## CONCORDIA UNIVERSITY

## DEPARTMENT OF COMPUTER SCIENCE AND SOFTWARE ENGINEERING

COMP 5541, Winter 2021 Instructor: R. Jayakumar

## **ASSIGNMENT 3**

Issued: Mar. 16, 2021 Due: Mar. 30, 2021

**Note:** Each team must electronically submit a single report for each assignment (which will be marked by the marker). The report should identify individual contribution by each student of the team.

## Software Quality Control for Smart Undo Capability

In order to ensure the quality of the software for the Smart Undo capability you designed in Assignment 2 (and will be implementing in the project), in this assignment you are going to do the following:

- Perform a technical review of the designed software to ensure that it satisfies the requirements. Your report should clearly document how the technical review was done, the errors found and how the errors are corrected.
- For each of the components in your corrected software, design the necessary component tests to cover all the necessary categories (interface, local data structures, boundary conditions, independent paths and error-handling paths) of testing. Your reports should clearly document each of the component level test, its purpose, the input to be applied and the correct output.
- Select the appropriate integration strategy (top-down or bottom-up) for your corrected software and design appropriate integration tests to ensure the software is integrated properly without any errors. Your report should clearly justify the selected integration strategy, each of the integration test and its purpose and how this test should be done.

Your submission should include a report explaining all the required information with proper justifications. You should also discuss any change to the requirements and/or design that you have to make to ensure the quality of your designed software.