**JAVASCRIPY DAY-2**

1. **List 5 difference between Browser JS(console) v Nodejs**

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| --- | --- |
| BROWSER JS(CONSOLE) | NODEJS |
| * In browser js “window” is a predefined global object which has functions and attributes, that have to deal with window that has been drawn. | * Node doesn’t have a predefined “window” object cause it doesn’t have a window to draw anything. |
| * The object in browser has all the information about the url that we have used. | * The object related to particular url to a specific page, so that doesnot require location acccess. |
| * In browser “document” is a predefined global variable which the html has rendered. | * In node object dosn’t have document because that is never rendered anything in a web page. |
| * The browsers may have an oject name global but the original one is the window. | * The node is a predefined global object it has several functions that are not available in browsers. |
| * Moduling is not mandatory in client side JavaScript, i.e. in browsers. | * In Node everything is a module. You must keep your code inside a module. |

1. Execute the below code and write your description in txt file
2. typeof(1)

var a = 1;

console.log(type(a));

Output : number

1. typeof(1.1)

var a = 1.1

console.log(type(a));

Output: number

1. typeof('1.1')

var a = ‘1.1’;

console.log(type(a));

Output: string

1. typeof(true)

var a = true;

console.log(type(a));

Output: boolean

1. typeof(null)

var a = null;

console.log(type(a));

Output: object

1. typeof(undefined)

var a = undefined;

console.log(type(a));

Output: undefined

1. typeof([])

var a = [];

console.log(type(a));

Output: object

1. typeof({})

var a = {};

console.log(type(a));

Output: object

1. typeof(NaN)

var a = NaN;

console.log(type(a));

Output: number

1. watch & summary 5 points - <https://www.youtube.com/watch?v=SmE4OwHztCc&ab_channel=JSConf>

# How does the browser actually render a website?

1. The browser actually render a website through HTML.

And HTML shows how it runs behind the screen, how passed and gets through different process.

1. Browser is one the complex application we use.

The components that make browser are

* Bindings
* Rendering : parsing ,layout, painting etc.

1. Platform
2. Javascript Virtual Machine.
3. In high level flow it act as Parse HTML, Parse CSS -> Render treee, layout, paint.
4. Parsing HTML: Forgiving by nature but not straight forward. Can be halted and do speculative parsing then it reentrant. Parse tree includes -> html, head, paragraph, div, span. Parse makes into DOM tree its all the element.
5. CSS Parsing: CSS Object Model is as the DOM Object Model, basically it represents style.
6. Render: CSSOM comes into form the render frame work
7. Layout : Traverse the Render Tree.