📄 **ProSensia Internship Report**

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Topic: Introduction to JavaScript & How JavaScript Runs in the Browser

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🔷 **Introduction to JavaScript:**

- JavaScript (JS) is a high-level, lightweight, interpreted programming language used to make web pages interactive.

- It runs inside web browsers and works alongside HTML and CSS.

- JavaScript can handle user events, manipulate the DOM, and create dynamic web experiences.

🔷 **How JavaScript Runs in the Browser:**

- Browsers like Chrome, Firefox, and Edge have built-in JavaScript engines (e.g., V8 in Chrome).

- The process includes:

  1. **Parsing** the JavaScript code.

  2. **Converting** it into machine code.

  3. **Executing** it using a call stack.

  4. **Using Web APIs** for asynchronous operations.

  5. **Event Loop** manages asynchronous tasks and keeps the UI responsive.

🧪 **Activities at ProSensia**

- Practiced JS basics like variables, functions, and DOM interaction.

- Explored how browsers handle JS behind the scenes.

- Used Chrome DevTools to test JS in real time.

🧠 **Key Takeaways**

- JavaScript is essential for front-end development.

- The browser executes JS using an engine, call stack, and event loop.

- DOM manipulation is a key part of JS interactivity