

Lappeenranta teknillinen yliopisto

School of Business and Management

Software Development Skills

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LEARNING DIARY, BACK-END MODULE

LEARNING DIARY

29.12.2020

I logged to the course on moodle and read the general information and instructions.

I followed the environment setup, and continued to the "Back-end" -tab. I proceeded to study the first module. I watched through the video and learned the basic concepts of REST APIs.

Everything was pretty straightforward and I'm not too confused yet.

NodeJS

3.1.2021

In this chapter I learned the basics of NodeJS. Today I went through various examples of different methods involved with NodeJS and learned how to use them.

Many things that I learned were something that I knew that had to exist in order for many websites and apps to work, but I had always thought that it would be pretty complicated. It was actually a lot simpler than I thought

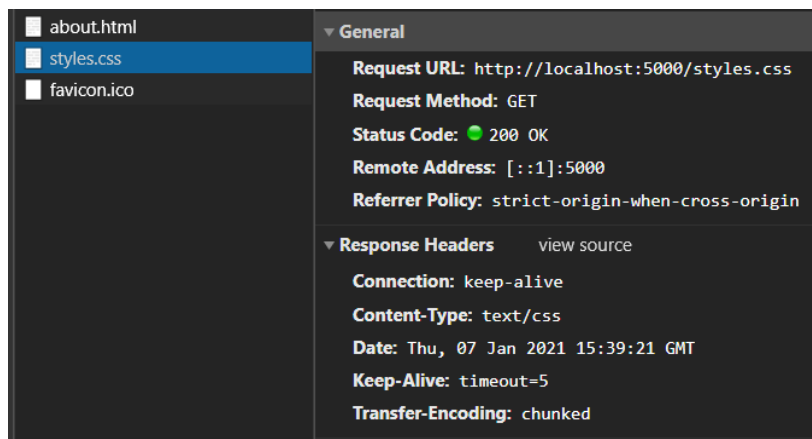
I probably don't have enough understanding yet how to completely put into account what I just learned but I'm sure I will figure everything out pretty soon.

With method 'os' I learned to access many kinds of data related to the users' devices that I didn't think I would have access to. This is surely something I will make use of in the future. At least for fun if nothing more valuable.

4.1.2021

I continued watching the tutorial and working along. I learned to create a live server from scratch, and got it running on my local machine. I had a little bit of trouble with the terminal and some commands, but nothing terrible.

With the help of the video I also discovered the 'network' tab in the console. It was pretty eye-opening to just play around with it.



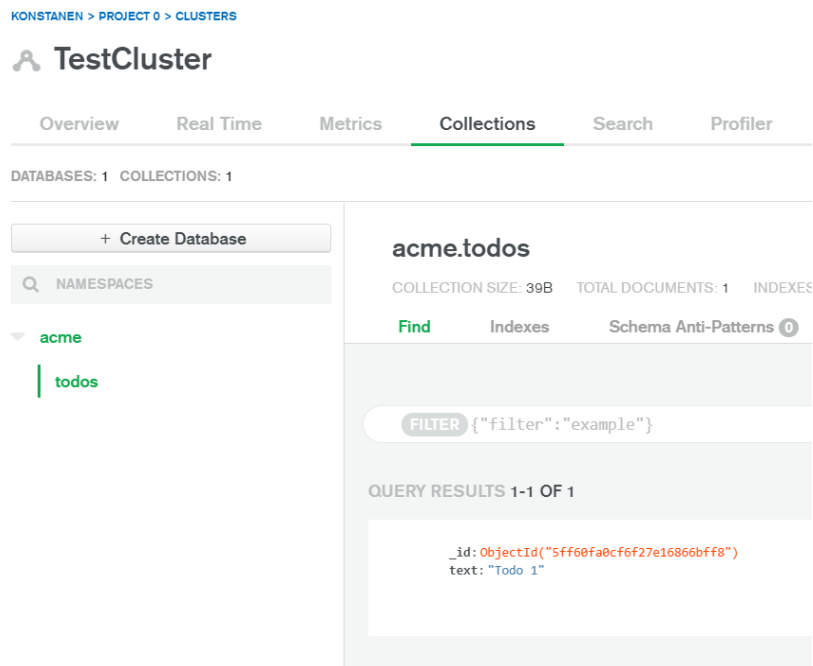
MongoDB

6.1.2021

In this chapter I learned the basics of MongoDB and a bunch of its commands. I had a little experience with databases, MySQL and also some PHP beforehand, but most of the concepts I learnt were mostly new to me. I learned to manage data in databases by reading, creating, updating and deleting.

I also connected mongo to my newly created atlas cluster and stored and managed the data there.

I did have some problems with starting mongo in the shell window. After following Mongo's documentation and some troubleshoot I managed to get everything to work. I also had some problems with atlas but it didn't take too long to figure it out.



ExpressJS

7.1.2021

Many things I got through this tutorial were the same or similar concepts as explained in the node.js tutorial. That's why I already had an understanding of some of the methods and tools.

I learned more about setting up a local web server. I learnt about express middleware and then the tutorial again got through all the different http methods. I also learned to use Postman to handle and send these http requests.

In this chapter, rendering templates were also explained. With that section I learned how to actually display the processed data on a web page, and how to have working input fields on the page.

Member App

Name

Email

Add Member

Members

John Doe: john@gmail.com

Bob Williams: bob@gmail.com

Shannon Jackson: shannon@gmail.com

Antti Anttila: antti@gmail.com

Visit API

Untitled Request

BUILD

GET

http://localhost:5000/api/members

Send

Params

Authorization

Headers (6)

Body

Pre-request Script

Tests

Settings

Query Params

KEY	VALUE	DESCRIPTION	...
Key	Value	Description	

Body

Cookies

Headers (7)

Test Results



Status: 200 OK

Time: 18 ms

Size: 462 B

Save

Pretty

Raw

Preview

Visualize

JSON



```
1 {
2   {
3     "id": 1,
4     "name": "John Doe",
5     "email": "john@gmail.com",
6     "status": "active"
7   },
8   {
9     "id": 2,
10    "name": "Bob Williams",
11    "email": "bob@gmail.com",
12    "status": "inactive"
13  },
14  {
15    "id": 3,
16    "name": "Shannon Jackson",
17    "email": "shannon@gmail.com",
18    "status": "active"
19  }
20 }
```

Bootcamp

Build

Browse



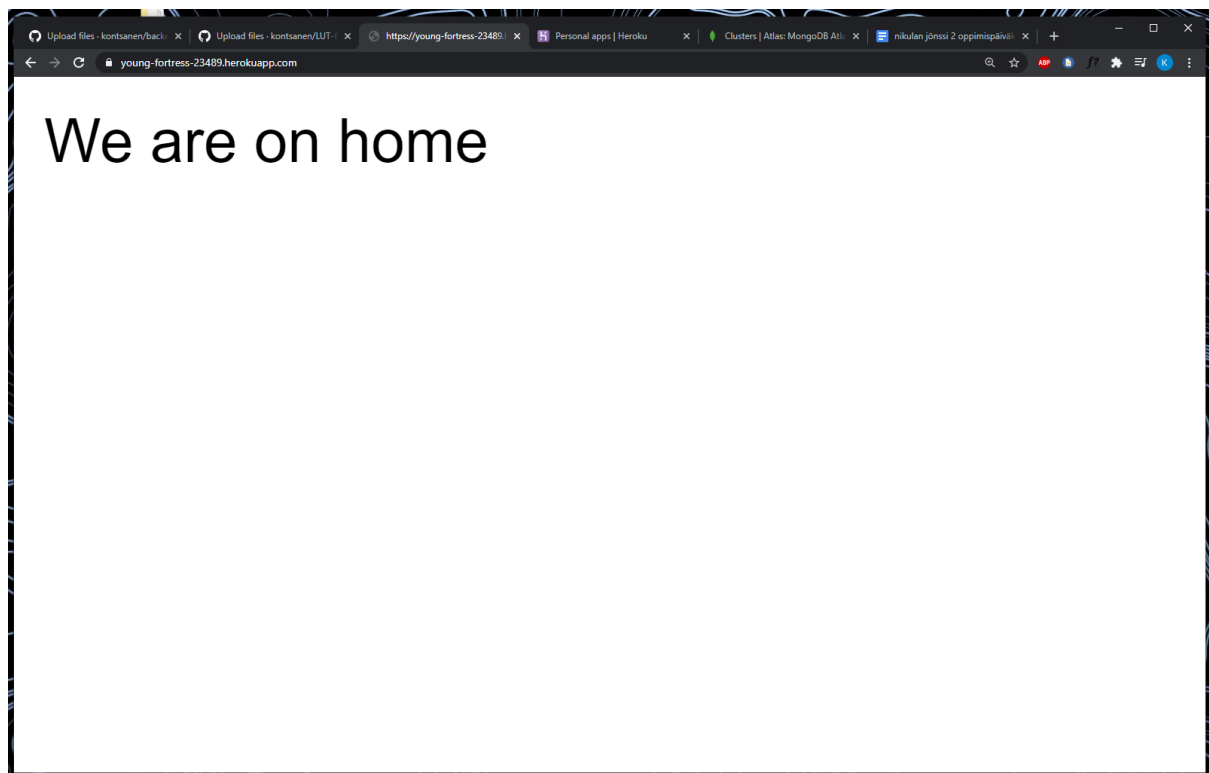
REST API

12.1.2021

This chapter went through the concepts learned earlier, but used somewhat different methods and things. The video was really fast-paced and

THE PROJECT

The plan was to create a simple student information system. I actually did this multiple times but always had trouble deploying the project to heroku. Locally it worked like a charm, but heroku just did not work. After many days, I finally managed to get it working. I was exhausting, but the project works now as intended.



QUERY RESULTS 1-2 OF 2

```
_id: ObjectId("6037431e723995002298c51f")
status: "Studies ongoing"
name: "Leo Mäkinen"
university: "LUT"
email: "leka@gmail.com"
registrationDate: 2021-02-25T06:26:38.398+00:00
__v: 0
```



```
_id: ObjectId("60374366723995002298c520")
status: "Studies ongoing"
name: "Harri Mäkelä"
university: "Aalto"
email: "harri@gmail.com"
registrationDate: 2021-02-25T06:27:50.666+00:00
__v: 0
```



Untitled Request

BUILD

GET
https://young-fortress-23489.herokuapp.com/posts/
Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE	DESCRIPTION	...
Key	Value	Description	

Body Cookies Headers (9) Test Results

Status: 200 OK Time: 673 ms Size: 648 B Save

Pretty Raw Preview Visualize JSON

```
2 {
3   "status": "Studies ongoing",
4   "_id": "6037431e723995002298c51f",
5   "name": "Leo Mäkinen",
6   "university": "LUT",
7   "email": "leka@gmail.com",
8   "registrationDate": "2021-02-25T06:26:38.398Z",
9   "__v": 0
10 },
11 {
12   "status": "Studies ongoing",
13   "_id": "60374366723995002298c520",
14   "name": "Harri Mäkelä",
15   "university": "Aalto",
16   "email": "harri@gmail.com",
17   "registrationDate": "2021-02-25T06:27:50.666Z",
18   "__v": 0
19 }
20
```

Bootcamp

Build

Browse