Virtualization of a Turing Machine Weekly Report: 4-18-2021

Outlined in this document details the work and progress toward the making of the Virtualization of a Turing Machine Project for the week of 4-18-2021.

Throughout the week, the team continued to polish the project for the upcoming deadline. This includes adding an "edit on the fly" feature while testing machines and also implementing more error messages during compilation. There were also a few more example programs added by the request of Dr. Chen for his CSC-475 course.

Brett George spent most of the week working on the "edit on the fly" feature. The original concern from last week was time constraints and the plethora of fail points a feature like this would introduce. However, after discussing with Dr. Chen, the feature concept was simplified to a state that could be implemented in a reasonable manner. Because of this realization, Brett was able to implement this in a timely manner. He also managed to add extra parameters to tokens for syntax error purposes as well. The compiler now tracks the line number in which the token is tied to.

Jisue Lee continued to work on error messages while also working on the user manual. With the latest additions of line numbers tied to each token, it will be easier to identify where errors are produced from in the editor.

James Merenda worked to add a few more examples that Dr. Chen requested to be translated from examples in CSC-475. This includes "wcw, where w is an element of {a,b}*" and "x-y, where x is greater than y". James also focused on adding information to the user manual throughout the week.

Some problems the team faced during the week include the following. Aside from time constraints due to an upcoming deadline, nothing to note at this time.

Since this is the final report for the semester, there will be no further plans to work on this project other than preparation for presenting our project and ironing out miniscule details.