Module 5a: Asynchronous JavaScript - Part1

In this Module:

Writing asynchronous code is a super important for Javascript developer and done on daily basis.

- Callback hell
- Promises
- Async/Await
- Error handling in asynchronous code

Callback hell

"*A guide to writing asynchronous JavaScript programs*"
http://callbackhell.com/

Async JS Crash Course - Callbacks, Promises, Async Await

"In this crash course we will look at asynchronous JavaScript and cover callbacks, promises including promise.all as well as the async / await syntax."
https://www.youtube.com/watch?v=PoRJizFvM7s

Promise (docs)

*"The **Promise** object represents the eventual completion (or failure) of an asynchronous operation, and its resulting value."*
https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Promise

Promises - Part 8 of Functional Programming in JavaScript (video)

"Promises are, just like callbacks, a way of dealing with things being asynchronous - when we don't know for certain in what order things will happen. But promises are more powerful than callbacks because they compose - you can combine promises and chain them, all kinds of cool stuff - I've showed you some in this video, but there is WAY more you'll be able to do when you get comfortable with promises."
https://www.youtube.com/watch?v=2d7s3spWAzo

Error handling Promises in JavaScript

"We're going to talk about how you shouldn't swallow errors by doing crash reporting inside of functions. Instead, we're going to look at how you can let errors propagate up to the interface by making use of promises."

https://www.youtube.com/watch?v=f8IgdnYIwOU

Async function (docs)

*“The **async function** declaration defines an **asynchronous function**, which returns an AsyncFunction object. An asynchronous function is a function which operates asynchronously via the event loop, using an implicit Promise to return its result. But the syntax and structure of your code using async functions is much more like using standard synchronous functions.”*
https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/async_function

Async / Await in JavaScript - What, Why and How

“async and await in JavaScript allows us to pause the execution of functions, and that allows us to write asynchronous code that reads like synchronous code.”
https://www.youtube.com/watch?v=568g8hxJJp4