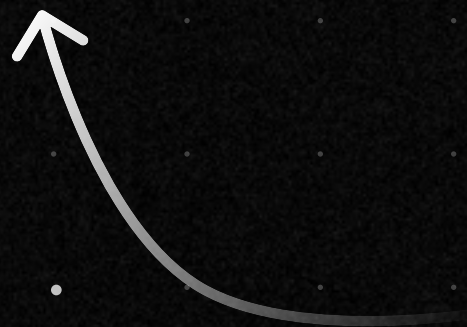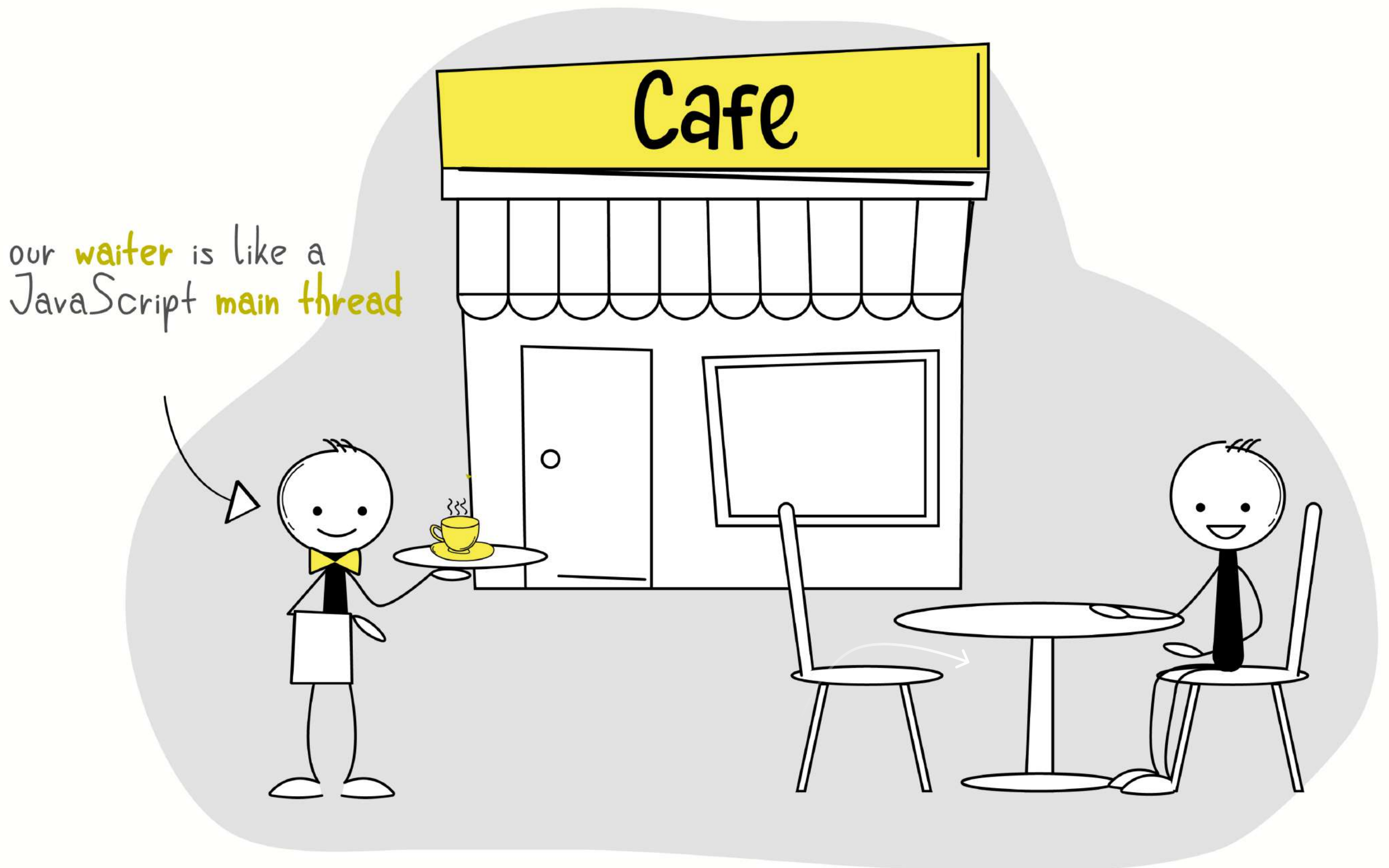# Web Workers
in JavaScript

explaining to your grandma

Imagine that you're running a coffee shop and

You have one waiter to serve the tables and make the coffee.
In most cases, he handles his business very well.

our **waiter** is like a
JavaScript **main thread**

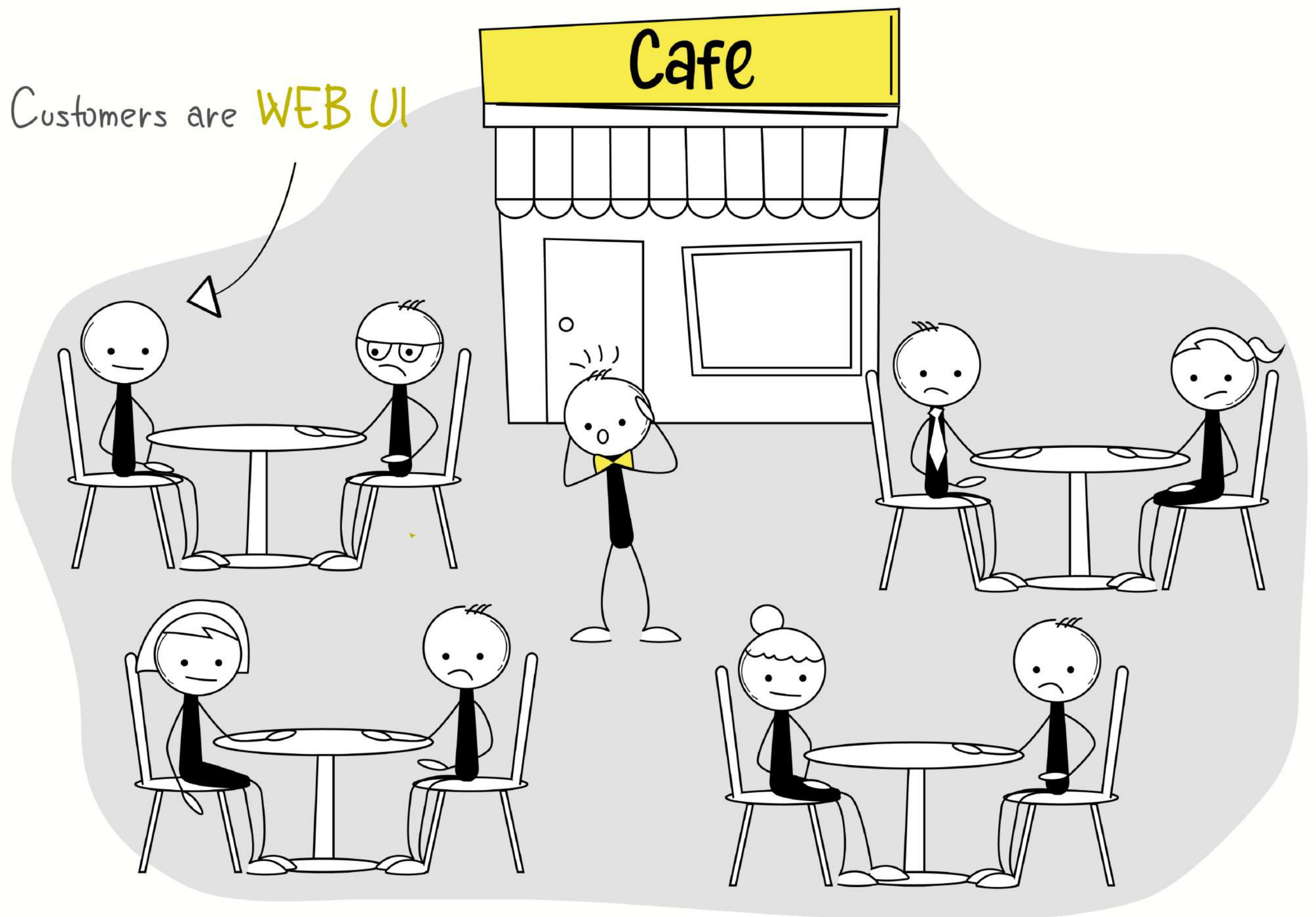The **main thread** is where a browser processes user events and paints.

But it can perform **one** thing at the time.

But in certain periods of the day your coffee

Shop gets crowded with customers, and as you have only one waiter, customers need to wait for him longer.

Customers are WEB UI

Cafe

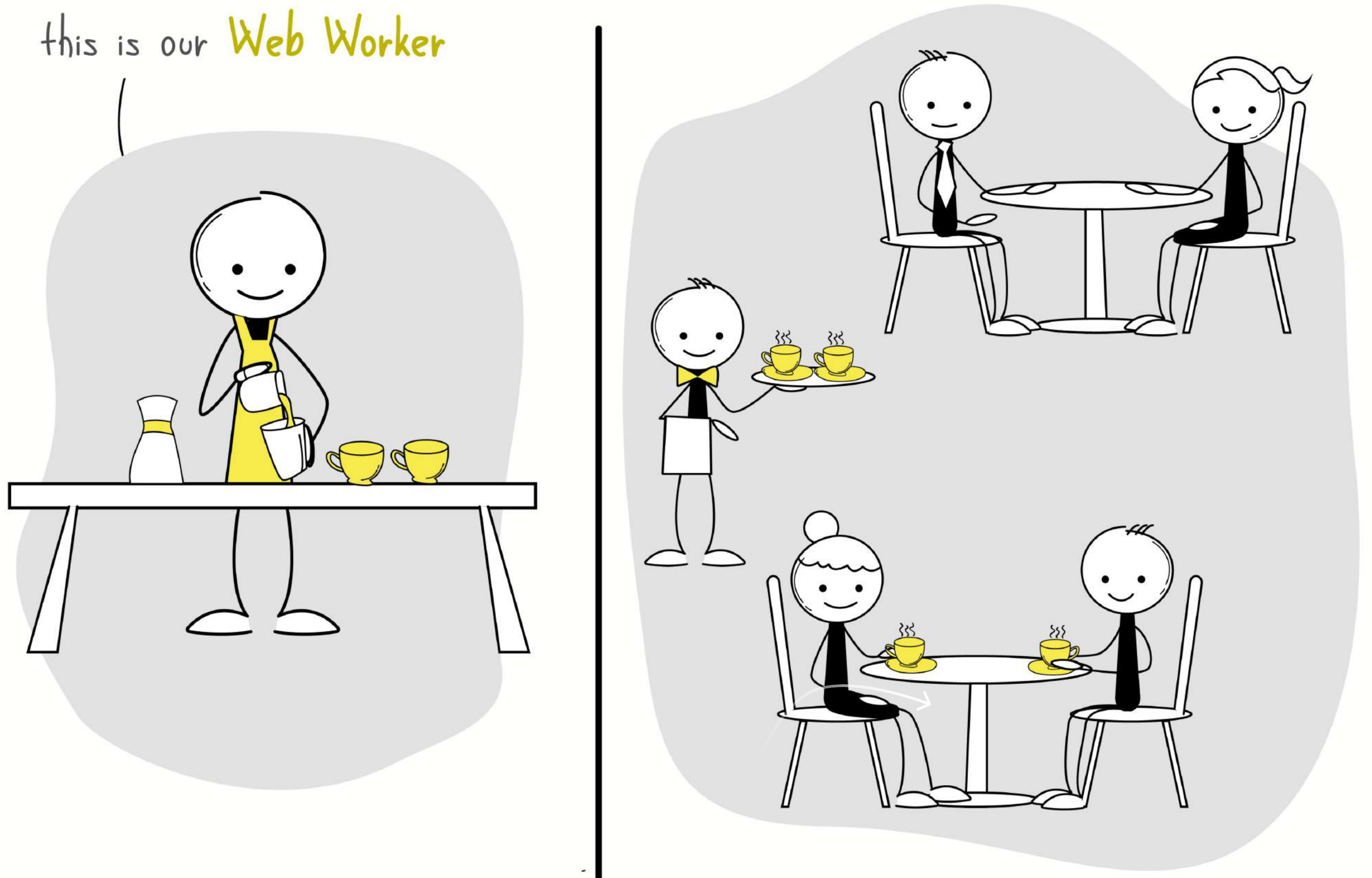Web UI refers to browser interface and different elements on the page.

It gets **blocked** if your operation is CPU-heavy as main thread can only do one thing at the time.

So you need to hire another worker to help

To make the coffee in the background and our waiter can serve the tables without delays.

A web worker is a script that runs in the background without interfering with the user interface. It is used to run the heavy computational stuff which usually would cause delays in the main thread and would block the UI.

Our waiter is passing orders to the coffee maker,

And once he makes the coffee he gives it to the waiter.

So main thread and web worker are communicating using 'PostMessage' method and they respond to messages via the onmessage Event Handler
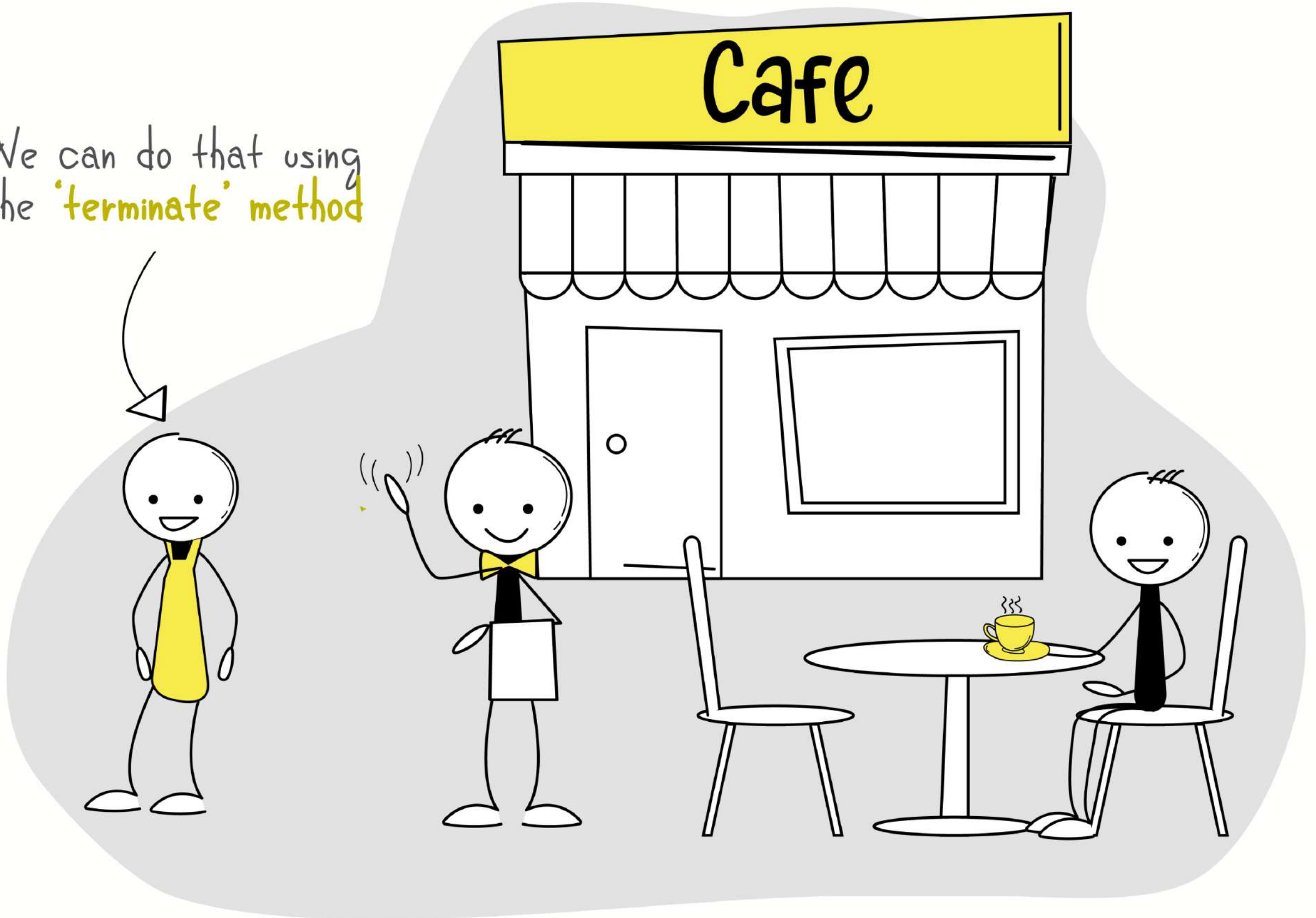
Once the rush hour is done

And you don't need additional help you can send the worker home.

We can do that using the 'terminate' method