

Beepboop Programming Language

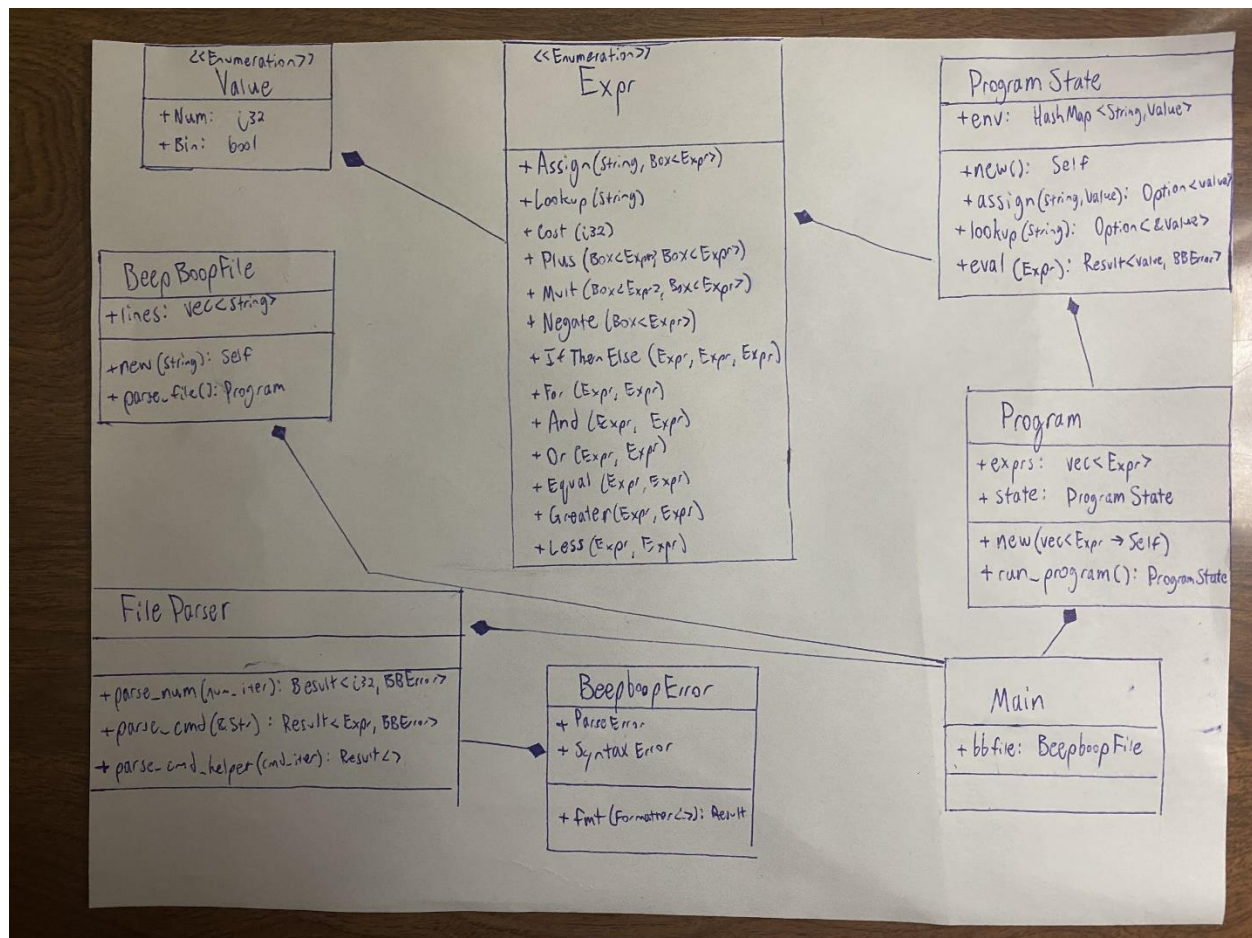
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Final State of System

The final state of our system is fully functional and able to be used, with variable assignment, integers, booleans, addition, multiplication, negation, conditional branching, loops, comparison (greater, equal, less), and logic (and & or).

We did not implement functions or lists because they were not in original scope, but we finished modulo and all of the looping since the last project.

Final Class Diagram and Comparison



This has not substantially changed from the original diagram other than added functions and expressions! Our class structure was almost all of what we had done for the first one, and we have been implementing features within it since.

Third-Party Code

We haven't used any third-party code except dependencies on the Rust standard library, specifically `std::io`, `std::collections`, `std::env`, `std::error`, `std::fmt`, and `std::fs`.

OOAD Process

List three key design process elements or issues (positive or negative) that your team experienced in analysis and design of the OO semester project.

When we were trying to implement number parsing, we encountered the issue that since we “used up” the first keyword to aid the parser in understanding we were beginning a number binary, all numbers have to be led by a zero, which is “beep” in our language. We tried to design a workaround but could not implement it.

Our second challenge was working together during the pandemic, because we could not meet in person. This meant most of the work was done non-collaboratively, which was highly unfavorable because the main advantage of a 2-person group was the amount of collaboration we could have.

Our best design process element was our workflow, which allowed us to implement the new expressions very quickly. Once an implementation was thought of, it was a quick and easy process to add it to the whole chain of dependencies we have. This was our main workload, so it was great that once we had the main structure established it worked so well.

Recording

13-minute recording is submitted with this document.

Code

Github repo: <https://github.com/e-rhodes/beepboop>