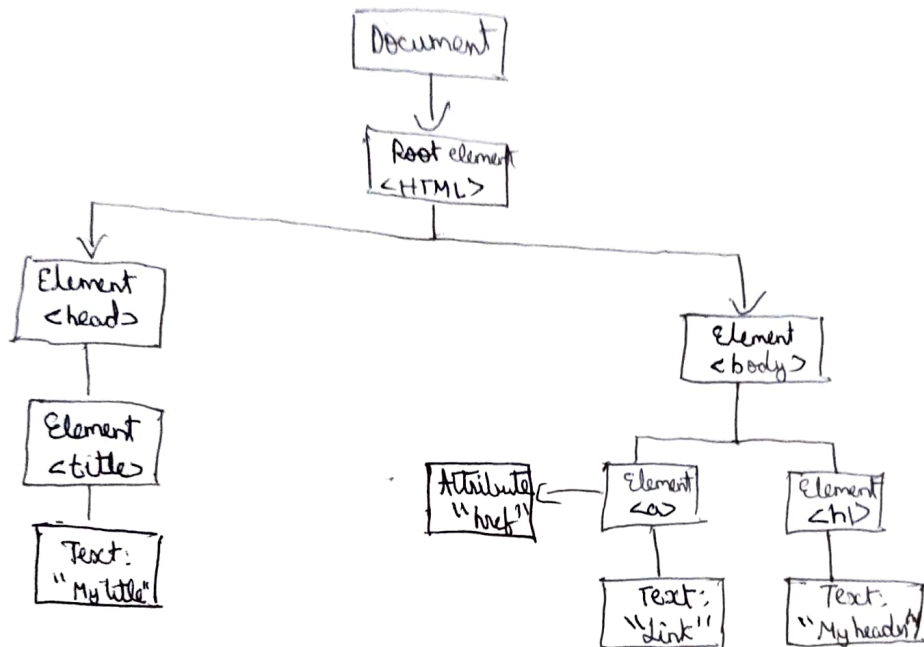


Assignment - 3 (Javascript)

- 1) The different types of datatypes available in Javascript are Boolean, primitive, Null, Number, undefined, String and symbol type.
- 2) $"=="$ is used for comparing two variables but it does not take into consideration the datatypes of the variable. eg $"100" == 100$.
 $"==="$ is used for comparing two variables but it also compares the datatype of the two variables. eg $"100" \neq 100$ but $"100" === "100"$.
- 3) Implicit type casting or coercion is the process in which Javascript automatically converts data types without the user specifying. eg: $12 + "" = "12"$. Here number 12 is implicitly converted by Javascript.
- 4) NaN in Javascript stands for "Not-a-Number". NaN is not a legal number. NaN is given values are generated when arithmetic operations result in undefined values. $\frac{0}{0}$ is NaN.
→ Infinity values are generated when any number is divided by zero.
 $\frac{8}{0} = \infty$ (or) $\frac{4}{0} = \infty$
→ Null in Javascript is a special value that represents empty or unknown value. Numbers can be assigned null values which can be changed later.
→ undefined in Javascript is when a variable is declared but it is not assigned any specific value. It is also possible to declare variables as undefined.
- 5) 'this' keyword in Javascript refers to an object that is executing the current piece of code. If ~~from~~ it references object that is executing current function, ~~it~~ If the function is regular function, 'this' refers to global object.

- 6) DOM stands for Document Object Model of the page
With DOM, objects Javascript creates
DOM model is constructed as tree of objects



- With Object Model, Javascript gets all power to create dynamic HTML
- Javascript can change all HTML elements of the page
 - Javascript can change HTML attributes,
 - Javascript can change CSS style.
 - Javascript can remove (or) add elements and attributes.
 - It can also react to existing HTML events (or) add new ones.

Array methods

- push() - Insert element at end of an array.
- pop() - Remove element from end of an array.
- shift() - Remove element from beginning of an array.
- unshift() - Add element at beginning of an array.
- slice() - creates shallow copy of an array
- length - Determines length of an array.

- `Concat()` - Concat method creates a new array by merging existing arrays.
- `splice()` - Splice method adds new items to an array and deletes specified number of elements. Eg: `splice(2,2)` adds new items at position 2 and removes 2 elements.