

CSC 311 Fall 2017
Milestone #2
Due Nov. 12, 2017 Sunday 11:59PM

Instructions

Submit your completed work using Blackboard before the deadline.

Submit the JFlex and Byacc/J file and also the inputs you used for testing.

Project Description and Requirements

Download the files provided for this milestone. Understand the Jflex and Byacc/J file.

I have written some skeleton code in the Byacc/J file.

You have to fill in the places where it is marked as `/* YOUR CODE HERE */`.

1. Add to JFlex file the capability to accept comments in our program
 - a. Comments can be in the form of `/* */` or `//` until end of line
 - b. Comments in `/* */` format can be multi-line.
 - c. Comments in `//` format can only be a single-line.
2. Fill in action items for the production rules marked as `/* YOUR CODE HERE */`
3. Based on what was discussed during lecture and looking at the skeleton code, implement the following methods:
 - 1) `public void pushScope()`
 - 2) `public boolean canRetrieveSymbol(Node id)`
 - 3) `public void exitScope()`
 - 4) `public void printSymbolTable()`

The goal is to perform simple semantic analysis where it can use **multiple scopes** to check for undeclared variables and check for multiple declarations of same variable.

Grading Criteria

1. Can handle multiple scopes – 20%
2. Can retrieve symbol from outer scopes – 20%
3. Checks for undeclared variables – 20%
4. Prints error message with a descriptive message when detected undeclared variables – 10%
5. Checks for multiple declarations – 20%
6. Prints error message with a descriptive message when detected multiple declarations – 10%