

CSE/ISE 308 (Software Engineering) Final Exam
SUNY at Stony Brook, Fall 2008

Name: _____

Student ID #: _____

Instructions: Please use a pen for all answers. Each question is worth the value noted in parentheses after the question number.

1. (10) Describe one organizational problem that your team experienced this semester and how your group resolved it. You should also briefly describe the organizational structure of your project group, including the division of responsibilities among team members.

2. (10) Briefly describe the testing process that your group used for your programming project. What sorts of test cases did you use, and what kinds of testing did you employ?

3. (10) Describe the development process that your group used this semester. Briefly discuss how closely (or not) it resembled the standard development models that we discussed this semester, such as the Waterfall model and the Spiral model.

4. (10) List two ways in which you might be able to apply the concept of “reuse” to a software engineering project.

5. (30) The Blackboard online content-management system (CMS) allows University faculty and students to interact with one another for educational purposes (e.g., for the distribution of class materials and communication regarding classes).

a. (20) Based on your experience with Blackboard, describe *ten* use cases for the system. You should name each use case and put a one-line description next to the user case name.

i.

ii.

iii.

iv.

v.

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vii.

viii.

ix.

x.

b. (10) One possible use case for Blackboard involves an instructor posting grades for a student in the online gradebook. Describe the steps of this use case in detail, including information such as the primary actor, any pre- or postconditions, and possible exceptions.

6. (30) “Alpha Quadrant” is a fictional MMORPG (massively-multiplayer online role-playing game) set in the “Star Trek” universe. Players take on the roles of characters in this fictional environment, and can interact with other players and computer-managed characters. Characters can purchase (or otherwise acquire) ships and other equipment, band together with other characters, earn ranks and honors, and explore various locations in the game (including solar systems, planets, and smaller locations on planets). Sketch a rough class diagram in UML that illustrates at least 10 different classes that might appear in an “Alpha Quadrant” implementation, along with some typical attributes and operations and indications as to how these classes are related to one another.