

Final Project Grading Rubric

Spring 2008

Team: _____

Problem Definition (30 points) _____

- Needs description is clear with sufficient contextual information
- Stakeholder list is complete, with roles and needs identified
- User needs analysis based on first-hand information and adequately synthesized
- Research into existing solutions is thorough
- Project Goals clearly stated
- Objectives tree is complete and without logical inconsistencies
- Constraints identified are appropriate and sufficient

Functional Analysis (25 points) _____

- “Black box” model is complete and representative
- Functional specifications are quantified, reasonable and complete
- Design metrics are appropriate

Concept Development (25 points) _____

- Conceptual design alternatives display creativity through a suitably broad diversity of approaches
- Evaluation criteria are appropriate to design goals and complete
- Convergence process proceeded in stages, with decisions based on adequate knowledge and ideas developed iteratively

System Architecture (20 points) _____

- System architecture plan
- Subsystem interfaces designed in detail
- Interfaces with surrounding environment thoroughly considered
- User interfaces planned out in depth

Project Planning (25 points) _____

- Risk analysis and mitigation strategy
- Work breakdown structure
- Responsibility matrix
- Project schedule: planned versus actual

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Detailed Design (25 points) _____

Layout drawing

Bill of materials

Detailed part drawings, schematics, computer code, etc.

Purchased component specifications

Analysis and Testing (30 points) _____

Engineering analysis is accurate, reasonable and relates results to project objectives

Model exists and tests a central design concern

Test protocol for model is complete, and results related to project objectives

Cost analysis is comprehensive and accurate

Design Fair (20 points) _____

Poster

Team presentation

Project Assignment Grades

$$\Sigma(+1's) + \Sigma(-1's) = \underline{\quad} \times 2 =$$

TOTAL SCORE (200 points) _____