LAB

Anytime-course: Software Development Skills: Full-Stack 2021-22

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LEARNING DIARY, Software Development Skills: Full-Stack 2021-22

**LEARNING DIARY**

29.6.2022  
**Intro to version control**

I checked the intro on version control. I was pretty familiar with Version control to begin with, but the video did clear up some things for me and it was easier to create a repository with this video. I did not install SourceTree because I felt like it was not needed for this project. I used Github on this project because it's most familiar for me.

**Node.js crash course**

Then I proceeded to watching Node.js Crash Course. I finished this video during the same day. I was somewhat familiar with node.js to begin with, but I felt like the person explained things in a very simple manner and things were very easy to understand. I felt like the code examples that we did to reference folder were very useful. Especially examples done in fs\_demo file (writing file, reading file, appending file and renaming file) and event\_demo file are useful, and I understand the logic better now.

I feel like I also understood well how different file formats can be handled in index.js file, I don't remember seeing this kind of node.js example before.

I didn't have any major problems with code, just a couple of typos that were easy to solve.

30.6.2022

**MongoDB**

I haven’t used MongoDB before, so I started everything with installing the required MongoDB software. I didn’t have any problems with installing MongoDB.

I did notice that MongoDB compass software has updated a bit after the video was made, but I still managed to get everything working in MongoDB Compass.

The directions on the video were clear and I was able to do everything correctly that was on the video (and everything that I did in Shell was also visible in MongoDB Compass).

In the end of the video I also noticed that the interface on cloud,mongodb.com was also a bit different, I still managed to follow the video and get everything done.

I didn’t have any issues with connecting to my database in cloud.mongodb.com through Shell.

**ExpressJS**

I’ve had a little bit of experience with expressJS before. Directions on the video were easy to follow and I didn’t really have problems with getting the code to work during the first hour of the video. The only couple of errors I had were typos that I had in the code and they were easy to find.

I have previous experience with API’s (GET, POST etc requests), so that part of the video was also very clear. I’ve also used Postman in other courses so there was nothing new about Postman.

The only problems I had with the code was in the last 20 minutes of the video. I’ve never used handlebars before, and I had some problems with the code. The problem was in this part of the code:

app.engine('handlebars', exphbs({defaultLayout: 'main'}));

I did some googling and found out that the problem can be solved by changing the code like this:

app.engine('handlebars', exphbs.engine({defaultLayout: 'main'}));

After I changed this part of the code, everything started working normally. I believe this problem was because the versions have updated since the video was made in 2019.

4.7.2022

**Angular**

I’ve had zero experience with angular before. Since I’ve never used it I had to start with installing Angular (npm install -g @angular/cli).

In general Tour of Heroes tutorial was easy to follow and build. I liked that there was the ‘What you’ll build’ section in the beginning because it was a lot easier to understand what the program should look like.

I used Visual Studio Code with this project (like all the other projects also) and it was easy to use Angular commands in Visual studio code shell.

Though I normally like videos more, because they are easier to follow, I feel like the tutorial did a good job explaining things. I also liked that I had to some thinking with the code (not 100% was just copy and paste, you did sometimes have to think a little bit about where the code goes). I also like that there was ‘Final code review’ in the end of each section.

I had no issues with running the code.

For me the most important part was learning about components and services (how components shouldn’t fetch or save data directly and how services are excellent way of sharing data/information between classes that don’t know each other).

I also feel that Adding navigation and getting data from a server were useful things to learn. Even though I hoped this tutorial would have used a real database, I still think it was useful to learn about In-memory Web API and it was a helpful way of getting more familiar with connecting to a database.

5.7.2022

**MEAN Stack**

Video 2

It was easy to do the express setup and add the routes. Connecting to a database (MongoDB) seemed simple in this video. I had no problems with code or shell commands.

Video 3

I had no issues with the code (User model ad registration) in this video and Postman was already familiar to me.

video 4:

Things done in video 4 were the most difficult for me until this point. The code used in the video did not run correctly on my laptop and I had several errors.

The first one was this:

Error: Login sessions require session support. Did you forget to use `express-session` middleware?

I managed to solve this by doing the following:

I had to install express-session.

Then I had to add this to my code:

const session = require('express-session');

app.use(session({ secret: 'yoursecret',

resave: true,

saveUninitialized: true

}));

After this there was another error while trying to run my code:

Error: Expected "payload" to be a plain object.

I solved it by changing my code into this:

const token = jwt.sign({data: user}, config.secret, {

expiresIn: 604800

});

Finally, I had this error:

TypeError: Cannot read properties of undefined (reading '\_id')

Which I managed to solve with this change in my code:

User.getUserById(jwt\_payload.data.\_id, (err, user) =>

Video 5

I had the same issues with installing Angular, but I managed to solve them with the directions in Moodle. I had to uninstall Node 16 version and reinstall Node 12.

I also had to upgrade my typescript version to 3.5.1 in order to get Angular running.

Other than that, I didn’t have any issues.

Also, the menu/links didn’t appear as they should at first. It was related to Bootswatch (css). I had to use a different versio in index.html in order to get the links to show correctly:

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css" integrity="sha384-BVYiiSIFeK1dGmJRAkycuHAHRg32OmUcww7on3RYdg4Va+PmSTsz/K68vbdEjh4u" crossorigin="anonymous"> <base href="/">

6.7.2022

**MEAN Stack**

Video 6, 7 and 8

I had the same problem with flash messages but solved it with directions in the Moodle. I’ve never used Flash messages so that was something new for me to learn.

I think flash messages are really useful in an application and they are also easy to set up.

There also wasn’t any handling of error when password is missing when trying to login. This caused my backend to crash, and I didn’t realize it at fist (that the backend crashed). I was wondering why login and registration stopped working (I had two shells open, so I didn’t notice the crash straight away). I finally managed to solve this when I noticed in the comments that someone said their backend crashed because there wasn’t any error handling on an empty password.

7.7.2022

Video 9

In this video the most important thing I learned was using angular2-jwt. I had no issues with installing agular2-jwt or the code. I think it’s very easy and fast way to show or not show links.

Video 10

In this video in learned how to upload the code to Heroku. I had no issues with installing Heroku CLI and uploading the code to Heroku.

The only issue I had was MLab wasn’t available anymore, so I used <https://cloud.mongodb.com/> instead. I followed the directions in the video and even though MongoDB Cloud was a bit different I managed to get everything working.

My app can be found here: <https://sleepy-cove-04377.herokuapp.com/>

Conclusion (Meanstack)

Overall, I feel like I enjoyed most learning how to use Express, Nodejs, angular and MongoDB together. I also like learning how to do registration and login/logout events. I feel like they are very useful in the future when working.

I feel like after the Tutorial I could create a simple app or webpage using Meanstack.

I tried to type code myself while watching the video and not copy pasting it from the source code. I feel like this is way better way of learning to code. I only used the source code couple of times when I was sure I had a typo somewhere and I just couldn’t locate it.

One thing that kept bothering me in this tutorial was that some of the tools and code was outdated (as mentioned also in the directions). It’s unfortunate that there isn’t a newer version of this tutorial.