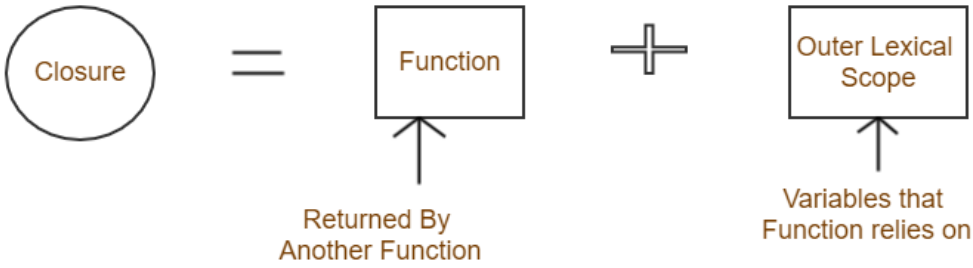
#javascript : JavaScript Interview Question for beginners !!!
What is Closure in JavaScript?



To understand closure we need to first understand the scope of a function?
What is the scope of a function?
or
we can think of scope from the other side as well, Is this variable inside the scope of this function?

scope -> Where can I access the specified variable in our code?

```
let outerVariable = 'outer'
function testScope() {
    let innerVariable = 'inner';
    function displayVariable() {
        console.log(outerVariable);
        console.log(innerVariable);
    }
    displayVariable();
}
testScope();
```

output of above code is:

outer
inner

It's very strange, innerVariable is not inside displayVariable function scope, but still I can access that variable? -> The answer is that a javascript function can access the variables defined in its parent function.

But it's again a bit strange outerVariable is defined in global scope, why can displayVariable function have access to global scope? -> The answer is scope chaining. If a function can have access to its parent function scope -> then Its parent has also access to scope of its parent-> and this chain continues until the global scope.

I hope it is a bit clear about scope and scope chaining.

Now I will use a term very often used to define closure -> lexical environment:

lexical environment = local memory + lexical environment of its parent

So to understand it we need to see how call stack is dealing with functions -> when execution context of function is created, a reference to its parent function scope is also created -> So as we dive deep into nested functions, this reference is created for each layer

If you understood above discussion
-> I hope it's bit clear about local scope and lexical environment,
Now I will move towards closure:

Closure -> A function bound together with its lexical scope is called closure.

In above example -> displayVariable() function forms a closure

On top of this there are many things we can do using this concept-> we can return a displayVariable() function and use it anywhere else in our code. -> you see the beauty of javascript. I can have access to innerVariable in above code from anywhere else in my code.

This is just a very basic level explanation to help you understand the meaning of closures. To understand it for sure first you need to understand following terms:
* scope
* lexical scope
* execution context
* call stack

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