

Lappeenrannan teknillinen yliopisto
School of Engineering Science

Software Development Skills

Teemu Ketonen, 545953

LEARNING DIARY, BACK-END MODULE

12.5.2021

I read through the course information to gain an overall understanding of the course and its aims. After this I moved on to the environment setup page. Git is already familiar to me, so no further learning was needed. I already had my VSCode environment set up from previous projects, which means I am ready to move on to the actual course exercises.

15.5.2021

The first task on "REST Intro" was pretty much a recap of what I already know about APIs. The video showed what APIs are and how they are used. Personally, I have used multiple APIs already when developing software e.g., YouTube, Google Maps, Facebook. So they are not a strange subject for me. Postman was also showed in the video, which I also like to use to make and model my API requests for services.

I found the second exercise video about Node.js really well executed. I have prior experience from this technology but it has been 3-4 years since that. So this video was a great refreshment for my memory. The code examples in the video were really helpful as well since I had forgotten most of the functions already. I had to stop the video at 50 minute mark to do some other stuff but I will continue tomorrow, hopefully.

16.5.2021

I continued the Node.js video and I must say the later part of the video was quite interesting. I have always done my Node.js servers using a framework of some kind, so doing everything from the ground up really shows how frameworks make our lives so much easier. I actually found that the 404 page should be also returned with status code 404 instead of 200, so just a small observation I made. I had never used Heroku before this, but in the end it turned out to be pretty easy to use. It is a very useful solution if you do not have your own server to deploy on.

Having completed the previous video and written a learning diary entry for it, I decided to continue to the next one about MongoDB. I have used it before to some extent but not

really as in depth as I would have wanted to, so I am quite interested what this video contains.

Installing the mongo environment was quite easy, although you have to take some extra steps on Ubuntu, but nothing major. The compass app seems like a really nice visual tool to check statistics, perform database operations, and use for debugging. The command line operations were new to me and also some operands like `$set`, `$gt` etc. I have used mongoose library before which had similar but still different syntax as far as I can remember. But this video has given me a good understanding and refreshed my memory about MongoDB. The cloud service Mongo provides seems like a useful tool to setup cloud servers without hosting your own. It has some similarity with Firebase, which also uses NoSQL and the interface/operations are alike.

Later the same day I decided to tackle the Express.js exercise module. I must say I have used Express.js a lot on my own projects before so I doubt there is much to learn in this video.

I like how the use cases of Express are presented in a clear way. All of the routing and express middleware things were familiar but I had never used a static folder before so that is something new. I also learnt that Express now comes with builtin bodyparser, so one does not have to install an extra dependency, which is great! Also, at the end of the video a templating engine called Handlebars was used. This was the first time I have used it, although I have heard about it before. It proves to be really useful if you want to render your templates on a server. But I doubt I will find much use for it in the future, since I like to stick with the normal client app – server API based workflow. I have used PHP without a templating engine and it was a terrible experience, and well, now I know better.

18.5.2021

I decided it is time to complete the final course exercise before starting the project work sometime later this week. I am quite excited for this particular exercise since the exercises before gave the foundation for building a REST API and in this exercise we combine all that knowledge into one project.

Right off the bat I noticed that this is a very fast paced video, so I decided to lower the speed to .75x to keep up. A new library called 'dotenv' is introduced in this exercise but I have used it before also and find it very useful to set up environment variables. Later on, mongoose was introduced, which I have also prior experience with, although my knowledge about it has blurred a bit. The asynchronous workflow and try – catch blocks in the exercise are something I have used in my old projects. For the HTTP status codes I usually like to bring a library that works as an Enum. That way I do not have to remember the codes by heart. The REST client VSCode addon was new to me and quite useful but I think I will stick to using Postman in the upcoming course project. This exercise and the others combined definitely give good grounds for making the project and I will try to incorporate some of my previous knowledge in it, too.