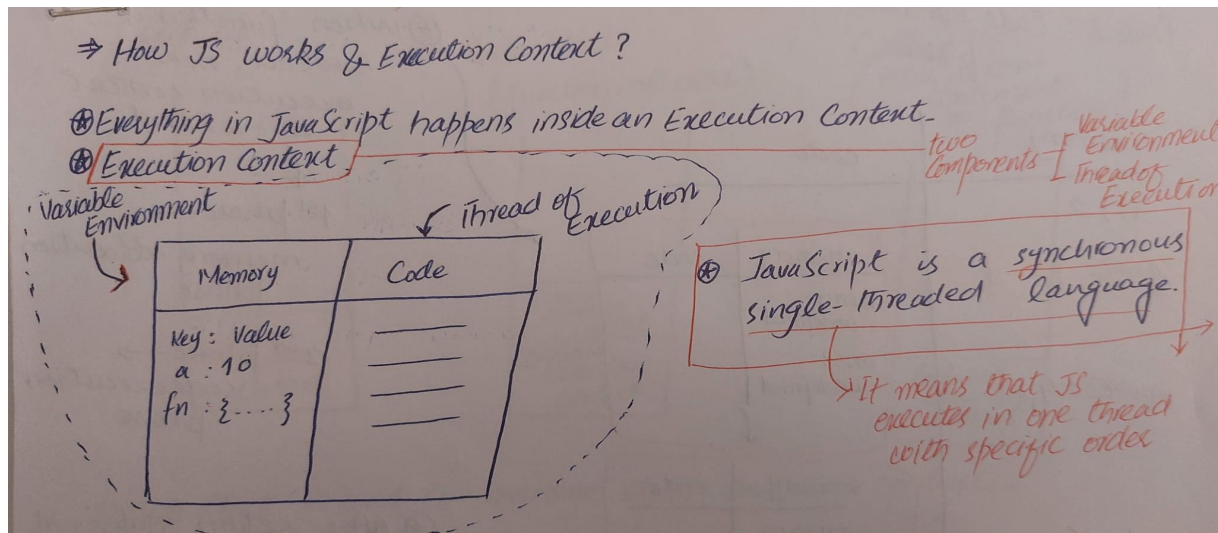#javascript : JavaScript Interview Question for beginners !!!
What is Execution Context in JavaScript?



Before answering this question we need to understand what happens when you run javascript code? I mean How javascript code is executed?

Whenever you run a javascript code, an Execution context is created.

Execution context consists of 2 components:
1) Variable Environment : where all variables of the program are created and stored

2) Thread of Execution: It is actually the order in which your program's statements will execute.

Now, moving one step further, above execution context is created in 2 steps:

**1st step:** Memory creation phase -> In this phase, javascript engine just goes line by line and creates variables out of your code.
e.g.
var test = 2;
var result;

After this statement, the test variable is created in memory and it holds undefined value in it.

**2nd step:** Code execution phase -> this is the second phase, where actually your program's statements get executed.
e.g. result = 2+2;
After this statement, calculation is done and the result variable stores 4 in it.

Now, you know about execution context. Question is how the javascript engine manages it for different functions inside our program.

JavaScript engine creates execute context for each function.
For the first time, it creates a global execution context and further for each function it creates another execution context.

Where all these execution contexts are managed?
All these execution contexts are managed in call stack.

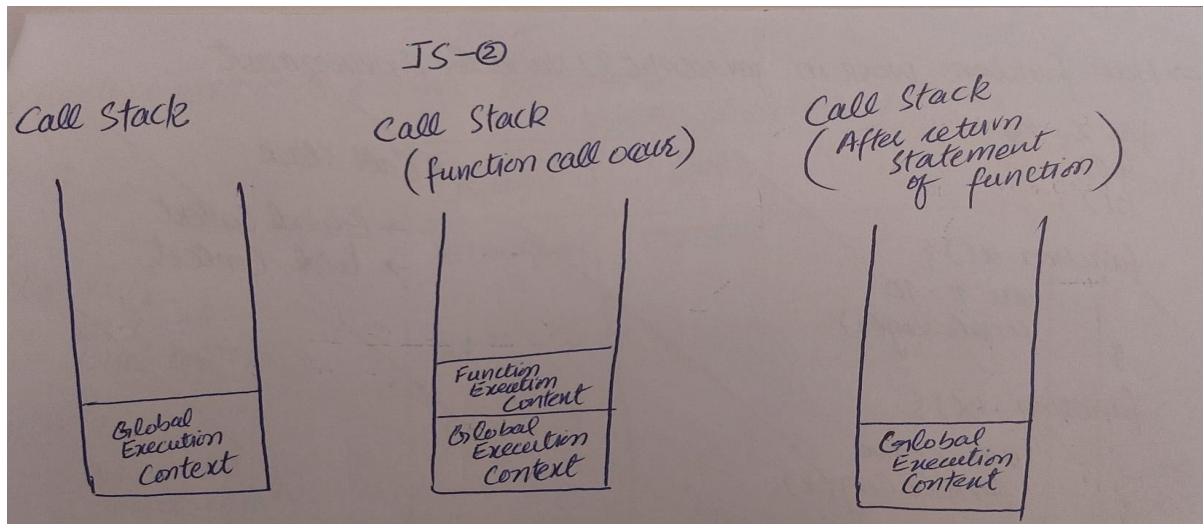Another term for beginners, many people call it different names:
program stack,
execution context stack,
control stack,
runtime stack,
etc

JS-②

Call Stack

Call Stack
(function call occur)

Call Stack
(After return
statement
of function)

Global Execution Context

Function Execution Content

Global Execution Context

Global Execution Content

Actually this is the stack, where javascript handles its execution contexts and runs the program accordingly.

Follow Akshay Saini Namasty Javascript series on youtube for better understanding.
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