

Introduction

The purpose of this project is to demonstrate practical knowledge of the java programming language, regular expressions, finite automata, software engineering and design, as well as general problem solving skills in a group dynamic. Throughout this project we have applied knowledge acquired during our undergraduate studies to design, build, test and deploy a working compiler for a LITTLE language.

A working compiler, for even a LITTLE language, is a positive for future endeavors and job searches. It serves to show that we not only understand how to program but that we also understand the foundations of the computer science field. By completing this project, we have gained insight into each of the elements that make up computer science and how they fit together to create a finished product.

In the course of this report we will touch on the background and purpose of a compiler, each of the components that make up a compiler and a summary of what we learned, what we could have done better, where we will go from here.

Background