Architecture Report Gradesheet – CSE681 Software Modeling & Analysis Fall 2015

Name: ***Project #***

Poor Fair Good Very Good Excellent

Overall System

1. discussed uses, user interface, top level tasks — P F G V E

Analysis of critical threads

1. Discussed critical issues, events — P F G V E
   a. Performance[1], security, complexity, cost, usability, flexibility, safety
2. Issues are, in fact, important — P F G V E
3. Analysis of impact on design — P F G V E
4. Level of detail — P F G V E
5. Architecture is feasible, e.g., can be implemented for "reasonable cost" in a "reasonable time". — P F G V E

Partitioning

1. Defined top level cohesive modules — P F G V E
2. Defined responsibilities assigned to each — P F G V E
3. Discussed activities and interactions — P F G V E

Presentation

1. Effective use of diagrams[2] — P F G V E
   a. Context and Module or package diagrams
   b. Activity diagrams
   c. Class, Event Trace diagrams
   d. Data structures
2. Clear discussion of each diagram — P F G V E
3. Coherent organization — P F G V E
4. Adequate level of detail — P F G V E

Overall Impressions:

1. Reader is confident that system can (or can not) be built to satisfy its goals. — P F G V E
2. Presentation is logical, concise, and effective. — P F G V E
3. Has Title Page, Table of Contents, numbered pages. — P F G V E

Late Fee: _____

Grade:

[1] Usually means ability to handle CPU and memory load. May also be concerned with effectiveness. A radar is of little value if it does not detect most of the targets in its region of coverage.

[2] Should almost always use Context, Module, and Activity diagrams. Use Data Structure Diagram to explain complex data. Use Class and Event Trace only when you need to explore design alternatives or discuss critical events.

Other Comments:

Common Problems:

1. Discussed design issues but did not discuss critical issues:

   server loading, security, robustness of versioning.

2. Errors following UML standards for diagrams:

   context, module, activity, class, event traces.

3. Functional errors in activity diagrams:

   Automatic deadlock

   Failure to show process waiting (show with synchronizing bars):
   server waiting for message, client waiting for user input, client waiting for server response.

4. Inadequate levels of detail:

   module and class responsibilities, client and server activities, events