Lappeenrannan teknillinen yliopisto
School of Business and Management

Sofware Development Skills

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LEARNING DIARY, BACK-END 2020-21 MODULE

LEARNING DIARY

26.10.2020

I read the course general information as well as course requirements to find out the course ‘s content and what I have to do in order to pass the course. As I have studied front-end development before, I find that it is necessary to gain knowledge in back-end. After this course, I am looking to have the ability to create unique project and then can develop my career as a software developer.

The course requirements clearly stated that there are 3 mandatory assignment for a student to pass the course. Moreover, following and coding along with the tutorial videos and writing learning diary play an important role to keep track and reflect the learning process.

I checked the recommendation for the environment setup. As I am familiar with version control through studying front-end course before, I skipped this part. Furthermore, I choose VSCode as my code editor for the course with the same reason.

I jumped to the first part of the course, that is REST Intro. In this part, I got to know what REST API is, learned some API concepts and followed the example to Facebook’s Graph API, Google Map’s API, Instagram’s Media Search API and Twitter’s Status Update API. REST. API stands for Application Programming Interface which allow software to interact with each other. REST API stands for Representational State Transfer API. There are some examples in which making the request to the server and get back the data in form of JSON. As in the case of Facebook’s Graph API, the field equal ID name and like are added and then when refreshing the page, only the ID name and likes are returned in JSON format.

I also learned about HTTP request method including GET, POST, PUT, PATCH, DELETE A GET request is used to get data from the API and a POST request is used to writing data to the API.

27.10.2020

I moved to the second part of the course. I learned Node.js fundamentals including modules such as path, url, fs, events. In addition, I also practiced coding along with the tutorial to create an HTTP server from scratch without using Express and learned how to deploy it to Heroku. In this part, I realized that coding along with the tutorial helps learning and remembering quickly.

Node.js is JavaScript Runtime, not a language or a framework and is built on the V8 JavaScript engine. Node.js allows us to run JavaScript code on the server. Because I haved learned a little bit about Node.js before, I already installed it, so I jumped to learn the first module that is path. Path module provides utilities for working with file and directory. I learned and practiced some methods such as: basename, dirname, extname, join. Another module I have learned is file system(fs) module. Some methods in this module are: mkdir (this method has both synchronous and asynchronous version), writeFile….

I also learned about Os module which provides information about our environment, our operating system; Url module which workd which Url; Event module which includes EventEmitter class in which we can emit events and have listeners listen to that event.

Through the process of creating HTTP server from scratch, I learned more about HTTP status codes, specifically commonly encountered errors.

28.10.2020

I learned two parts of the courses: MongoDB and ExpressJs. Firstly, I installed MongoDB by using Homebrew and also installed MongoDB Compass. I practiced around with MongoDB Compass including creating database, create collection and insert document. I learned to use MongoDB by using mongo shell. I can then create the database, find the data, update data, delete data…

I learned the basic concept and usage of Express.js framework for Node.js. I pay more attention to the express middleware part. I also installed Postman to make request to server (GET, POST, PUT…). I practiced by coding along with the tutorials.

29.10.2020

I learned how to create full Restful web API that will allow us to get, post, put and delete JSON data through HTTP requests. I coded along with the tutorial and here is the link to my works: https://github.com/Ha-Ngo/back-end-course. In this part, as I already learned about Express and MongoDB, I mostly spent time to learn about Mongoose and Route in Express. Instead of using REST Client, I am using Postman to make my request.

I started to do my own project. I aimed to include all the stuffs I have learned in my project and also visualize it in order to make it easy to make request and observe the result.

3.12.2020

I edited my learning diary in order to provide more details on my learning process.

8.12.2020

I added one more feature to my project, that allows user can search by name of the item.

10.12.2020

I checked my project one more time, commit it and pushes to github. Here is the link: https://github.com/Ha-Ngo/Back-end-exercise.