1 Usage

The usage of the compiler is quite simple, to compile it go to the root of the project and execute `make -C src/`, then you just need to use the given script `./jlc <sourcefile>`.

2 Language specification

The language is specified using `BNFC`, just open the `Javalette.cf` file in order to check all the grammar rules of the language.

3 Shift/reduce conflicts

4 Implemented extensions

We have implemented 5 extensions:

- **Arrays**
- **Multidimmensional arrays**
- **Structures**
- **Classes**
- **Classes 2 (with dynamic dispatch)**

5 About the compiler

The compiler consists of the following pipeline:

1. **Lexer**: Generated with `BNFC`, this phase reads the source file and translate it into a set of tokens.

2. **Desugarer**: Removes syntax-sugar such as for loops and structure/classes definitions.

3. **Typechecker**: Checks the program is correct, and returns the typed program.

4. **Code generator**: Using the typed program, generated the `LLVM` code necessary to run the program.