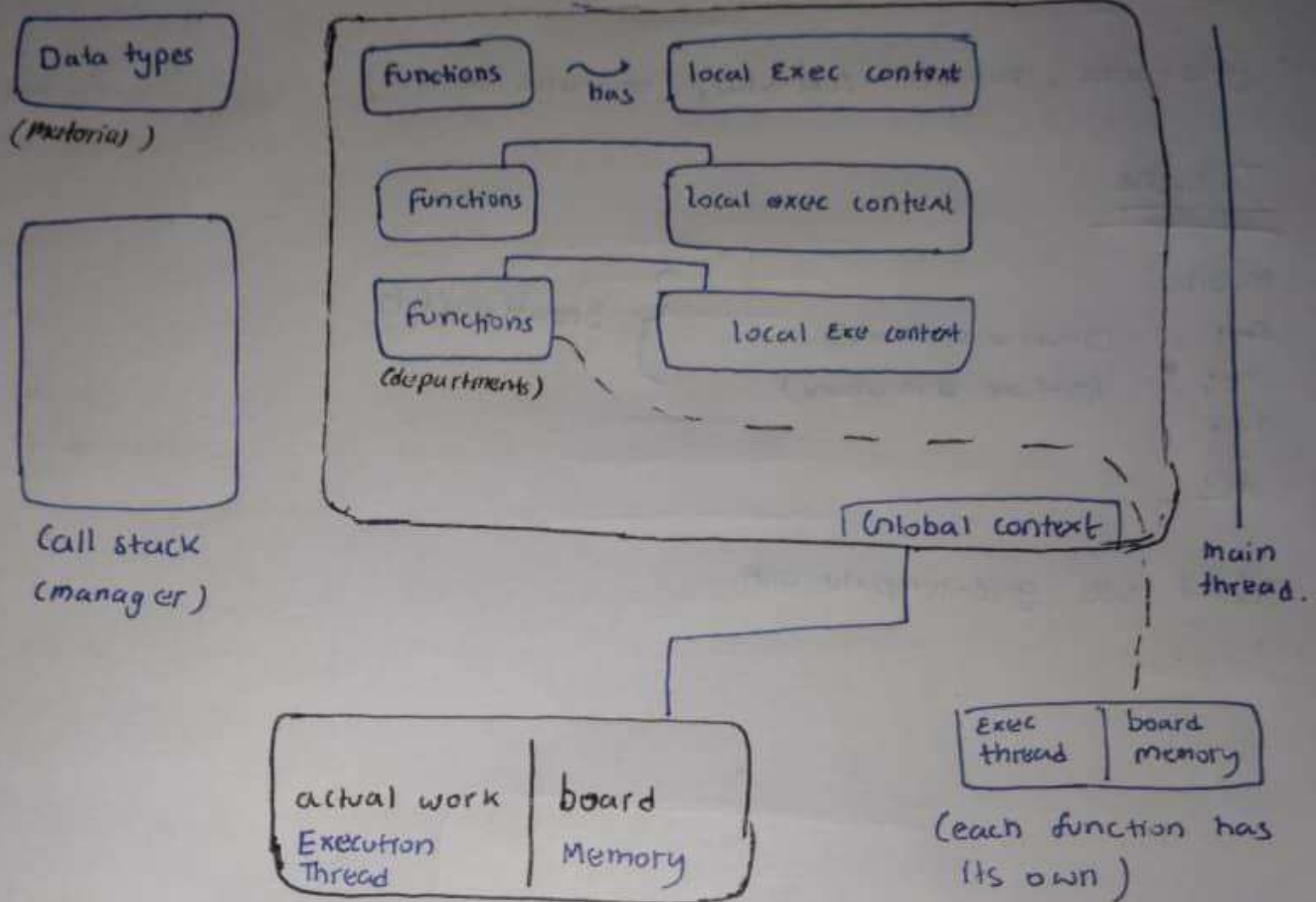


JAVASCRIPT

(main thread : analogy → owner of factory, interpreter)

↓
reads
line by
line

- > `const number = 5` → stored in memory
 - > `function addTwo (num) {`
 - > `return 5+2 num+2` → stored in memory
 - > `}`
 - > `const valueOne = addTwo (num)` → function set to work (by call stack)
- (main thread reads the function)

- NodeJS → runtime environment
↳ not framework/library



- Node JS → V8 engine + Cpp compliances
to move JS outta browser

- Internal JS → `<script> // Your JS CODE </script>`
- External JS → `file_name.js`
- JS is loosely typed language...



```
> function addNumbers (num1, num2) {  
    var result = num1 + num2;  
    console.log ('Result is', result);  
}
```

It's okay to write

```
var fname = "rgtu"  
fname = 36
```

> addNumbers (3, 13) → go check console



CONDITIONAL CODE

↳ returns boolean (yes or no)

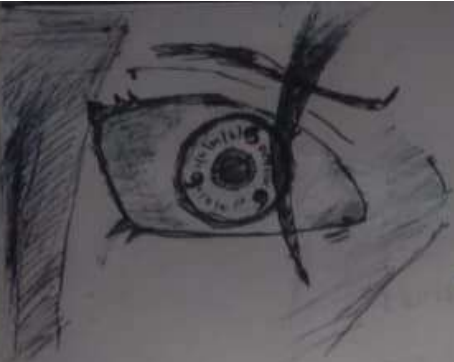
```
if (condition) {  
    // execute this  
}  
else {  
    // execute this  
}
```

Verbose : unnecessarily too much

#multi-condition : var age

```
var childage = age <= 12  
var teen = age <= 14  
var adult = age <= 40  
var senior = age > 40
```

```
if (childage) {  
    // child  
} else if (teen) {  
    // teen  
} else if (adult) {  
    // adult  
} else if (senior) {  
    // senior  
} else {  
    // all false
```



Loop Is GENJUTSU

→ Various Types of loops in JS

1)

Initialization	Condition	update
for (var x = 0 ;	x <= 10 ;	x = x + 1) {
// code		
}		

→ When you exactly know no. of iterations you wanna have

2)

```
var fileSize = 1024;
var currSize = 0;
```

→ Initialization

```
while (currSize < fileSize) {
    // Downloaded
    currSize + 40; // update
}
```

→ When you know condition to stop, but not no. of iterations.

→ Sirf kaam hone se matlab hai --



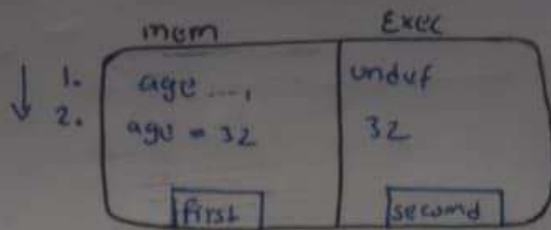
3)

```
var i = 10;
```

```
do {
    // code , i = i - 1 // update
} while (i > 1);
```

→ ensures atleast one iteration





console.log (age)

var age = 32

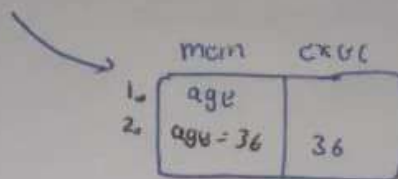
console.log (age)

output ⇒ undefined
32

- age = 36
- console.log (age)
- var age

Hoisting : declarations conceptually moved on the top of scope during compilation phase.

o/p : 36



HEINNN!

