

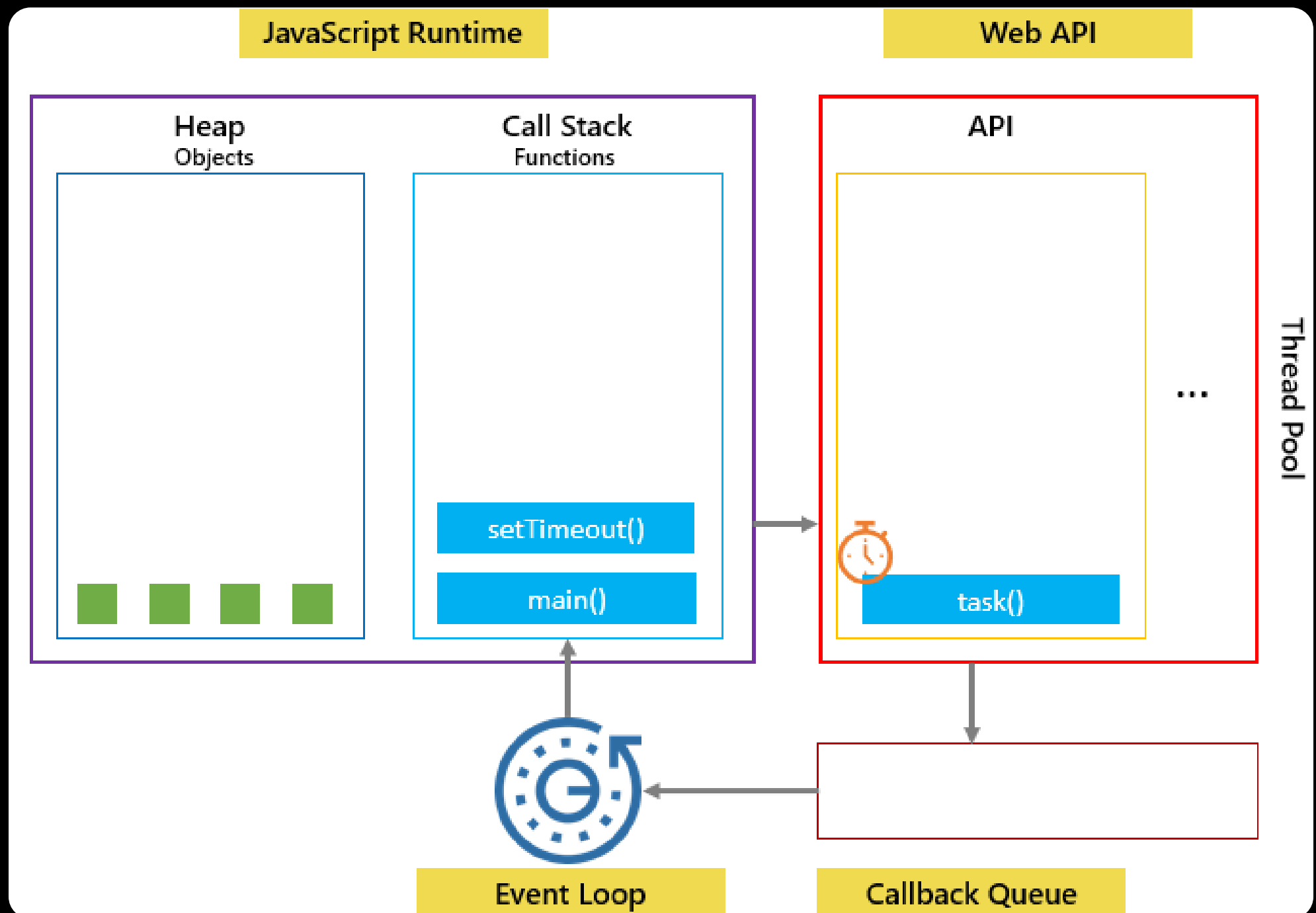


JS

EVENT LOOP



- We know that JavaScript is a **single threaded language** and the secret behind JavaScript's asynchronous programming is **EVENT LOOP**



How EventLoop works?

we will know one by one from
**call stack -> web API -> Callback Queue-
>Event loop>call Stack**

- **Call stack** is nothing but the simple stack data structure which keeps track of the function currently being executed. Here functions call are executed one by one
- since our JavaScript runtime is single-threaded, it can export some time consuming tasks or async tasks to the **WEB APIs** which helps us to respond to multiple requests.

Example of some **web APIs are:**

- **DOM**
 - **Network requests**
 - **setTimeout()**
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- **Once the Web Api request is completed, it will be push to **callback Queue****
 - **In between the callback Queue and call stack there is a **EventLoop** which will continuously look any requests are present in callback Queue, if present event loop will push the requests to call stack**

- Once it reaches the **call stack** it finishes the task and gives the output needed

