Zahava Gopin

Web 330: Discussion 6.1

Professor Krasso

2/7/2023

Promises

A promise is an object that shows the state that an asynchronous function is in. There are three possible states of an object pending, fulfilled, or rejected. Only one of these can be true at each instance. Pending means that the function did not fail or succeed, it just is. Fulfilled means that the asynchronous function is complete. The final possible state is rejected, the function has failed. The promises are great because they “hold” the results of the function even if the outcome of the function is not known yet.

With promises, asynchronous methods act like synchronous ones. They wait to return the final value and instead return a promise. Promise chaining is a way to line up many asynchronous functions one after the other. You do this using the then() handler.

All is a method of promises and is used when there are many promises in an array. The promises will be returned in one single promise. However, the promise.all() is only fulfilled when all the promises are fulfilled. Then() is called to display the responses in the same order they were passed. Catch() is another handler that is used when calling promise.all(). Catch will throw an error by a promise that is rejected within the array.

Using keywords asynch and await make the process of building function calls easier because you don’t have to write out promise chains, the code will look like regular synchronous code.

Promises may be hard to learn but their purpose is very helpful. They hold the “results” for the function until they are ready to be displayed

Code sample:

let promise = new Promise(function (resolve, reject) {

if (/\*works\*/) {

resolve(“function works”);

}

else{

reject(Error(“somethings wrong”));

}

});

Resources:

*JavaScript Promises Explained*. (2020, January 15). FreeCodeCamp.org. https://www.freecodecamp.org/news/javascript-promises-explained/

‌

*How to use promises*. (n.d.-b). MDN Web Docs. Retrieved February 7, 2023, from https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Promises