

Lappeenranta teknillinen yliopisto
School of Business and Management

Software Development Skills

Konsta Jalkanen, 000489689

LEARNING DIARY, NODE JS MODULE

14.5.2025

I coded along with the video and learnt Node.js fundamentals including modules such as path, url, fs, events. Additionally, I created a HTTP server from scratch without Express.

These can be found in “codealong_moduletask” folder in repository.

LEARNING DIARY, MONGO DB MODULE

15.5.2025

I learnt about MongoDB fundamentals, MongoDB atlas, Mongosh and the syntax to create, read, update and delete data.

These can be found in “codealong_moduletask” folder in repository.

LEARNING DIARY, EXPRESSJS MODULE

15.5.2025

I watched the expressjs video and learnt the basic concepts and usage of Express.js framework for Node.js.

These can be found in “codealong_moduletask” folder in repository.

LEARNING DIARY, REACT MODULE

15.5.2025

I watched the video and made some similar code. I learnt about react framework fundamentals, Components, State and Hooks. Events, JSON Server and Routing
These can be found in “codealong_moduletask” folder in repository.

LEARNING DIARY, MERN STACK MODULE

23.3.2025

Watched first MERN-stack video.

16.05.2025

Rewatched first video and watched 2nd, 3rd, and 4th video. I learned about mern stack and got reminded of previous stuff

LEARNING DIARY

23.3.2025

Watched first MERN-stack video due to other parts were already familiar from Advanced Web Programming course. As the video didn't seem to explain what a MERN-stack is so I googled it. I learned that it simply means making a website with MongoDB, Express, React, and Node.js.

Made a server with express and typescript. I chose typescript for easier debugging and for that I have used and liked it in Advanced web programming course. The server is similar to the server made in advanced web programming.

24.3.2025

Actually made changes to the backend as controllers like in the MERN stack video as it seemed a good idea to make code more cleaner and more readable.

Made some react front end stuff. Added home page with login and map adding functionalities.

25.3.2025

Added a circular gallery to the main menu to show the maps in the database. Then deleted it and made a own as the code has a lot of bloat and things I do not understand thus changing it seemed more hard than making own. Reasons I didn't use it was that there was annoying animation over every card, the cards themselves should have been clickable, and scrolling affected the gallery but the gallery didn't have scroll stop thus it feels awful to use.

26.3.2025

I found multi-carousel module that handles the show bar fantastically while giving me options to add anything inside. Then I made a page that has the Id of map in url to look that specific map and the maps are openable from the carousel module from the main menu page. Also fixed some type from back-end like writing type string as String (it's a wrapper object).

27.3.2025

I added a dock from a module to the map showing page.

28.3.2025

I wrote the best code I ever have. Made simple drag feature to move on the map in show map page. It was so good I made it to a hook for later usage. Then made a zoom function but it is still janky. It is supposed to keep the image in same place according to the position of mouse but am I bad at math to figure out the formula to calculate the difference needed to move the picture just right.

29.3.2025

Some code refining but didn't succeed in making proper zoom

30.3.2025

Prevented the dragging of an image causing download or opening a new tab when dragged outside of the website. Found npm package called <https://www.npmjs.com/package/react-zoom-pan-pinch?activeTab=code>. It has all the image movement I need, it didn't have proper demo with the source code, so with some digging I found source code and got it to be just right. ShowMap.tsx is now unused.

31.3.2025

Made some progress in addable markers in for marking points of interest on the maps.

9.4.2025

I made proper backend (adding and finding) to the markers and made it possible to add some simple test markers.

14.5.2025

After a while of studying other stuff, I came back to this project. I started working on the modules for completing this course.

I coded along with the video and learnt Node.js fundamentals including modules such as path, url, fs, events. Additionally, I created a HTTP server from scratch without Express.

These can be found in “codealong_modulerepo” folder in repository.

15.5.2025

I watched the MongoDB Crash Course 2022 video and coded and tested along.

I learnt about MongoDB fundamentals, MongoDB atlas, Mongosh and the syntax to create, read, update and delete data.

I watched the video and made some similar code. I learnt about react framework fundamentals, Components, State and Hooks. Events, JSON Server and Routing

I watched the expressjs video and learnt the basic concepts and usage of Express.js framework for Node.js

16.5.2025

Rewatched first video and watched 2nd, 3rd, and 4th video. I learned about mern stack and got reminded of previous stuff.

I coded only the back end as the react part was similar to react module.

18.5.2025

Recorded a video to showcase my project. Probably fix some things yet.

The project is still work in progress.

Changes will be made but I will not update this document as this is only for the course.

AI declaration:

Some css is made by ChatGPT 4.0 or Deepseek. It is marked as such in those files. Otherwise no other AIs were used as 18-05-2025.

Acknowledgement:

Similarities might be seen with this project and Advanced web programming course and the module videos as everything is mainly learned from Advanced web programming course / those modules in this course.