\$LANG Language Proposal

Daniel Cole, Rashedul Haydar, Megan Skrypek, Tim Waterman dhc2131, rh2712, ms4985, tbw2105

September 30, 2014

Motivation

Most 'modern' programing languages trace their origins back decades, to before the advent of cheep, general purpose multicore CPUs. They were designed for a distinctly monothreaded environment. While libraries and enhancements to mainstay languages such as C/C++ and Java have added multithreading capabilities, it remains in many ways a bolted on kludge. Newer frameworks such as Node. js provide more integral support for asynchronous operations, they lack the depth of support and power of a fully complied language. with \$LANG, we aim to build a language that has the power and flexibility of a fully complied C style language, while having native threading support for modern multithreaded applications.

Description

\$Lang is inspired by C, which has a very well known syntax, and has been one of the most widely used languages since it was released over forty years ago. \$Lang is a general purpose language that supports all standard mathematical and logical operations. In addition to the standard C primitive types (int, double, char, etc.), \$Lang has native support for the string type.