Web API and Event Loop

# Web API

A Web API (Application Programming Interface) is a set of rules and protocols that allows different software applications to communicate with each other over the web. It provides a standardized way for applications to send requests to servers and receive responses, usually in the form of JSON or XML. Web APIs are commonly used in web development to allow interaction between frontend applications and backend services. Examples of popular Web APIs include REST (Representational State Transfer) and SOAP (Simple Object Access Protocol).

# Event Loop

The event loop is a programming construct that handles asynchronous operations in JavaScript, commonly used in environments like Node.js. It allows non-blocking operations by placing tasks, such as I/O operations, into a queue and executing them one by one when the call stack is empty. The event loop continuously checks if there are any events or tasks waiting in the queue, and it processes them accordingly. This mechanism allows JavaScript to perform multiple operations concurrently without freezing or blocking the main thread.