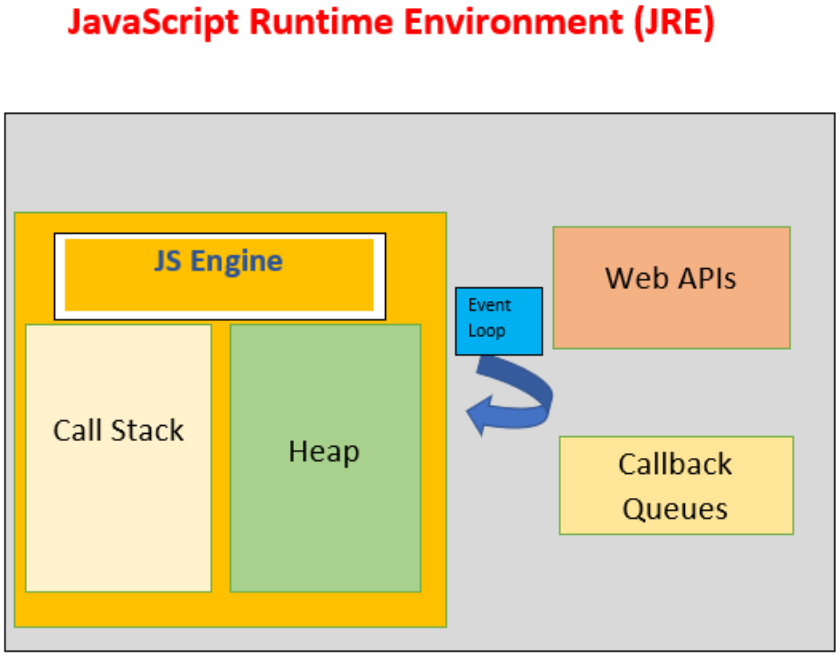
JavaScript Runtime Environment



1. JavaScript runtime environment (JRE) is a term used to describe the environment in which JavaScript code is executed. It includes the JavaScript engine, call stack, heap, web APIs, and callback queues.

2. The JavaScript engine is the component responsible for interpreting and executing JavaScript code. Popular engines include Google's V8 engine used in Chrome and Node.js, Mozilla's SpiderMonkey, and Apple's JavaScriptCore.

3. The heap is the memory space the JavaScript engine uses to store objects and values created by the code.

4. Web APIs are interfaces provided by the browser environment that allows JavaScript to interact with browser features. These APIs include the alert(), confirm(), prompt(), and setTimeout() and setInterval() methods.

5. Callback queues and the event loop are used to manage asynchronous code execution in JavaScript.

The JavaScript runtime environment is the foundation for executing JavaScript code in the browser environment. It provides a set of tools and interfaces that allow developers to create complex and interactive web applications.