**Lappeenrannan teknillinen yliopisto**

**School of Business and Management**

**Sofware Development Skills**

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**LEARNING DIARY,**[**Anytime-course: Software Development Skills: Full-Stack 2024-25**](https://moodle.lut.fi/course/view.php?id=23816&section=1) **MODULE**

**Node.js Crash Course**  
From this course, I learned the basics of Node.js: how it works and what it’s used for. I mastered using built-in modules like fs (file operations), http (creating a server), and path (working with file paths). I learned how to write a simple server, handle HTTP requests, and create basic routing. I also got familiar with working with files and streams and using NPM to manage packages. Thanks to this, I now know how to build a simple backend application from scratch.

**Node.js Crash Course**

From this course, I learned how to install and configure MongoDB and perform basic CRUD operations (create, read, update, delete). I understood the principles of data modeling, creating collections, and working with documents. I also learned how to use indexes to speed up queries and how to use aggregation for data analysis.

**Express Crash Course**

Nauczyłem się podstaw pracy z Node.js, w tym instalacji, konfiguracji oraz korzystania z wbudowanych modułów. Tworzyłem serwery HTTP, obsługując żądania, odpowiedzi i routing. Poznałem Express.js jako framework do budowy aplikacji webowych i RESTful API, obsługując różne metody HTTP i walidację danych. Pracowałem z bazami danych, głównie MongoDB, realizując operacje CRUD przy użyciu Mongoose. Zrozumiałem, jak implementować logowanie, rejestrację oraz mechanizmy uwierzytelniania i autoryzacji.

**React JS Crash Course**

I learned the basics of React, including setting up the environment and configuring a project. I became familiar with component structure, props, and state, as well as how to use them. I mastered creating dynamic user interfaces, handling events, and conditional rendering. I learned to work with lists and keys and manage application state using hooks like useState and useEffect.. Finally, I learned methods for working with APIs in React.

**Learn The MERN Stack**

Using the knowledge from previous courses and following the instructions, I created a simple application.