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School of Business and Management

Sofware Development Skills

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LEARNING DIARY, <Full-Stack 2024-25> MODULE

**LEARNING DIARY**

10.5.2025

Started the course. Read the course instructions. Set up all the tools.

I watched the Node video until 50:00.

I learned to build a simple Node server. Additionally, got familiar with two different ways how functions are exported and imported between files.

11.5.2025

I continued watching the Node Crash Course video until 1:19:08.

Learned how to import .html files and use them with servers. Additionally, learned to use \_\_filename and \_\_dirname variables. The middleware part was quite challenging. Traversy said that with middleware the code is less messy and easier to understand but I can’t agree with that at least now. Maybe after some practice.

12.5.2025

Node Crash Course video until 1:33:42.

Learned how to write to and read from files using ‘fs’ and its readFile, writeFile, and appendFile functions. Repeated the use of async and try-catch clause.

13.5.2025

Node Crash Course video until 1:47:45.

Learned to use and manipulate path variables, getting operating system related information and handle url related variables.

14.5.2025

Node Crash Course video until 1:54:07.

Learned the basic cryptography functions and tools like .createHash(), .update() and randomBytes().

15.5.2025

Node Crash Course video until the end.

Learned to use the EventEmitter object and log different process related information on the screen.

16.5.2025

Started with the Express Crash Course and watched the video until 0:13:10.

Learned to build a basic express server and show text in the browser.

17.5.2025

Continued watching the Express Crash Course video until 29:35.

Today, I learned to

* add more routes to the server
* use sendFile function to show .html files as web pages
* work with JSON
* use request params to show a single item on a page

18.5.2025

Continued watching the Express Crash Course video until 36:40.

Today, I learned to

* use query strings in web addresses and parse them in code
* set status codes and chain them with json

19.5.2025

Activity: Express Crash Course video 36:40 – 53:23

I learned to

* use router
* repeated the two different ways (common, module) to import/export tools and files
* do post and put requests

20.5.2025

Activity: Express Crash Course video 53:23 – 1:00:23

Things learned

* delete functionality
* put logger in a separate file and import it to the server file

21.5.2025

Activity: Express Crash Course video 1:00:23 – 1:10:46

Things learned

* custom error handler
* error middleware

22.5.2025

Activity: Express Crash Course video 1:10:46 – 1:20:44

Learned to use

* colors package
* controllers

23.5.2025

Activity: Express Crash Course video 1:20:44 – 1:24:28

Learned today: \_\_dirname workaround

24.5.2025

Activity: Express Crash Course video 1:24:28 – 1:30:02

Things learned

* frontend and backend working together i.e. posts can be fetched by clicking a button (making requests from frontend to backend)
* short repetition of JS items like document and innerHTML

25.5.2025

Activity: Express Crash Course video 1:30:02 – end

Things learned

* submitting form to API
* EJS template, passing data to views, looping, partials

26.5.2025

Activity: Started watching React JS Crash Course, watched until 22:38

Things learned

* creating a react app
* rendering text on web page

27.5.2025

Activity: watched React JS Crash Course 22:38 – 30:42

Things learned

* creating components
* using props / variables with components
* setting defaults props and prop types

28.5.2025

Activity: watched React JS Crash Course 30:42 – 37:45

Things learned

* styling elements
* creating a button component

29.5.2025

Activity: watched React JS Crash Course 37:45 – 46:52

Things learned

* handling events when a button is clicked
* useState in a component
* global state i.e. state that is available to components on lower level

30.5.2025

Activity: watched React JS Crash Course 46:52 – 51:40

Things learned

* separating handling items in two different components (Tasks, Task)
* using react-icons

31.5.2025

Activity: watched React JS Crash Course 51:40 – 1:03:12

Things learned

* how to delete tasks
* conditional rendering
* toggle reminder

1.6.2025

Activity: watched React JS Crash Course 1:03:12 – 1:19:32

Things learned

* adding tasks to task list
* opening and closing a form by pressing a button (toggle)

2.6.2025

Activity: watched React JS Crash Course 1:19:32 – 1:30:12

Things learned

* what build is and how to run it
* create a json-server
* useEffect
* fetching tasks from server

3.6.2025

Activity: watched React JS Crash Course 1:30:12 – 1:35:14

Things learned

* deleting tasks from server
* adding tasks to server

4.6.2025

Activity: watched React JS Crash Course 1:35:14 – End

Things learned

* toggling reminder on server
* using BrowserRouter and Routes

5.6.2025

Activity: started watching the first MERN video, watched until 20:33

Things learned

* setting up a MERN project
* creating a routes file and handling routing from this file

6.6.2025

Activity: watched the first MERN video 20:34 – 36:45

Things learned

* creating a controller
* error and exception handling
* using asyncHandler

7.6.2025

Activity 1: watched the first MERN video from 36:45 – to the end

Things learned

* setting up MongoDB
* using models, schemas

Activity 2: started watching the second MERN video, watched until 14:00

Things learned

* constructing a user model, routes, and controller

8.6.2025

Activity: watched the second MERN video 14:00 – 25:39

Things learned

* registering a new user
* hashing password
* creating login

9.6.2025

Activity: watched the second MERN video 25:39 – 41:24

Things learned

* generating JWT
* creating authorization middleware
* basics of protecting routes

10.6.2025

Activity: watched the second MERN video from 41:24 – to the end

Things learned

* protecting routes
* get, set, update, delete user goals

11.6.2025

Activity: started watching the third MERN video, watched until 12:30

Things learned

* setting up a React app
* creating pages and paths to them

12.6.2025

Activity: watched the third MERN video from 12:30 – 27:36

Things learned

* constructing header, login and register pages

13.6.2025

Activity: watched the third MERN video from 27:36 – 45:36

Things learned

* running server and client with concurrently
* creating slices

14.6.2025

Activity: watched the third MERN video from 45:36 – to the end

Things learned

* constructing register form
* creating logout functionality

15.6.2025

Activity: started watching the fourth MERN video, watched until 16:38

Things learned

* restricting dashboard view to logged in users only
* constructing Goal form

16.6.2025

Activity: watched the fourth MERN video from 16:39 – 34:13

Things learned

* creating goal async thunk and extra reducer
* fetching goals from server

17.6.2025

Activity: watched the fourth MERN video from 34:14 – 44:59

Things learned

* displaying goals (very simple)
* deleting goals

18.6.2025

Activity: started working on the project. Created the repository, a simple server, and did installations as guided on the video.

19.6.2025

Continued working on the project. Things completed today:

* .env file has variables
* created an expenditure route that handles get, set, put, and delete spending item
* created a controller for different functionalities
* posting spending items in Postman with amount and category console logs properly
* added error messages if amount and/or category is missing
* error handling with middleware

20.6.2025

Continued working on the project. Things completed today:

* wrapped async functions inside asyncHandler
* connected the application to MongoDB
* created expenditureSchema
* get, set, put, and delete expenditures function with database
* created userSchema and routes for user functionalities

21.6.2025

Continued working on the project. Things completed today:

* user registration
* password hashing
* user authentication
* jsonwebtoken
* authentication middleware
* protected routes
* user specific expenditure only for logged in user: get, set, update, delete

22.6.2025

Continued working on the project with video 3 topics. Things completed today:

* set up React frontend
* created routes to dashboard, login, register pages
* started working on user registration but ran into an useContext error, tried to find the error and managed to locate it roughly by commenting out a lot of code

23.6.2025

Continued working on the registration part and logout. Things completed today:

* completed the registration, logout, and login
* the error message remains so have to find a solution to that

24.6.2025

Continued with the expense creating functionality. Things completed today:

* created expenses slice
* dashboard has now introductory texts
* expense form

25.6.2025

Continued with the expense functionality. Things completed today:

* fetching expenses from server

26.6.2025

Continued with the expense functionality. Things completed today:

* displaying expenses
* deleting expenses

27.6.2025

Activity: watched the fourth MERN video from 45:00 – to the end

Things learned

* set up Node production environment
* saw how an app is set up on Heroku

28.6.2025

Activity: fixed the Redux library problem that did not allow login and registration properly.

29.6.2025

Activity: designed dashboard

* category is now a dropdown list from which users can choose category instead of writing them
* expense rows are displayed in table format

30.6.2025

Things completed:

* The dashboard shows also total spending for each category

1.7.2025

Things completed:

* Dashboard shows spending percentage of total for each category

2.7.2025

Things completed:

* Refactored dashboard

3.7.2025

Things completed:

* fixed the getExpenses update and visibility bug
* changed the expense form so that the hint “choose category” is first and all categories after that

4.7.2025

Things completed:

* started working on the expenses per day table, expenses per day sum is not calculated and only NaN is shown, must research this closer tomorrow

5.7.2025

Things completed:

* NaN issue resolved but with two consecutive for loops which looks weird. A better solution would be if date is not in data object, add zero first and then the actual value.
* Updated README with instructions on how to install and use the application

6.7.2025

Things completed:

* Learning diary
* Demo video (https://youtu.be/KZedLX4KkyU)