Introduction to Web Development: JavaScript

Class 9: Preparation

Understanding Scope

Understanding variable scope is a very important aspect of all programming languages. When you create a variable and store a value, a number, a string, any data into the variable where the variable can be accessed within the programming code is important. Todays lecture we discuss variable scope and run some experimental code to show the scope of different types of variables. In programming, scope refers to the set of variables, functions, and objects that a program can access at any given point during its execution.

In JavaScript, there are two types of scope:
- Global Scope: Variables declared outside of a function have a global scope, meaning they can be accessed from anywhere within the program.
- Local Scope: Variables declared within a function have a local scope, meaning they can only be accessed from within the function where they are declared.

It's important to note that variables with the same name can exist in different scopes. When a variable is accessed, the program first looks for it in the local scope, and if it's not found, it looks for it in the global scope.
Understanding scope is crucial for writing effective and efficient JavaScript code. It helps prevent naming collisions, keeps code organized, and ensures that variables are only accessed where they are intended to be used.

The Date object.

In JavaScript, the Date object is a built-in object that represents a date and time. It provides methods for working with dates and times, such as getting the current date and time, formatting dates, and manipulating dates and times.

Todays learning outcomes:

1) Develop an understanding of variable scope when using the JavaScript language. Understand the difference between global scope and local scope. Be able to implement some functions written in JavaScript that demonstrate the difference between global and local scope.

   - https://learning.oreilly.com/videos/modern-javascript-from/9781789539509/9781789539509-video2_17/

2) Understand the breadth and depth of the Date object by exercising its properties and methods for both date and time manipulation.

   - https://learning.oreilly.com/videos/modern-javascript-from/9781789539509/9781789539509-video2_11/
   - https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Date