

## Internship Report – Week 4 – Day 3

**Topic:** Operators and Conditions (if, else, switch)

**Date:** 16 July, 2025

### Overview:

On Day 3, the focus shifted to logical operations and control structures used to make decisions in code.

### Key Concepts Covered:

#### 1. JavaScript Operators:

- **Arithmetic Operators:** +, -, \*, /, %, \*\*
- **Assignment Operators:** =, +=, -=, etc.
- **Comparison Operators:** ==, ===, !=, !==, >, <, >=, <=
- **Logical Operators:** && (AND), || (OR), ! (NOT)

#### 2. Conditional Statements:

- **if, else if, else:** Used to control program flow based on conditions.
- **switch:** Alternative to multiple if-else statements, suitable for checking equality.

#### 3. Use Cases Demonstrated:

- Conditional rendering in user interfaces
- Input validation logic
- Flow control in programs

### Learning Outcome:

Learned how to apply various operators and construct conditional logic to control the flow of JavaScript programs.

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