In this essay I want to discuss JavaScript promises. I want to describe what they do and what they are used for. I will include a snippet of code as well to show how a JavaScript promise works. So, what is a JavaScript promise?

Let me use a relatable example of how a promise works in JavaScript. Imagine that you are at a store and want to buy something. You are at the register and realize that you have forgotten your wallet. The item you want to purchase is a popular one and it’s the last one. What do we do? For this example, we are going to assume that we have a friend that can help us out. We then text this friend to ask if they can go get our wallet so we don’t have to leave the store and the item behind possibly losing it. The friend then PROMISES to text back as soon as they have something to report. Assuming the friend can get our wallet, they can then text back and say “SUCCESS, I found your wallet and I am on the way”, yet if they can not get/find the wallet they will reply “SORRY, I could not find/get your wallet”. In the meantime, the store clerk holds on to the PROMISE that the wallet will be delivered and sets the store purchase to “PENDING”. The store clerk as well as us at the register have done all we can do, yet here our purchase still depends on the “FINAL STATUS” of the wallet. Eventually the friend will text us back. As discussed before if the friend could not find the wallet, they will share the failure and why they could not find it. If that happens, the purchase is cancelled, and the sale is “REJECTED”. Otherwise, if the friend finds the wallet, he will reply to us and let us know that he was successful and he will be able to “FULFILL” the promise of delivering the wallet to complete the purchase. (Ubah, 2021). This is the basic premise of how promises work in JavaScript. ”**Promises** are used to handle asynchronous operations in JavaScript. They are easy to manage when dealing with multiple asynchronous operations where callbacks can create callback hell leading to unmanageable code.” (GeeksforGeeks, 2021). To reiterate the states of a promise lets look at the list below. A promise has four states:

* Fulfilled – Action related to the promise succeeded
* Rejected – Action related to the promise failed
* Pending – Promise is still pending, not rejected or failed as of yet
* Settled – Promise has either been rejected or has been fulfilled

(GeeksforGeeks, 2021).

Below is an example of code for a promise fulfilled:

Text

Description automatically generated

This is an example of a promise rejected:

Graphical user interface, text, application

Description automatically generated+

This is an example of a promise pending:

Graphical user interface, text, application

Description automatically generated

(Vanessa, 2021)

In conclusion we can see how a promise works in JavaScript. As well, we have defined what JavaScript promises are used for. And finally, we can see from the code examples how JavaScript promises are structured. Since JavaScript promises are easy to manage when dealing with asynchronous operations, they are a great premise of JavaScript to not be ignored.

References:

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