Async Programming: Day 1

"JavaScript is a single-threaded Synchronous language which executes all the Code line by line in the order in which it is written".

Step1: Finish task 'A' which is to mix all the ingredients of the cake

Step 2: You will put the cake in microwave for 30 mins. You will NOT WAIT to get the baked cake before proceeding to next task.
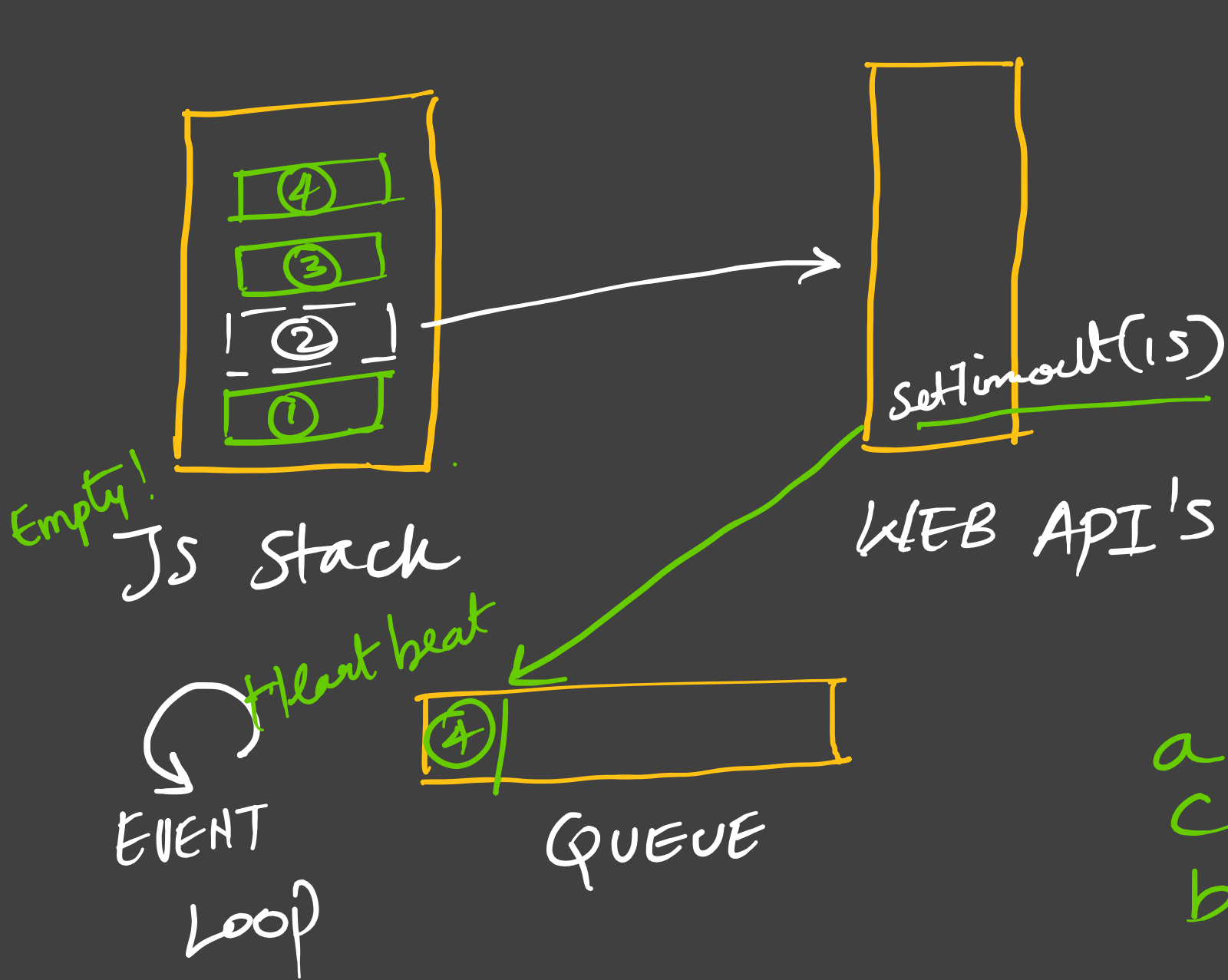
Step 3: You will start preparing cold coffee.

After 30 mins, you will get your baked cake.

"Yet you can write asynchronous Code"

In async programming, you can do tasks without waiting for a task to complete its execution!

Running the code is background essentially means running them inside "WEB API's"

JS Stack

Empty!

Heart beat

EVENT
LOOP

WEB API's

SetTimeout(1s)

QUEUE

④

① Console.log('a');

② setTimeout(function(){

④ Console.log('b');

3, 1000);

③ Console.log('c');

a ✓
c ✓
b ✓

O/P:

a
c
b

CALLBACK:

" Pass a function as an argument to another function."

A Callback is a function passed into another function as an argument, which is then invoked inside the outer/other function to complete some kind of action.

Callbacks serves a great purpose in async
                                    programming:

USAGE:

→ Mark completion of a long-running
                                        task

→ Execute a task after a long-running
                                        task.