The Global Scope

Website vs Web Page

A website can be seen as a collection of web pages linked together using hyperlinks. While a web page is a single document. A bigger website can be broken down into smaller web pages, with every webpage being associated with its HTML, CSS and JS files.

The Concept Behind Global Scope

Example:

- Suppose you load a web page in your browser.
    1. The browser creates a window object for it.
    2. Then it creates the associated DOM for your HTML document and renders it.
    3. This document object is a property of the window object.
    4. All the global variables that you create in the JS files attached to the HTML document share a single global scope.
    5. All these variables become properties of the window object.

- Now suppose, this web page that you loaded contains a hyperlink to some other web page.
    1. When you click on this hyperlink to navigate to a different web page, the browser creates a new instance of the window object and document object.
    2. Now all the global variables in the JS files attached to the HTML document of this newly loaded web page share a single global scope, which is different from the global scope of the previously loaded web page.

Conclusion

- All global variables in different JS files have a single global scope when all of them are attached to the same HTML file.

- The window object is different for different web pages of a website. It means that the global scope is associated with a single web page.

- If a web page has links to multiple other web pages, then its scope is independent of the JS files linked to those other web pages. Therefore the global scope concerning a web page includes only the javascript files that are directly linked to its HTML document.