

Compiler Project

CSC 7351, Fall 2018

Due: 1 December 2018

Pick a reasonably sized compiler project of your choice and implement it in the compiler of your choice. Depending on the size of the project, it could be implemented alone or in a team of two. If you work in a team, I strongly recommend that you use a pair-programming style, i.e., that both of you sit in front of one screen.

As examples for the scope of such a project, I provided the project handouts from CSC 7351 in 2012 on the course web page. Possible projects include:

- the strong mobility project from 2012 in `javac` or `LLVM`,
- retroactive abstraction or multimethod dispatch from the Brew project,
- comparing the ease of implementing the object project from 2012 in `javac`, `LLVM`, and `Polyglot`,
- adding a new language frontend and backend to the Tiger compiler, and
- adding an equation translator to the TCE that makes spatial symmetry blocks explicit in the equation.

Submission

Please, discuss with me what you want to implement no later than two weeks after the midterm (preferably sooner). If you are interested in working with `Polyglot`, let me know. I have detailed instructions for installing the compiler and the necessary tools.

I strongly recommend that you use source code version control, such as `Git` or `CVS`. You could either install them on your own machine or you could use a web-based version control service, such as `GitHub`.

To submit your project, upload the code to your `classes.csc.lsu.edu` account in a directory `prog2` and submit it using

```
~cs7351_bau/bin/p_copy 2
```

Please provide a `README` file (as text, PDF, or Word) as well as test cases with your submission. In the `README` file document and justify your language design choices, explain the architecture of your code, and explain what's working and what's not yet implemented. Write test cases to highlight the details of your language design.

I will likely not test and run your project myself. Instead, please, schedule a demo with me during finals week in lieu of a final exam.