### Megan Walker

#### Bellevue University

#### WEB 330 - Enterprise JavaScript II

Professor Krasso

February 6, 2023

## **Discussion 6.1 – JavaScript Promises**

JavaScript promises are a way to handle asynchronous operations in your code. They provide a way to handle the outcome of a task, whether it was successful or not, in a more organized and cleaner manner. Promises in JavaScript are objects that represent the eventual completion or failure of an asynchronous operation.

For example, imagine you are making an API call to get data from a server. The process of getting that data can take some time, and during that time, your application can't do anything else. That's where promises come in. A promise lets you start the API call and then do something else, like display a loading animation while the data is being fetched. When the data arrives, the promise "resolves" and lets you know that it's available. If the API call fails, the promise "rejects" and lets you know that there was an error.

Here is an example of a promise in JavaScript:

```
const fetchData = new Promise((resolve, reject) => {
   setTimeout(() => {
      resolve({ data: "Data fetched successfully" });
   }, 2000);
});

fetchData
   .then(response => console.log(response))
   .catch(error => console.error(error));
```

In this example, I created a promise called fetchData that resolves after 2 seconds. The "then" function is called when the promise is resolved, and it logs the response. The catch function is called when the promise is rejected, and it logs an error.

In conclusion, promises in JavaScript provide a powerful way to handle asynchronous operations. They help you keep your code organized, clean, and readable. Whether you are making an API call, reading a file, or performing any other type of asynchronous operation, promises are a great way to handle the outcome of that task.

# References

JavaScript Promises. (2019, January 2). GeeksforGeeks; GeeksforGeeks.

https://www.geeksforgeeks.org/javascript-promises/

JavaScript Promises. (2015). W3schools.com. https://www.w3schools.com/js/js\_promise.asp

Promise - JavaScript | MDN. (2022, December 13). Mozilla.org.

https://developer.mozilla.org/en-

US/docs/Web/JavaScript/Reference/Global\_Objects/Promise