Lappeenrannan teknillinen yliopisto

School of Business and Management

Sofware Development Skills

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LEARNING DIARY, FULL-STACK MODULE

**LEARNING DIARY**

15.6.2022  
  
I familiarized myself with the course. I am eager to get started with the course as I wish to develop my skills in software development. It is nice that there are first exercise projects as a “warm up” and then I can learn more and be creative with my own project. I chose Git for my version control. I have used it before this very little, so it is very useful for me to learn to use it more with a “real” coding project. I had previously used Gitlab as a repository hosting service but this time I decided to try Github. For my code editor for this course I have chosen VS Code as I have already used it so it’s easy to get started with that. I had previously already installed some extensions to my Visual Studio. From the link provided in the course material I realized it would be useful to get to know more with the extensions as there seems to be many extensions that make the developers work easier and faster.

I had to do some revision in basic functions in using Git. I had some problems with making a first commit and pushing it to Github. One of the problems seemed to be that my branch was named “master” locally but “main” in Github. I learned that “main” is nowadays the recommended branch name so I changed the local repository to main. I somehow struggled also otherwise in pushing but finally with the step by step advises from the documents in github site it finally succeeded.

Before starting to learn more about Node, I studied little bit (as recommended in the beginning of the tutorial video) about the http response status codes and headers, MVC ( Model-View-Controller) design pattern and REST API’s.

20.6.2022

I started to learn about what Node is through the node.js -youtube courses / tutorials. I learned that Node is an Javascript runtime. Through node, we can use Javascript as a serverside language. Node is fast and efficient and it can be used almost with anything that is not CPU intensive.

Through the tutorials I learned for example that:

* through Node REPL (Read-Eval-Print-Loop) it is possible to run JS through terminal.
* NPM (node package manager) is essential tool for running Node.js. It provides countless open source packages, which can be installed and interacted in node.js project through npm cli.
* Node module types are: core modules, local modules and third party modules.
  + Node core modules are for example: http, url, os, querystring, path, fs, util, event
* nodemon is a dev dependency tool that automatically restarts the node application when the file is changed
* a simple HTTP server can be started with Node.js
* through Heroku it is possible to deploy an application to the internet

First the syntax of Node.js seemed little difficult for me, especially as I haven’t much used serverside languages. There seems to be anyway good documentations available and after a while it felt more clear.

I did not have any bigger problems in accomplishing the exercises in the tutorials. Of course there were many typo problems but they were easily solved.

28.6.2022

I had problems in pushing to Git remote repository. I did not manage to push all of the contents of my git folder to remote repository, a subfolder could not be opened and the contents were not accessible in remote repository. I searched help from stackoverflow and other internet sources and tried many things. Apparently the problem was that I had a .git folder higher up in the folder hierarchy. After removing that folder I could finally successfully push all of the contents to github.

29.6.2022

I watched the MongoDB crash course videos. I was unfamiliar with MongoDB before this but it was quite easy to catch up with it through the videos. I learned that MongoDB is a no-SQL database. It has advantages compared to relational databases, it is for example easy to scale and faster. The data is stored in collections. JSON -like syntax is used with MongoDB.

I followed the tutorial and successfully created, read, updated and deleted the data in my own Mongo database.

Express:

web framework for node. server-side framework. fast, most popular node framework.

created a static server

with pure node.js we had to handle the content type, loading html files and css.files etc

higher order functions

template engine express handlebars

added .engine -> worked (index.js 13)

exphbs.engine

11.9.2018

I have chosen VS Code as my code editor for this course, I learned how to set up addons by googling how to do it. I searched the web for best addons and chose the best addons that I think fits me best. I started to watch the first part of the example project to understand the technologies better.

I did my second commit but somehow it did not go as I planned. I went to stackoverflow and found quite many threads about version control problems. I was able to figure out what was the problem and continued to watch the first part till the end.

**EXAMPLE STYLE 2**

10.9.2018

I learned about,

version control, but mostly it was just refreshing my memory. What I learned was…

how to develop as a becoming software professional. I find <something> interesting, because…

how to set up Atom environment with addons. There was one problem that took me a lot of time to solve. The problem was about …

Etc.

**EXAMPLE STYLE 3**

Freeform.

Something else, but reasonable. You must document what you have done, learned and when this have happened.