

## Homework Assignment #2

**Due Date:** Wednesday, July 06, before 10:00pm

### Tasks:

This is an individual assignment – all questions should be answered by you, according to your thinking.

- 1.) Familiarize yourself with the purpose of doing reflective essays (attached).
- 2.) Answer the following 3 questions.

- Q1.** *Which lifecycle model (or mix of models) would you propose for the project you are part of? (You may need to consult some of chapters 7, 20, 21, 25, 35, and 36 in “Rapid Development” + the lecture notes.) What are the reasons for your choice?*
- Q2.** *Select two of the many best practices listed in Part III of “Rapid Development” (with the exception of those that concern various lifecycle models) that you think will be most valuable to adopt for the project you are part of. Explain your choice.*
- Q3.** *Watch the following 40-minute online streamzine on “Commonality and Variability Analysis”:*  
<http://www.netobjectives.com/streamzines/CurrentStreamzine/>  
*Then, answer the following questions:*
- Q3.1.** *In what ways is a door bell the same as a guitar? List at least three distinct commonalities between these two objects. What other objects are also the same to these two, based on each of the commonalities you listed?*
- Q3.2.** *How would you augment the component/abstraction design on slide 24 if your system suddenly had to accommodate the following additional rule (in addition to the already existing rules listed on slides 19-21), created to respond to a recent change in the law:  
 “The value of assets taken physically outside the country where they were originally acquired cannot be written off, except in the case when those assets are returned back to the country within 180 days of the acquisition.”  
 Sketch a diagram and explain.*

### Format:

- Use at most 2 pages of text total for all of your answers. Non-textual artifacts (e.g., images), if any, are limited to 1 additional page (embedded inside the same document).
- Format your document to be single-spaced, using font size 11 or larger.
- Save your work preferably in rich text format (RTF or DOC). We cannot edit (and add comments to) PDF without copying the contents over.

### Things to remember:

- Name the file that contains your essay using the following convention:
  - *LastName-cse403-hw2.rtf*, where *LastName* is replaced with your last name.
- Put your name in the header field of your document, not only in the filename.

**Submission:** via UW Catalyst’s eSubmit tool:

<https://catalyst.washington.edu/webtools/secure/esubmit/turnin.cgi?owner=alanliu&id=3266>

**Follow-up:** As part of our feedback, we will pose a follow-up question or two, based on what you wrote. You will be expected to answer that in writing too, though we anticipate that the answer will take you less time to produce than the original writing did.

## Reflective Essays

The goal of reflective essays is to:

- (a) get you to think more deeply about certain aspects of the course;
- (b) practice the skill of reflecting.

Reflecting upon your experience deepens your understanding of the domain, shows it in a different light, and helps you to generate new ideas and possibilities in that and other domains. Practicing reflection is important, since this skill is critical for becoming an expert in *any* domain – only by reflecting upon what happened can you learn from successes and mistakes.

Here are some general techniques that will help you get the most from your reflections:

- Write in the first person about what happened to *you*, not to some abstract person.
- Write about things that are meaningful to *you* or happened to *you*. You will have more energy to dig into those topics.

Consider the following aspects as you reflect upon your experience:

- What stood out for you?
- What insights did it give you?
- What is *one* thing you will do differently as a result of what you learned?
- Use facts to ground your assertions.
- Do not confuse opinions with facts.

We are looking for stories about issues meaningful to you, communicated in a way that makes them meaningful to the reader (i.e., us).

Good essays have solid content, clear style, are grounded in factual assertions, and communicate well. Incidentally, good code has the same characteristics, so excellent software developers tend to also be excellent writers. In the end, writing code and writing a good essay are both about communicating effectively with your audience – an indispensable skill regardless of your domain of expertise.

In our experience, good essays often include one or more of the following aspects:

- Demonstrate how lessons from this course enabled you to do something that you were not able to do before. This may include noticing things about the world around you that you had not noticed before.
- Illustrate how this course is (or is not) changing your beliefs and ideas of what is, or is not, possible for you.
- Discuss how you have used lessons from this course in other parts of your life, or vice versa.
- Analyze situations using tools learned in this course, and discuss how well those tools worked for you.
- Discuss a situation from multiple perspectives.