

Risk Management Project

CptS 322—Software Engineering

Objective:

Risk Management is a vital component of any software engineering activity. During the initial stages of any project, its leader(s) must determine if the project's potential risks can be overcome with an acceptable level of effort. This small (3% of your overall grade) project assignment will help you identify risks that may keep you from completing a successful ('A'-grade) project. Once identified, you will then need to develop a plan that will either overcome or avoid the risks that you will identify.

Grading:

Project Weight: 150 points, 3% of the Final Grade
Project Assigned: January 24, 2005
Proposal Due: February 9, 2005
Project Due: February 23, 2005

Requirements:

Risk Management Proposal (50 points)

- 1) Identify between five and eight risks that may affect your project.
- 2) Assign weights for the likelihood, impact, and retirement cost of each of your risks.
- 3) Compute the overall risk priority for each risk.
- 4) For the highest priority non-software development-related risk:
 - a. Determine if this risk should be overcome or avoided.
 - b. Write a short (one paragraph) risk management plan for this risk.
- 5) For the highest priority software development-related risk:
 - a. Identify how this risk will be overcome (or avoided).
 - b. Write a risk management plan for this risk.
 - c. **Propose** a small, prototype application/experiment that can be undertaken to *demonstrate* your ability to overcome this risk.

Risk Management Project (100 points)

- 1) Design, Implement, and Test your prototype application.
- 2) Describe how this prototype application/experiment demonstrated your ability to overcome the risk.
- 3) Record and report the following metrics for this project:
 - a. Hours spent (in Design, Implementation, Testing)
 - b. Lines of Code produced
 - c. Defects found / Defects corrected

(Note: the above metric values will not be used to determine your grade).
- 4) Miscellaneous Project Requirements:
 - a. The project must be demonstrable in the CptS departmental lab (running on elec, beta, or any other system of your choosing)
 - b. All source code, make files, etc. must be under code management control (e.g., checked into CVS).

Note: If it is helpful, you may think of this project as a rapid prototype not meant for reuse.