Lappeenrannan teknillinen yliopisto

School of Business and Management

Sofware Development Skills

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LEARNING DIARY, FULL STACK 2021 MODULE

**LEARNING DIARY**

04.05.2021  
  
 I chose this course because I really want to learn both frontend and backend. I have studied full stack development by myself already using MERN stack, but I was thinking that this course is going to give me something new. And for start when I was checking course materials, I was very happy to see that in this course we are going to use Angular for frontend. I have been learning and using React for frontend, se I’m more than happy to try and learn Angular also.

I started course by checking all the course material and setup my development environment. I already have Git installed and I have used it before. I also chose visual studio code for my editor because I have been using that before. I also have node and NPM installed on my computer and I am planning to use Mongo database from cloud provider in this course.

Also I planned folder structure for my git repository. Also today started to watch node.js crash course video.

5.5.2021

I continued to watch Node.js crash course video and did coding along. Because I’ve been using Node before there was not so much new stuff to learn, but I think it was very good to repeat basics of Node. I think I learned to better use of Node’s core/base modules. Next I started to watch express crash course video. I’ve also used express before for building API’s so making routes, middleware’s etc. is nothing new for me. But what is new for me is the use of template engine and express handlebars to build views. I haven’t build MVC type applications with Node so I was very happy to learn how to use template engine and render pages using it.

6.5.2021

Today I started checking out Angular from their documentation. I build the tutorial application “Tour of Heroes”. Because Angular is totally new for me and this was the first time, I tried it, there was a lot of new things what I learned. It feels little bit confusing right now after that Angulars own tutorial, but I was thinking to start next that tutorial series about MEAN stack and code along and I think I’m going to get answers to my questions about Angular. Right now, Angular feels little bit more complex than React but at the same time I can feel that you can code very readable and understandable code with Angular. And I like that Angular uses TypeScript se I can also learn that at the same time.

7.5.2021

Today I started to watch MEAN stack video series and I coded along. It started with building of backend with Node.js. I’ve coded couple of API’s with Node so there was not so much new things, but I made couple things differently than in videos because these videos are quite old and I thought I could make them little bit better. One thing what new to me was authentication made with passport. I have checked it little bit, but never used it so I was very happy to implement it in this project and learn how to use it.

10.5.2021

Today I watched rest of MEAN stack course videos. I knew that the course material is old and there is some things what is known that they are not working, but I made myself a challenge to try and get everything to work without downgrading either Angular or dependencies. And I managed to build that application what is in this video series and its working. I think because I tried to get everything working and used time to find solutions to things that aren’t working anymore like they worked on those videos 4 years ago, did teach me a lot! I think right now I know how to make basic MEAN stack application. Now I just need to try and figure out some good project what I’m going to build. I definitely going to try and implement something new what wasn’t in these courses so I get to learn even more about MEAN stack.

11.5.2021

I started on planning and coding my MEAN stack project. My plan is to make a to do application. Users can register and use CRUD operations on those to do’s. Because Angular is using TypeScript by default I thought that I’m also going to try TypeScript on my back end so I can learn more about using it. I think this is a goof project because I’m going to implement basic authentication and CRUD operations on this application.

Coding started from backend REST API with Node.js. I had little bit problems on the way because of TypeScript types. I used quite a lot of time to figure out all the type errors, but I think by now I got hang of it. And for now, I really like using TypeScript. It gives more safety to code of course it’s little bit more code, but I write more good code on start than trying later to figure out all errors because of bad code and type errors from start.

12.5.2021

Today I got my backend to that point that I started building frontend with Angular. When I was initializing Angular, some of its dependencies where updated so it broke Angular installation, but I managed to fix it by searching answer from stackoverflow.

In frontend first thing was to make user registering and login components also made service for authentication so now registering and login works. I wanted to make own notification component and use it for my error and other messages for the user, but I didn’t manage to get it working. Now I implemented it so its coded same way in both of register and login component. But I’m going to figure out how I can refactor it to own component so I can use it anywhere I want.

14.5.2021

Today I was planning/trying how dashboard page is going to look like when user has logged in to application. I was playing around with different styles with Bootstrap. I got dashboard looking like I wanted and next week I’m going to start code some functionality to dashboard page.

17.5.2021

Day started with little bit of refactor of dashboard page. I made it look simpler and added some nice icons to edit, delete and create buttons. Next thing what I started was implementing CRUD operations to application. First, I coded create for new to do. It went quite smoothly. After that was time for delete functionality, that one also went smoothly. But with edit operation I had some small problems, and I didn’t first know how I was going to make that it would work how I wanted. Now I have been starting to see differences with angular and react. These things would have been easy to do with react, but I think because I have been using it so much before. But it was fun to struggle little bit with these operations with Angular. But end of the day I think I got these crud operations done quite good. Of course, there is still some room of improvement and refactor. Biggest points to refactor is making edit modal window separate component and also doing separate component for push notifications.

Other thing what I coded was more auth service and auth guard so that users that aren’t authenticated cannot go to URL where they are not supposed to.

19.5.2021

Today I tackled the notification problem. I found some good examples how to get notification component done from searching Google. First, I was thinking to build just separate component for notifications and then showing it on pages where I want to show notifications. But end of the date after researching I build own module for notifications. I learned a lot about modules on the same time when I was building this notification module. It works good and It’s easy to use on pages where I want it. I also fixed some backend code. When a to do where deleted from user it still stayed inside User models to do array. So I fixed it that it would also be deleted from User document when the to do is deleted from todo document.

20.5.2021

Today I just started writing ReadME to the repository.

21.5.2021

Today I did write dockerfile for the project so it’s also easy to build and run with docker. Also tested to build the project and run in production build. I came across some problems with CSP (content security policy), because I’ve been using bootstrap through cdn so I’ve got some inline script tags in my index.html when I build it. I tried my best to set the rules so I can still use bootstrap without downloading I package to project. But I couldn’t get it to work. But I think I learned a lot about CSP and I understand now that it’s better to try always have js and css inside own file and now use any inline scripts. So how I then fixed it? I just downloaded the bootstrap package from npm and now I’m not using any inline scripts anymore.

Also today I checked code one more time and took out any unnecessary console.logs etc. Also added installation introduction to the projects README.

Now what I still need to do is take the video of my project running and double checking that everything works as planned.