## Introduction

This final exam requests a written analysis of various aspects of the project that you just completed, with reference to the material in the lectures and the literature to support your analysis.

This exam is due **before midnight**, Monday, June 9. Turn in your work through the web link.

Write 1-2 page answers for each of the three questions below. Each answer can be for the servlet, the midlet, or both, as you like. In any case, use specific examples from your project and specific references from the literature to support your conclusions.

The page format should be 12-point type, single spaced, with reasonable margins.

## **Grading Guidelines**

- Is there a clearly stated and relevant response to the question?
- Is there a good analysis that supports the response? Relevant specific details about the project should help build a convincing analysis.
- Are there appropriate citations from the literature to help structure and validate the analysis? Supporting or contradicting citations should be incorporated with appropriate discussion.

## Questions

- a. Where would you place your product on the grid in figure 1.1 of The Mythical Man-Month? Using specific references to Brooks' writings discuss the specific aspects of your project that lead you to place it where you do. Remember that I generalized this matrix in lecture to describe the differences between LittleApp and BigApp products. Don't focus too narrowly on the type of product that Brooks was building. Think about the issues he raises and apply them to your product.
  - b. What would you do differently if you were going to do this project again and wanted to be able to place it closer to the bottom right corner? Again, be specific and show how the changes would reposition the product in your analysis.
- 2. Pick any one of the references on the Readings and References page except The Joel Test. The content of the paper should be relevant in some way that you want to describe. (In other words, don't answer part (b) with "this didn't apply to our project.")
  - a. Identify and describe two key ideas expressed by the author of the selected paper.
  - b. Describe how the two key elements you identified in (a) are relevant to your project. Did your experience on your project support or contradict the ideas put forth by the author? Be specific in describing the stated idea and the specifics of how they applied to your project.

- 3. The intent of this question is to let you characterize the final quality of your implementation. I know that not all groups had an extensive quality assurance and test process, so there may not be as much documentation as is suggested below. In that case, do the best you can to explain the testing and bug tracking that you actually did do and the quality of the released application.
  - a. Describe the testing process that you applied during development. Be as specific as you can. For example, answers to some or all of the following would be useful.
    - How many documented tests do you have?
    - What aspects of the system do they test?
    - Give an example of a module test and an integration test.
    - How easy are these tests to run? Is there an automated framework?
    - Include a section test run output.
    - Identify two major challenges in doing the testing and how you solved them.
  - b. Describe what you think the final state of the system is in terms of bugs (ie, features that exist but don't work as intended). Again, be as specific as you can. For example, answers to some or all of the following would be useful.
    - How many bugs were found?
    - How did you keep track of them and assign responsibility for closing them?
    - Include a section of your bug list.
    - How many bugs are still open?
    - Approximately how many unidentified bugs do you think are left? Why do you think that?