Static Resource Analysis of Smart Contracts – Milestone 7

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1 Summary of updates

For this milestone, I focused on fixing bugs and making minor usability adjustments to my compiler, on running empirical benchmarks of my compiler against existing blockchain programming languages, and on preparing a draft of the report and the poster.

2 Accomplishments

Since last milestone, I have:

- Fixed bugs involving inter-contract calls.
- Compared the performance of the bytecode output by my compiler with the bytecode output by the Solidity compiler on a similar program.
- Worked on the report and the poster, incorporating results from the empirical benchmarks.

2.1 Meeting the milestone

In the previous milestone, my stated goal was to add support for the contract acting as the caller. I ended up abandoning this goal to move more of my effort toward the report and the poster. I think that this is reasonable for a later milestone.

3 Looking ahead

Until the end of the semester, I will continue to revise my report and my poster. I don't expect to work any further on adding features to the language, but this could (in principle) be something I work on in the future.

In the report, I wish to develop in greater detail the experimental results section, for which I will write more benchmarks. In the poster, I wish to incorporate these results into charts and figures.

Upon some revisions to the report, my project will be in a presentable form for Meeting of the Minds.

3.1 Revisions to future milestones

None beyond what I stated in the **Looking ahead** section.

3.2 Resources needed

I'll just need to order a poster from TartanInk.