IT3003 Final Project Summer 2021

In this ultimate assignment you will collaborate with your peers to add langauge features to CLite.

Fork the donor project: https://github.com/nicomp42/CS3003Summer2021FinalProject. Clone your forked version to your desktop so you can make changes to it.

1. Review CLite from the textbook, particularly Appendix A.
2. Design three new features for the language:
    a. add a new data type,
    b. add a new control structure, and
    c. add a new binary operator.
3. Modify the design by adding to the documentation in sections A.1-A.4 (follow the formats given there) as necessary to define the features you added. This includes Meaning Rules and Type Rules as necessary to clarify the features you added.
4. Write a simple test program (test.cpp, for example) to demonstrate your new langauge features.
5. Demonstrate that your parser and lexer handle your test program ansd your language features.

You are not executing your test program. You are just parsing / lexing it.

This version of CLite generates Java btyecodes. Ignore the Code Gen logic. If you need to edit it or remove it, no problem.

All pull requests against my donor project will be ignored.

Be cognizant of what CLite does: the grammar defines syntax and vocabulary. It does not define semantics. You get to make up the symantics and (good news everyone!) you don't have to implement them.

Deliverables on Canvas:

- ✓ A single Word Doc, named according to our standard and submitted through Canvas , containing:
    - Names and UC IDs (Not M Number) of all project members.
    - Project responsibilities of all project members
    - Text from Steps 3 and 4 above.
    - A snippet (or two) illustrating the changes you made to the Clite project.Do not provide the entire program listing: make it easy for your reader to understand the changes you made.
    - The URL of your GitHub repo where your new version of CLite resides. Be sure it's public.
    - A screen snip of the output of your program from your dev environment and commentary descibing the results. Think about this: how will you demonstrate your successes?
    - A link to a YouTube video demonstrating your CLite project and your project execution. The video must be no longer than four minutes. All members must introduce themselves and talk about their part of the project.

Do not zip the Word doc.

Do not post this document or any solution in any form or fashion. Do not submit in part or in whole to any sites, blogs, wikis, repositories, or databases except as an exhibit of your work with your identifying information.

Note: Each group is expected to do their own work.

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