

- *Node.js version v12.22.12 detected. The Angular CLI requires a minimum Node.js version of either v14.20, v16.13 or v18.10. Please update your Node.js version or visit <https://nodejs.org/> for additional instructions.*

This led me to changing the NodeJS version to 18.14.1, which meant that I had to work my way back to video 4's tasks. Course's instructions to `app.use(session())` did not work with this version and that is why I needed to install `express-session` and find a way to use it from the internet.

Finally I got to finish video number 4 and the messages sent from Postman worked as in the video tutorial.

18.02.2023

Today I finished video number 5 with lots of struggle with the newer NodeJS version. Lots of my time went on finding similar problems from the internet and trying to find the most applicable methods to solve my issues.

I think that I have used my past days on this course without actually moving forward but only trying to find other ways to handle things. But I still managed today to set up those Angular routes for front-end.

21.02.2023

Now I completed the MEAN-stack tutorial's videos except the deployment to Heroku part since it is not free and thus I am not going to deploy this course project there. The main issues for the last videos were with `html` files' stylesheets since the ones in tutorial were not

available anymore. Other issues were with handling user-object's data between HTTP requests and I spent a quite a lot of time on accessing user's attributes after trying to get profile information. I had an unauthorized error occurring a long time but I finally got the bottom of it and made it work.

Finally I pushed the whole MEAN-stack application to my remote Git repository and can move on to the course project next time.