mdn web docs

Asynchronous JavaScript

In this module, we take a look at asynchronous JavaScript, why it is important, and how it can be used to effectively handle potential blocking operations, such as fetching resources from a server.

Prerequisites

Asynchronous JavaScript is a fairly advanced topic, and you are advised to work through JavaScript first steps and JavaScript building blocks modules before attempting this.

> **Note:** If you are working on a computer/tablet/other device where you don't have the ability to create your own files, you can try out (most of) the code examples in an online coding program such as JSBin or Glitch .

Guides

Introducing asynchronous JavaScript

In this article, we'll learn about **synchronous** and **asynchronous** programming, why we often need to use asynchronous techniques, and the problems related to the way asynchronous functions have historically been implemented in JavaScript.

How to use promises

Here we'll introduce promises and show how to use promise-based APIs. We'll also introduce the `async` and `await` keywords.

Implementing a promise-based API

This article will outline how to implement your own promise-based API.

Introducing workers

Workers enable you to run certain tasks in a separate thread to keep your main code responsive. In this article, we'll rewrite a long-running synchronous function to use a worker.

Assessments

Sequencing animations

The assessment asks you to use promises to play a set of animations in a particular sequence.

See also

- Asynchronous Programming from the fantastic Eloquent JavaScript online book by Marijn Haverbeke.