In this thread I want to discuss JavaScript module bundlers and why we need them. I will also describe how best to choose the right bundler even though there are so many bundlers available. As well, I will discuss what impacts if any that a module bundler has on code scalability. So, what is a JavaScript module bundler?

“A bundler is a development tool that combines many JavaScript code files into one that is production-ready loadable in the browser. Module bundlers are the way to organize and combine many files of JavaScript code into one file. A JavaScript bundler can be used when your project becomes too large for a single file or when you're working with libraries that have multiple dependencies.” (Gardón, 2022). We need module bundlers to be able to source all files within one file which will reduce the amount of code written and can increase load times of our pages with having less HTTP requests. In other words, “One of the most important tasks of a module bundler is to take multiple JS files and combine them to create a single file that contains code we wrote along with required libraries to load in the browser.” (Nalakath, 2022) As far as choosing the “right bundler”, I think it is important to consider an npm package like Broswerify. This is also a JavaScript bundler and as is a popular one at that. So, we must consider what we want the module bundler to do, and we must ask, is it capable? I think it is important when choosing a bundler to of course research it first and see exactly what it can and can not do for you before choosing to go with one over the other. When we consider code scalability, we must entertain the following points regarding module bundlers as they will “help developers to manage dependency relationships in the project which will take a lot of time if done manually. Also, it helps load modules in dependency order for you. It will also help to avoid issues when the browser doesn’t support the module system completely. It helps to convert, optimize, and minify our code so that it works. And it helps to optimize and load assets like CSS, images, etc., in their dependency order.” (Nalakath, 2022)

References:

Gardón, D. S. (2022, March 21). *The Complete JavaScript Module Bundlers Guide*. Snipcart. Retrieved August 24, 2022, from <https://snipcart.com/blog/javascript-module-bundler>

Nalakath, N. (2022, June 29). *Module Bundlers and their role in web development. | Better Programming*. Medium. Retrieved August 24, 2022, from <https://betterprogramming.pub/javascript-module-bundlers-2a1e9307d057>