

# CSE 5321: SOFTWARE TESTING

February 26, 2023

## Homework 2, 10%

Due: 3/13/2023 11:59PM

## 1 Introduction

This individual assignment requires the student to review two Java programs that implement a singly-linked list. The program files for these two programs are:

Node.java, and  
SLL.java

The student is required to review the two programs using the code review checklist given in Section 2, and produce one review report (not one review report for each of the two programs).

## 2 Code Review Checklist

1. How well do the programs implement the intended functionality?
2. Is the code easy to understand? If not, how to improve it?
3. Are the interfaces of the functions well documented? If not, what needs to be improved and how?
4. Is each class/method correctly implemented? If not, identify and explain the errors, describe how the errors can be corrected, and revise the code and submit the revised code.
5. What are the cyclomatic complexity of each of the methods? What are the weighted methods per class?
6. What are the computational complexity of each of the methods? The computational complexity is also called the big oh notation  $O(x)$ , which gives the “time” required to execute an algorithm. The computational complexity is usually taught in an algorithm and data structures course.

## 3 What To Do

1. Review the Node.java and SLL.java programs using the review checklist given in Section 2.
2. Produce one review report.
3. If the given programs are incorrect, revise the programs and produce the revised code.

## 4 What and How To Submit

Submit one review report and revised code, if any, on Canvas.