## ProSensia Internship Report Week 4 - Day 2

**Date:** 7-15-2025

Intern Name: Hamza Rafique

# **Today's Focus:**

JavaScript - Variables and Data Types

# **Topics Covered:**

#### 1. JavaScript Variables:

- o Declaration using var, let, and const
- Scope and hoisting differences
- Reassignment and redeclaration rules

#### 2. Data Types:

- o Primitive Types: String, Number, Boolean, Undefined, Null, Symbol, BigInt
- o Reference Types: Objects, Arrays, Functions

#### 3. Type Conversion:

- o Implicit type coercion by JavaScript
- o Explicit type conversion using Number(), String(), Boolean()

#### **Hands-on Practice:**

- Declared and initialized variables using all three types.
- Created examples for each primitive and reference data type.
- Performed type conversion on different values.

## **Challenges Faced:**

- Differentiating between undefined and null
- Remembering scope limitations of let and const

## **Learning Outcome:**

- Understood the significance of using let and const over var
- Gained confidence in identifying and using different JavaScript data types
- Practiced real-time examples involving type conversion

# **Next Steps:**

- Explore JavaScript Operators and Control Flow
- Build logic-based mini projects for further practice