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Web 231- Discussion 8.1

*The advantages of using arrays over other options:*

If a developer wants to create many values that are a similar type an array is the most efficient way for the data to be stored. Another advantage to arrays is that it is fairly simple to access data from within the array. It is very easy to apply a search process to the array.

*The disadvantages of using arrays over other options:*

It is difficult to insert or delete one piece of data from within the array because all the elements need to be shifted. Another disadvantage to arrays is that to access elements from a string you need to use a non-negative integer instead of a string.

*Performance impacts, if any:*

Arrays are faster than lists because all of the elements within the array are homogeneous (as apposed to lists that can contain heterogeneous elements). Also, arrays store their data more compactly than lists. They are more efficient for large amounts of data. The reason why arrays are more efficient is because the computer knows where all of the information is stored so it doesn’t waste time “looking” for information.

*Readability and community preference:*

The best way to use an array is with an array literal. Usually, in JavaScript, arrays are declared with the ‘const’ keyword. There is also the option to use new Array() but this method can lead to complications. For best readabily its better to stick with array literals.

*Provide at least one example, in code of the selected option looping over an array of data*

Const object = {a: 1, b: 2, c: 3};

For (Const property in object) {

Console.log (‘${property}: ${object [property]}’);

}

//output

//”a: 1”

//”b: 2”

//”c:3”

Resources:

eshitadutta. (2022, July 3). *Advantages and disadvantages of array in C*. GeeksforGeeks. Retrieved December 5, 2022, from https://www.geeksforgeeks.org/advantages-and-disadvantages-of-array-in-c/

*How does array access affect the performance? solutions*. Programming and Tools Blog. (n.d.). Retrieved December 5, 2022, from https://www.folkstalk.com/tech/how-does-array-access-affect-the-performance-solutions/

*JavaScript Arrays*. JavaScript arrays. (n.d.). Retrieved December 5, 2022, from https://www.w3schools.com/js/js\_arrays.asp

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