

Assignment 2.1

Introduction to Javascript

Deliverable 1

• JavaScript Cheat Sheet

1. Variables and DataTypes:

- Variables : 'var', 'let', 'const'
- Data types : 'String', 'Number', 'Boolean', 'Array', 'Object', 'null', 'undefined'.

2. Operators:

- Arithmetic Operators : '+', '-', '*', '/', '.'
- Comparison Operators : '==', '===', '!=', '!==', '>', '<', '>=', '<='.
- Logical Operators : '&&', '||', '!'.

3. Control flow:

- Conditional Statements : 'if', 'else', 'else if'.
- Switch Statements : 'switch', 'case', 'default'.
- Loops : 'for', 'while', 'do-while', 'for-of', 'for-in'.

4. Functions:

- Function Declaration : 'function
functionName (parameters) { }

- Arrow functions: '(parameters) => { }'

- Higher-Order functions: Functions that take other functions as arguments or return them.

5. Arrays and Objects:

- Arrays: ordered collections of values. Accessed by index.

- Objects: Key-value pairs. Accessed by keys.

6. Scope and Closures:

- Scope: Defines the accessibility of variables. Global and local scope.

- Closures: functions that capture and remember the scope in which they were created.

7. DOM Manipulation:

- Document Object Model (DOM): Tree-like structure representing HTML elements.

- Selectors: Methods to select elements:

 - 'getElementById',

 - 'getElementsByClassName',

 - 'querySelector',

 - 'querySelectorAll'.

- Manipulation: Methods to modify elements: 'innerHTML', 'textContent', 'setAttribute', 'style'.

8. Events :

- Event Handling: Responding to user actions like clicks, keypresses, etc.
- Event Listeners: functions that listen for specific events on elements.

9. Asynchronous JavaScript :

- Callbacks: functions passed as arguments to other functions, executed later.
- Promises: Objects representing the eventual completion or failure of an asynchronous operation.
- Async / Await: Syntactic Sugar for working with promises, making asynchronous code look synchronous.

10. Modules :

- Export: 'export' keyword to expose functionalities
- Import: 'import' keyword to bring functionalities from other modules.