Midterm Examination Makeup

Version 1.0 Due December 16, 2016

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 an Executive Summary for your Project #5 OCD, e.g., summarize the concept, structure, and critical issues you expect to discuss in the body of the report.
- Describe in concrete detail how the Peer-Comm-SelfHosted communication system provided in the Project4HelpF16 folder works. You will need to discuss the interfaces, classes, and important methods.
- 3. Create a list of at least seven messages needed by Project#5 communication between Clients, Repository, Build Server, and Test Harness. Please list the name of the message, its destination, source, and contents.
- 4. Describe the Messages used by Clients, Repository, and TestHarness in Project #4. The structure¹ of these elements should match the requests made to each server.
- 5. Write code for a Communication send thread that switches between proxies to send to different destinations. This could be one of the required prototypes you supply with the Project #5 OCD. Include the ability to save a previously used proxy for later use.
- 6. Draw a class diagram for file caching on the Project #5 Clients and Repository server. Explain the responsibilities of each class.
- 7. Enumerate issues with Repository operations and provide proposed solutions for each.
- 8. Where would you expect to use C# tasks in an implementation of the Code Repository as described in the Project #5 statement.
- 9. Write code to list all the Repository packages submitted by a specific author. Assume that each package in the repository has an associated XML MetaData file with that information.
- 10. Explain how the Federation of Project #5 supports continuous integration.