# JavaScript

JavaScript is an incredibly versatile programming language that can do more than anyone can imagine when it comes to web development. There is so much to learn with JavaScript, and because of that, a single course can not possibly teach everything there is to learn about it. Fortunately, learning the basics of JavaScript is vital in learning more advanced JavaScript later. Client-Side Scripting has helped me build upon those basics, teaching me the basics of variables, looping, functions, scope, and so much more. Additionally, I plan on taking what I learn from this class and apply myself in future applications, any team-based environments, and even for my own job.

The basic concepts I have learned from Client-Scripting using JavaScript have given me what I need to start building a variety of applications, some which may be useful, while others can simply be for fun. With fun in mind, I now have the basic understanding to create games using JavaScript. Based off one of our group projects, I can use *while* loops, and *if* conditions for the foundation of a video game. Additionally, the calculations and timer logic we had to create in class will also be used to create games. On a different note, forms are another great example of what I can apply myself within. Using events, functions, and regular expressions, one can check to see if a field in a form has the correct format. For example, email addresses must have a user name, followed by the *@* symbol, and the website. Forms have a significant meaning when it comes to business, for a customer, it can mean payment checkout, a contact form, or a sign in page. Practicing JavaScript and constantly staying up to date on the language can make the difference between a buggy flawed form, and a near perfect form. My last example here involves websites that appear to be alive with all sorts of on the fly styling, animations, and user interactions. In the future, this is something I will strive for when building a website. Using JavaScript’s events, it is possible to change the DOM with as little as a page load. This can be taken to a whole new level when one starts to experiment with JQuery as many big tech companies such as Microsoft, Google, and Apple use this custom library to make beautiful and fun websites. There is a *ton* of uses for JavaScript in web applications, and I am excited to see how I can bring my future projects to the next level with it.

Unlike many other programming languages, I feel that JavaScript is one of the more popular languages that many businesses and teams across the world work with. As a result, learning JavaScript also requires learning to work in teams. From my experience in group projects in Client-Side Scripting, I have learned that working in a team means making mistakes and finding the best solutions for the errors. This is where debugging code comes into play. Setting proper break points, stepping through code, and watching variable’s values and conditions change is an essential skill in JavaScript development. For example, one can identify the issue behind a function misfiring when they examine closely what is occurring within the function, the issue could be something a simple as a wrong operator being used. Although JavaScript is a completely different language, the concepts behind the language often apply to other languages. As an illustration, in Java, while loops, for loops, and if statements all still carry over, and while those are just a few examples, there are many more. To this point, learning JavaScript has essentially strengthened my knowledge and understanding of other languages that I work with such as Java, Python, and SQL. As a final point, through learning JavaScript, I can apply what I have learned at work to take on larger projects, or at the very least troubleshoot, analyze, and adjust any JavaScript that is found to be bugged. Frequently, companies are looking to hire candidates that are well versed in many programming languages, not just for one language, and I feel that with this class under my belt, I can safely apply myself even more than before. Businesses across the world are looking for new additions to their team’s and learning the in’s and outs of JavaScript will help become a better candidate.

Learning JavaScript this term in Client-Side Scripting has been extremely challenging, in fact, I do not think I have learned this much in any of my other programming classes. While it proved to be challenging, I was able to take something away from this class, and that was that hard work and dedication, along with diligent studying in JavaScript can make any program work, no matter how impossible it seems. This is not the end of the journey, but only just the beginning, learning JavaScript is a full-time job. I will do my best to keep up on latest trends in JavaScript and to also practice using every so often with applications such as creating games, forms, and on the fly styling. On top of that, I wish to work in projects later that involve JavaScript, so I can become well verse in team-based efforts. I am looking forward to seeing what is in store for the future with JavaScript.