M. Sean O’Brien

Luke Smith

Red

Red is a language developed by Nenad Rakocevic, meant to expand on the REBOL (Relative Expression Based Object Language) language. Rakocevic describes Red as “the world’s first full-stack language”, or a language that produces a packaged binary for any platform, to any other platform. Red is homoiconic (its own meta-language and data format). It also supports functional, imperative, reactive, and symbolic programming. We chose this language because of how new it is, and because of the lofty goals that it is pursuing. In fact some of the language’s features are still in development (such as garbage collection), so we thought it would be interesting to explore a language still on the ground floor.

The proposed project schedule is as follows:

Date Tasks

~~Jan 26 Initial language selection (Luke)~~

~~Jan 28 Initial research and feasibility study (Luke and Sean)~~

~~Jan 29 Prepare team organization deliverable (Sean)~~

~~Feb 1 Submission of initial team organization (Sean)~~

~~Feb 4 Research brief history (Sean)~~

Feb 4 Research general language overview (Luke)

Feb 8 Write section on brief history (Sean)

Feb 8 Write section on general language overview (Luke)

Feb 11 Compare language with Sebesta’s evaluation criteria (Sean)

Feb 11 Research interesting features and select code fragments for report (Luke)

Feb 15 Write section on Sebesta’s evaluation criteria (Sean)

Feb 15 Write section on interesting features and code fragments (Luke)

Feb 15 Review technical debt (Luke and Sean)

Feb 21 Team meeting with Dr. Gurka (10:00am)

Feb 22 Review technical debt (Luke and Sean)

Feb 26 Write paper final draft (Luke and Sean)

Mar 3 Prepare presentation (Luke)

Mar 5 Write cover letter (Sean)

Mar 7 Team meeting with Dr. Gurka (10:00am)

Mar 7 Practice presentation

Mar 8 Review technical debt (Luke and Sean)

Mar 12 Submit paper copy for review

Mar 14 Practice presentation with Dr. Gurka (10:00am)

Mar 21 Practice presentation

Mar 22 Final technical debt review and polish (Luke and Sean)

Mar 27 Target completion date

Mar 21 Practice presentation

Apr 3 Presentation and final submission

Initial resources and standard:

Red Programming Language official homepage

<http://www.red-lang.org/>

Red GitHub repository

<https://github.com/red/red>

Red official documentation

<https://doc.red-lang.org/en/>