**Week 3 Research Assignment**

**Select five methods that can be used on an Array and describe the following for each: 1) what the method signature is, 2) what the method does, and 3) why would this method be useful (how could you use it)?**

There are several methods that can be used in arrays in JavaScript. One method is Splice. The splice allows specific elements in an array to be removed. This is useful so that any element can be selected to be removed rather than just the first or the last with the pop and shift methods. A good time to use this is if an employee leaves a company, and their name should be removed from the employee directory. Another method is concat. This method creates a new array by combining multiple arrays. This is useful when you are needing to combine two lists, such as combing two shopping lists into one. The forEach method will run the function on all of the elements of the array. For example, if you have a function(adding), you can add a certain number to each number in an array. The filter method allows you to search and get results of all the same elements. This is useful if you are wanting to find, for example, all of the red cars in an array of cars/colors. Finally, the reverse element will change the order of the array and turn it around. This is useful if you need the array to count down rather than count up.

**Resources**

[**https://javascript.info/array-methods**](https://javascript.info/array-methods)

[**https://www.w3schools.com/js/js\_array\_methods.asp**](https://www.w3schools.com/js/js_array_methods.asp)

**What is the difference between == and ===?**

When using ===, the data must have the same value and be the same thing. For example, 2 bananas === 2 bananas, however, 2 bananas === 2 apples is false. On the other hand, when using ==, 2 bananas == 2 apples would be true, and 2 bananas == 2 bananas is also true.

**Resources**

[**https://codeburst.io/javascript-double-equals-vs-triple-equals-61d4ce5a121a**](https://codeburst.io/javascript-double-equals-vs-triple-equals-61d4ce5a121a)