

Chapter 6 - JavaScript in the browser

JavaScript was initially created to make web pages alive. JS can be written right in a web page's HTML to make it interactive.

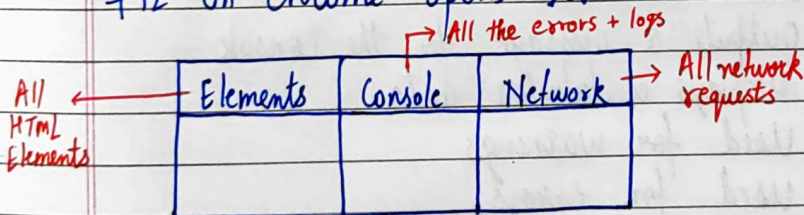
The browser has an embedded engine called the JavaScript engine or the JavaScript runtime.

JavaScript's ability in the browser is very limited to protect the user's safety. For example a webpage on <http://google.com> cannot access <http://codeswear.com> and steal information from there.

Developer tools

Every browser has some developer tools which makes a developer's life a lot easier.

F12 on chrome opens Dev tools



We can also write JavaScript commands in the Console

The script tag

The script tag is used to insert JavaScript into an HTML page

The script tag can be used to insert external or internal scripts

```
<script>  
  alert("Hello")  
</script>  
// or ...  
<script src = " /js/thisone.js" > </script>
```

The benefit of a separate javascript file is that the browser will download it and store it in its cache

Console object methods

The console object has several methods, log being one of them. Some of them are as follows:

assert() → Used to assert a condition

clear() → clears the console

log() → Outputs a message to the console

table() → Displays a tabular data

warn() → Used for warnings

error() → Used for errors

info() → Used for special information

You will naturally remember some or all of these with time

Comprehensive list can be looked up on MDN

Interaction : alert, prompt and confirm

alert : Used to invoke a mini window with a msg.

`alert("hello")`

prompt : Used to take user input as string

`inp = prompt("Hi", "No")`

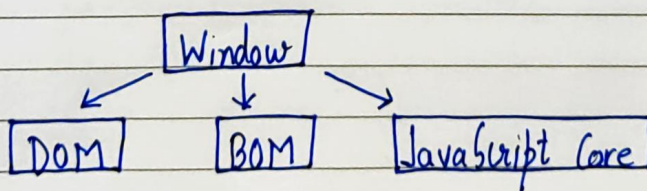
→ optional default value

Confirm : Shows a message and waits for the user to press OK or Cancel. Returns true for OK and false for Cancel.

The exact location & look is determined by the browser which is a limitation

Window object, BOM & DOM

We have the following when JavaScript runs in a browser



Window object represents browser window and provides methods to control it. It is a global object

Document Object Model (DOM)

Dom represents the page content as HTML

`document.body` → Page body as JS object

`document.body.style.background = "green"`

↳ changes page background to green

Browser Object Model (BOM)

The Browser Object Model (BOM) represents additional objects provided by the browser (host environment) for working with everything except the document.

The functions `alert` / `confirm` / `prompt` are also a part of the BOM

`location.href = "https://codewithharry.com"`

↳ Redirect to another URL

Chapter 6 - Practice Set

- 1 Write a program using prompt function to take input of age as a value from the user and use alert to tell him if he can drive!
- 2 In Q1 use confirm to ask the user if he wants to see the prompt again
- 3 In the previous question, use console.error to log the error if the age entered is negative
- 4 Write a program to change the url to google.com (Redirection) if user enters a number greater than 4
- 5 Change the background of the page to yellow, red or any other color based on user input through prompt.