

1. Javascript Runtime - the web browser is working in the background while the synchronous javascript code is running

2. Web/Web Browser API - Used by the browser to communicate with JS engine.

Web Api comes with the browsers and all of them have their Javascript implementation and all of them have a javascript runtime that provide a Web API.

The browsers are helping us create rich Web app so that users aren't just sitting around waiting for our js to execute anything that can be offloaded.

2.1 Can send HTTP requests

2.4 Caching / Database storage on the browser

2.2 Listen to DOM events

2.3 Delay execution using something like set timeout

2.5 Web Api are asynchronous that means you can instruct them to do something in the background and to return data once it's done.

Meanwhile we can just continue working on our javascript call stack and to execute functions.