Javascript Fundamentals

For Week 6, We go deeper into JavaScript this week, focusing on essential programming concepts such as variables, data types, operators, control flow statements, functions, arrays, objects, and asynchronous programming. Mastering these fundamentals is vital for any aspiring JavaScript developer, as they form the foundation for writing efficient and robust code. Through a blend of theoretical insights and hands-on practice, Fellows will acquire the skills needed to write clean, functional, and scalable JavaScript applications.

Software Development Week 6

3MTT

Learning Objectives for the week

At the end of this week you should be able to;

★   Define JavaScript variables, data types, and operators.

★   Utilize control flow statements (if/else, loops) effectively in JavaScript programming.

★   Work with arrays and objects, understanding their properties and methods.

★   Evaluate and optimize JavaScript code for performance and readability.

★   Explore asynchronous programming concepts in JavaScript, including callbacks, promises, and async/await.

Online Learning Modules

This is the online module that you have to complete this week.

- Javascript Full Course: <u>Click Here</u>

- **Full course:** Understanding Arrays in Javascript: <u>Click Here</u>

Additional Resource links
1. <u>**Click here**</u> **- Text**
2. <u>**Javascript Playground**</u> **- Text**
3. <u>**Download**</u> **- Ebook**

Software Development Week 6

Weekly Applied Learning Assignment

- ○ **Create a Simple Application:**
  Build a small project using:
    - ■ Variables and data types to store user information.
    - ■ Control flow statements (if/else, loops) for interactivity.
- ○ **Use Arrays and Objects:**
    - ■ Create an array for multiple items (e.g., products).
    - ■ Use objects to represent complex data.
- ○ **Implement Asynchronous Features:**
    - ■ Include at least one asynchronous element using callbacks, promises, or async/await.
- ○ **Documentation:**
    - ■ Write a brief summary (150-200 words) explaining your project and challenges.

Submission:

- ● Submit your JavaScript code and summary via CodePen.