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Assignment 6

1. For our project, we are comparing the C++ programming language to the JavaScript programming language. C++ was developed by Bjarne Stroustrup in 1979 as part of his Ph.D. thesis. After exposure to the Simula programming language, Mr. Stroustrup decided he wanted to create a C compiler that would include object-orientation. He chose to improve the C language because he was working for Bell Labs, where the C language was developed, and C was a language known for its portability and speed. The first compiler he developed to accomplish this task was called “C with Classes”, which is a self-hosting compiler. The first language manual for this language was published in 1985, called “The C++ Programming Language”. The name of the language was changed to C++ to represent the idea that this language was an incremental enhancement to the C language. C++ would later be enhanced to include support for features like regular expression support, atomics support, and a threading library (History of C++ - C++ Information, 1).

The JavaScript programming language was developed by Brandon Eich in 1995 (A Short History of JavaScript, 1). However, the language did not gain popularity until 2005, after Jesse James Garrett released a paper that describes a set of technologies implemented using JavaScript (A Short History of JavaScript, 1). This paper started a movement in large developer communities to use JavaScript as a scripting language to build web applications because data could be loaded in the background without having to reload an entire web page (A Short History of JavaScript, 1). Users of the programming language claim its benefits include a “flexible syntax, loose type system, powerful reflection mechanisms, and shorter build cycles” (Kienle, 1).

We chose the C++ programming language as our primary language because it is built upon C. Therefore, the programs written in the language are expected to be portable and easy to compile, like C. We chose JavaScript as our secondary programming language because the idea for our project is based off the efforts of the Wycliffe Associates, who are trying to build a written language translation application using JavaScript. Their choice for JavaScript, as described by one of their managers, can be attributed to its popularity, flexible language, and portability. In this project, we will be building our own simple translation machine written using both the C++ and JavaScript programming languages so that we may compare the two languages.

**References**

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