

**CHRISTOPHER NEWPORT UNIVERSITY**  
DEPARTMENT OF PHYSICS, COMPUTER SCIENCE & ENGINEERING  
**CPSC 480/CPSC501: SOFTWARE ENGINEERING**

**\* Assignment 2: Reverse File \***

**Goal**

Practice creating JUnit test cases and using GitHub.

**Description**

Write a class “Reversal” that has the method:

public static void reverseFile(File input, File output) throws FileNotFoundException

This method receives an input file and an output file. It reads lines of text from the input file (lines could be empty) and writes these lines in reverse order (where the first line from the input will be the last in the output, second line will be one before last, and so on) with the words in each line in reverse order.

For example, given an input file of 2 lines {“Lorem ipsum dolor sit amet,”, “consectetur adipiscing elit.”}, the method writes the output file {“elit. adipiscing consectetur”, “amet, sit dolor ipsum Lorem”}.

There will be exactly one blank space between words, and no spaces at the beginning or end of a line. However there can be empty lines anywhere throughout the file.

The method should throw a “FileNotFoundException” if any of the files do not exist.

No static variables should be used.

Write a class “ReversalTest” that thoroughly tests your implementation.

You should aim at 100% test coverage of the class “Reversal” (as reported by Coverage) and 0 warnings/errors (as reported by Eclipse).

**Groups**

This assignment is done individually.

No code should be taken or disclosed to/from other people, including online resources.

**Submission & Grading**

You should submit your GitHub handle and the name of the public repository where your public repository resides. All work done should be pushed to your GitHub account. After the due date, the instructor will fork your program and tests.

Your program will be graded based on the degree to which they pass the instructor’s tests, the degree of coverage provided by your test classes, and whether they were submitted through GitHub (with at least 5 versions committed across several days).

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