

SAE Institute Belgrade

Learning Journal

Student details:

Isidora Nikolic

student number: ?

4FSC0WE003 / 4FSC0WE004

Leraning Journal

Front-End Fundamentals / Back-End Fundamentals

January/March/April 2024.

Word Count: 584

Lecturers: Dusan Osmokrovic, Vladimir Lelicanin

Front-End Fundamentals

Week 1-4

In these weeks I learnt about JavaScript history, JS basics, how to use JS, how to connect with HTML, variables, how to write them, naming rules and commenting in JS. We learnt arrays and objects and how to iterate through them via loops. I learnt about built-in functions for strings and arrays and other data types, as well as what data-types are being used in JS. Arithmetic operations, comparison, conditional statements and functions. These weeks already gave me the possibility to write my first JS code by myself, it was super useful for my future projects and assignments in JS.

Week 5-7

I learnt about DOM manipulation, how to grab, make and add elements in JS, how to change their inner text or even add whole element from created in JS file to HTML structure. I learnt to add event listeners and it was really a lot of fun for me figuring out what all I can accomplish with these JS features. I learnt about `SetInterval` and `setTimeout` methods and used it for making animations in JS. Also learnt about scopes. These weeks were a bit harder but amazing what I was capable of making after learning all these.

Week 8-10

Learnt some advanced JS techniques such as JQuery library and the power of it and how it works. How to make more dynamically pages with only JS, for example to-do list, how to remove items without refreshing the page, append elements to the list and how to remove them. Also learnt basics of classes in JS. Ajax calls, json formatted data, how to work with API keys.

Week 10-13

Did a lot of practice and assignments, was making weather forecast app with API key and Ajax calls, talked about tailwind implementing in our projects, made a lightbox with images that open on click even listener and so many other small projects that will help me with final project for this trimester.

Back-End Fundamentals

Week 1-5

Basics of PHP, history, how to install in our computers, then talking about basics such as commenting, name conventions, math operators, about variables and data-types in PHP. Learnt about arrays, loops, expressions, functions, scopes. How to work with files in PHP, about built-in functions such as Date() which is super useful in every task and project. Data inputs, we talked about forms and validation of forms. About file structure, about cryptography and password hashing, about sanitization when we validate the data. And last but not least, about authentication.

Week 6-7

Databases, MySQL databases, how to make database, how to make tables, how to populate tables, as well as queries, how to update, delete, insert, select from tables as well as how to delete whole database or whole tables. About organizing data, about primary key, about basic data types in MySQL, SQL operators etc.

This knowledge is crucial for final project where everything will be connected and manipulated from databases.

Week 8-13

Object Oriented PHP-OOP, here I learnt how to make classes and methods and how to use them in live example project because we started whole PHP-MySQL project with lecturer which is continuing till the last week 13, where we used everything we learnt to build the base for final exam, we on live example worked with database, tailwind and plain PHP.