Senet

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A Programming Language for Playing Board Games

The Team

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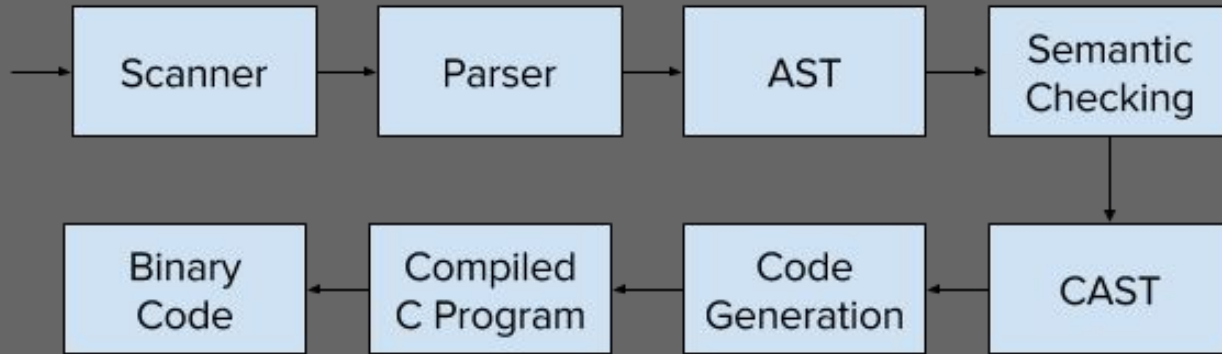

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The Goal

- Expression of setup and flow of general, two-dimensional board games
- Intuitive and simple
- Interactive gameplay
- Static, strong typing
- Mix of C and Python

Language Features

- Basic object-oriented programming
- Assert functions
- Boards library
- Static typing
- Passing between @turns functions

Compiler Architecture

Senet Program Structure

- program -> setup-block turns-block EOF
  - Two program sections:
    - setup-block -> @setup {declaration-list statement-list}
    - turns-block -> @turns {function-list}
    - declaration-list -> /* nothing */
      | declaration-list declaration

Demo

Future Work

- Integrate with written C code that implements virtual tables, generic lists, garbage collection, and makes every variable an object.
- Develop a larger standard library of boards and pieces.
- Implement exceptions.
- Allow developers to create their own libraries.