

Lappeenranta teknillinen yliopisto
School of Business and Management

Software Development Skills

Bui Nguyen Khoa , student number : x106927

LEARNING DIARY, SOFTWARE DEVELOPMENT SKILLS: FULL-STACK MODULE

MODULE TASKLIST:

NODEJS:

What I learned :

- Knowledge about the definition, benefits, best types of projects for NodeJS.
- Knowledge about NPM, Node Modules
- Download Nodejs for Windows
- Create package.json for a project
- Understand NodeJS core fundamentals such as path, url, fs, event, https
- Create a basic server
- Know how to deploy a server to Heroku

MongoDB:

What I learned:

- Know how to download MongoDB and understand MongoDB fundamentals.
- Basic commands to display all database in mongo shell
- Basic commands to add one row and multiple rows in collection
- Basic commands to sort all formatted rows in collection in ascendant/descendant order

EXPRESSJS:

What I learned:

- Knowledge about the definition and the advantages of ExpressJS.
- Download and use Postman which is an HTTP client to make requests(GET, POST, PUT, DELETE) to server
- Know about middlewares and how to handle them

- Understand how to render static folder in ExpressJS
- Know how to get all, get one, create, update, delete member in ExpressJS
- Understand the method to render templates using express-handlebars -In the future, I have to learn how to send JSON web tokens to authenticate

ANGULAR:

What I learned:

- Understand the Angular fundamentals as well as know the structure of an Angular project
- Know how to use CLI to create components and services
- I am working with React so when move to Angular framework, the logic is not different but the syntax is tricky for me to remember and understand
- Using two-way data binding with the ngModel directive
- Know some condition syntax in Angular: *ngFor, *ngIf...
- Know lifecycle hook: ngOnInit
- Know how to defined routes, a redirect route, and a parameterized route.
- Know how to share a service among multiple components
- Use HTTP and add post, put, delete, get method to a service
- Learn how to use observables
- Angular is more difficult for me because of its syntax and the flow of code. I need to spend more time on researching about this framework.

COURSEWORK (MEAN STACK):

What I learned:

- This coursework project include Rest API, Token Generation and Authentication, CORS, Mongoose ODM, Angular 2, Angular2-JWT, Auth Guard.
- Apply the knowledge about NodeJS, ExpressJS and Angular to create a fullstack application (MEAN stack)
- Understand how to create user model and schema and create register, authenticate functionalities in back end and connect to the front end.
- Deploy the MEAN application to Heroku and use MongoDB Atlas to set up database because mLab's account has been closed since February 2019.
- Because the technology is updated everyday so there are some unexpected bugs happened during the time I studied this coursework.

PROJECT (APPOINTMENT APP)

What I learned:

- I understand more about REST API with Get, Post, Put, Delete, Get By Id method and the structure of an Angular application.

-I have a lot of problems but I tried to figure them out through Stack Overflow and Github as well as some other resources.