## **Midterm Examination Makeup**

Version 1.0
Due December 16, 2018

If you complete both parts carefully and correctly, your midterm exam grade will be raised to 85, but no higher.

Part A. – Critically analyze your Midterm submission, question by question, discussing all errors of commission and omission you find. Please do not feedback my solutions to each problem. Instead, discuss problems with your submission. I would expect you to use my solutions to help you do that, but you are analyzing your errors, not my solutions.

Part B. – Provide solutions for each of the requests, below:

- 1. Write a Critical Issues section for your Project #1 OCD, e.g., discuss each critical issue you can think of, and propose a solution.
- Describe in concrete detail how the CsMessagePassing communication system provided in the Project4HelpF2018 folder works. You will need to discuss the interfaces, classes, and important methods.
- 3. Create a list of messages needed by Project#4 communication between Clients, and Server. Assume that the server will create a process for your Code Analyzer and run it, returning a message containing the results.
- 4. Describe the Message Dispatching process you will use in your Server.
- 5. Write the code that, using the .Net Process class, starts your Code Analyzer with an appropriate command line.
- 6. Write a class that provides a method to open a specified file, retrying a specified number of times, if the initial attempt fails.
- 7. Draw a package diagram for your Server for Project #4.
- 8. Write all the code for a Client receive thread that dequeues server reply messages and writes a notification that a message has arrived in a TextBlock in your Client GUI. Note that there will be other work for this thread to perform, but you are only responsible for the code that satisfies this request.
- 9. What is a C# task? Show two ways of using one.
- 10. Drawn an activity diagram for your Project #4 Client.