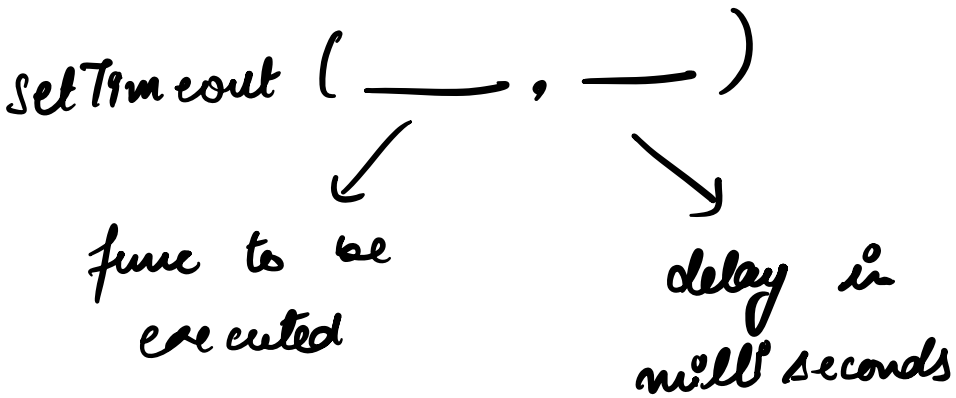
Agenda of the class :-

- setTimeout() method
- clearTimeout() method

- Debouncing
- Throttling

- Async & defer

setTimeout → if you want to perform some action after some delay.



Debouncing → • technique to control the rate at which a function is executed

• using debouncing, a function is executed after certain period of inactivity

• improves performance of your app.

```
function debounce(func, delay) {
    let timerId;
    return () => {
        clearTimeout(timerId)
        timerId = setTimeout( () => {
            func();
        }, delay)
    }
}
```

timerId	t (milliseconds)	Search text	delay
~~1~~	~~0~~	~~m~~	~~3~~
~~2~~	~~10~~	~~mo~~	~~3~~
3	20	mob	3

t=0 m

t=10 mo

=

t=20 mob

```
function throttle (func, delay) {
  let flag = true
  return () => {
    if (flag) {
      func()
      flag = false
      setTimeout(() => {
        flag = true
      }, delay)
    }
  }
}
```

	t	text	delay	flag
t=0 m	0	m	3000	~~true~~ false
t=10 mo	10	mo	2990	false
t=20 mob	20	mob	2980	false
t=3010 "___"	3010	"___"	3000	true ~~false~~