Mathew Boston report

1 ) I spent about the entire time given to me reading over the code given to me to understand how to search the remaining variables and methods inside of the classes. Once I understood how I was able to write code that would go through each class and all the methods, parameter, fields, and variables associated with it and their types.

2) A major problem I ran into was when methods had 0 or more than one parameter, this caused my code to break and receive a null pointer exception. I fixed this by adding a while loop that would first see if the current parameter ID was not null, if not add it to the symbol table. This somewhat fixed my problem for method with zero to one parameter but still did not work with multiple. I corrected this in my grammar by allowing multiple parameter and in the process made the grammar less ambiguous from assignment 1.

3) I had issues with trying to detect multiple instances of the same variable. I am confident it is related to how I was trying to separate symbol tables for each level. The separating caused a lot of null pointer exception and was omitted from the submitted code, in turn disabling the ability to confirm the same variable declaration was not in the same scope. I believe to have found the solution to having multiple symbol tables without error and will be present for the assignment 3 resubmit.

4) I found this assignment extremely helpful in understanding and visualizing the way a compiler will traverse the parse tree it generated to great a symbol table. It also allowed me to understand in what order the tree is traversed.