

# Assignment 7: Java Type Checker

## 1 Implementation

You are to implement a type checker for the object-oriented extended Java language from Assignment 6.

You will implement a Java class `Verifier` with a main method that reads a file in the given language from standard input (`System.in`) and either prints “ok” if (and only if) the code is correct with respect to Java’s static type rules (in other words, `javac` would accept the input). If the code does not type check, you should print “error” to `System.out` and an explanation of the problem to `System.err`.

Your code must implement the type checking, you must not call `javac` or similar tools that perform type checking. While you must support the extended calling conventions of our extended Java dialect, they should not cause any complications when type checking.

As always, if the file does not parse, the program should print “Parse error.” to standard error (`System.err`).

## 2 Submission

You must submit the implementations to your subversion repository to the directory `comp3351/f2007/$USER/P7/`. Include only the provided grammar, the Interpreter implementation and the provided build script. The files must be called

- `objects.jj`
- `Makefile`
- `src/edu/du/cs/comp3351/p7/Verifier.java`

You must check that the submitted code compiles by invoking `make`. Verify that the output of your program matches the expected output using your own testcases.

You will not get any points if your submission does not compile without modifications, fails to run with the provided testing script or if your submission is in the wrong directory. Make sure to use “P7” for the directory

name and **not** “p7”. Furthermore, make absolutely sure to use the correct package (“edu.du.cs.comp3351.p7”) for your `Verifier` class. Also make sure that your `main` method is in `Verifier` and not in `Parser` (or `Interpreter`).