Day-21()

Tuesday, 11 February 2025   7:02 PM

| Phase-3 | VVImp .

"'" **Async - Programming** "'"

JS → single | multi

⌐→ weakly | strongly

→ dynamically | statically

→ synchr. | Async

→ interpreted | Compiled
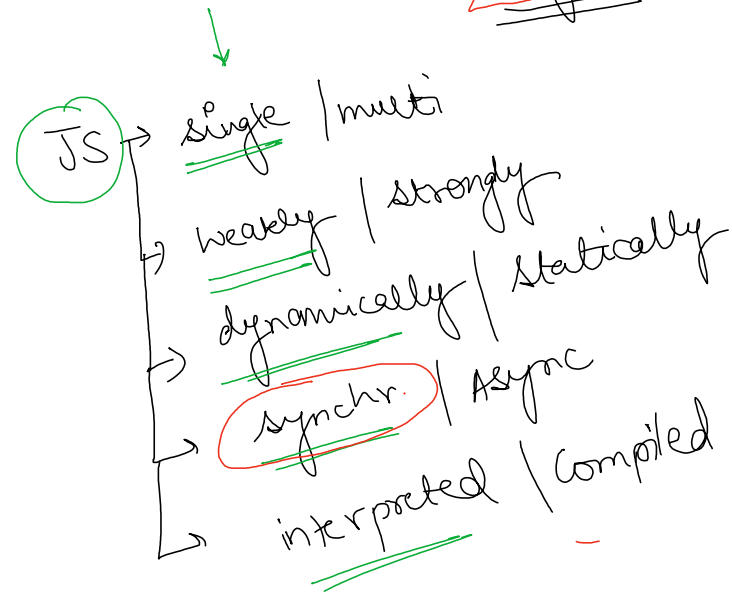
SetTimeout → delay → executes task ①[once] after a delay .

SetInterval → repetive → repeats the fn/task → after an interval

→ 2 args ⟹ (cb fn , delay)

SetTimeout ( )

SetTimeout (function ( ) { ___ } , 5000)

(execute)   after

set Interval

BROWSER ✓

JS Engine ✓

Web api's ✓

set Timeout

timer

Callback queue

```
console.log("open a shop");

setTimeout( function(){
console.log("work there for 5 secs")
} , 5000 )

console.log("close the shop");
```

Console

microtask queue (Priority)

↳ GEC ✓

↳ Call Stack

event loop ★

open

Output

JS — 'BFF' — BROWSER ✓ → MOST REMABLE INVENTION

Browser → Special powers

Web Api's

- setTimeout ( ) ✓
- setInterval ( ) ✓
- fetch ( ) ✓
- location ( ) ✓
- local storage ( ) ✓
- Console ✓

BROWSER

JS Engine

Webapi's

OS
5s

Fh1

Brows.
memory (store)

Registerd

set Timeout

timer

1
console.log("open a shop");

2
setTimeout(function(){
console.log("work there for 5 secs")
}, 5000)

3
console.log("close the shop");

console

GEC

Call Stack

Callback queue

microtask queue (Priority)

event Loop

open

Output

BROWSER

JS Engine

Webapi's

OS
5s

Fh1

Brows.
memory (store)

set Timeout

timer

1
console.log("open a shop");

2
setTimeout(function(){
console.log("work there for 5 secs")
}, 5000)

3.

console

Callback queue

microtask queue (Priority)

JS Engine

Web api's

BROWSER

set Timeout

timer

console

OS

8 7 3 4 5

5s wait over

fn1

Brows. memory (store)

② callback queue

δF, SI

fn1

① microtask queue (Priority)

Promise

```
function(){
  console.log("work there for 5 secs")
}
```

EC

Call Stack

event loop

check CS (empty)

open
close
5 sec

Output