

Lappeenrannan teknillinen yliopisto  
School of Business and Management

Software Development Skills

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**LEARNING DIARY, CT70A9140 Software Development Skills: Full-  
Stack MODULE**

## LEARNING DIARY

28.9.2025

Today I checked out the course material. I am already somewhat familiar with full stack development, so I chose my environment and tools based on what I am used to using. This means VSCode and GitHub. As already mentioned I am somewhat familiar with full-stack development with the mern-stack and one of my apps can be seen here <https://github.com/RoniSeppala/Advanced-Web-Applications-2024-Course-Project> and it is also for the time being deployed here <https://awa.roniseppala.com/> . However I am mid migration with my server, so the page is currently running in dev mode and isn't correctly set up for deployment regarding ports, though this does not affect the usability of it.

As I am already somewhat familiar with some ways of developing mern-stack apps, I will try to focus on refreshing my memory during the videos and then try some new things during the project. Today I watched the express video and did some rudimentary express coding. The memory on how to use express came back quickly and I didn't have any major issues.

29.9.2025

Today I decided to watch the MongoDB video. As with express, the memory on how to use MongoDB came back quickly and I set up a small demo which adds and removes a few entries from a database.

30.9.2025

Today I checked out the Node video. This had some new things I hadn't looked into too much. While the differences in setup with esm and cjs were familiar to me, I hadn't checked them out too closely, so I set up small demos for each. I also hadn't served any static pages with just node before, so I set up two small pages. Also to refresh my memory I made a small api.

1.10.2025

Today I checked out the react video. I had used react more recently than other parts of the mern-stack, as I took a small part in a react native app a few months back. This came very naturally, and I made a small page with a task board.

2.10.2025

Today I began working on the backend of the final project. As a new thing for me, this time I decided to change my structure to use controllers for my API routes. This required a bit of research but worked out very naturally.

4.10

Today I finished the backend. The back end didn't have much work left to do, but I tested and fixed all the bugs I found. After confirming that the server, API and database work as intended, I also initialized the client and made a few components.

6.10.

Today I did most of the frontend. Here I used reduxjs toolkit and axios for the first time. They required a bit of research and configuration, but the file structure and setup were much cleaner compared to what I did before. I also made all the components and added water.css to the project for a quick and clean visual improvement.

7.10

Today was my last day of the course. I cleaned up all the code, fixed a few bugs, checked everything works and set up easy start scripts to the root of the project for easy testing. I also copied my GitHub repository to bitbucket as requested by the course.