**Assignment 2. Due Wednesday October 7th, 11pm.**

The task for assignment 2 is to create symbol tables for MiniJava programs, as explained in class and in our textbook.

To help you get started, this assignment’s zip folder contains all the files necessary to build a rudimentary symbol table for MicroJava programs. The symbol table has only one level instead of the required 3 levels table, and it does not contain all symbols from the MicroJava programs. Look at the FilesMap.txt file for a description of the different files in the zip folder.

The code for the symbol table should be modular and encapsulated, hiding the details about the data structure. You should detect and report errors related to program symbols, such as variables that are declared more than once in the same scope. Verification of symbols used in program statements will be done in a later phase.

The string provided by the toStringTree method is very hard to read. For 5% extra credit, write an indentString method that prints a tree in a more readable format, something like the file indentedTree.txt. Currently, the indentString method in TestGrammar.java just returns its String argument unchanged.

Write a report that contains the following:

1. How long did you spend to do this assignment?
2. What problems (if any) did you encounter in this assignment, and if yes, how did you solve the problems?
3. Is there any problem you encountered that was not fixed?
4. Was this assignment helpful for your learning about the visitor pattern and about symbol tables?

In addition to your report, submit the grammar (.g4 file) and any other file needed to run your program. Also provide a FilesMap.txt file similar to mine, that describes the files in your submission and instructions on how to compile and run your program from the command line. Submit by e-mail to [longpre@utep.edu](mailto:longpre@utep.edu) with “CS4352 Assignment 2” or “CS 5390 Assignment 2”on the subject line. Penalty for late homework is 1% per hour, up to 10% for up to 24 hours late. If you get < 80% on assignment 2, you may submit this assignment again after the deadline until the deadline of assignment 3. We will calculate a new grade as the average of the two submissions, up to a maximum of 80%.