CS471/571 Team Project

Instructions for the Final Project Report

Turn in a single zip file containing your project report file, source code files, compiled code files, and sample data files (if any).

The final report should include the following titled sections. List the author name(s) for each part of Sections II, III, and IV. Reports must be typed and fonts should be consistent throughout the report. Points will be deducted for problems with correctness, completeness, clarity, structure, and writing style.

- **Cover Page.** Provide the names of all team members and the table of contents.

- **Section I. Team Organization and Buddy Rating** (1-2 pages):
  (1) Describe how tasks were divided among members and describe each member's work in detail.
  (2) Provide a table of buddy ratings: each student will rate the performance of each of the other members of his/her group with a rating between 0 and 1. The average of the ratings each student receives from other members will be multiplied by the project grade to determine individual grades. To safeguard against a capricious rating, if a group member receives one and only one buddy rating below 0.8, it will be discarded.
  (3) Provide a list of your team meetings, including time, place, and meeting minutes.

- **Section II. Requirements Specification** (as many pages as needed):
  (1) Provide one or more use case diagrams that depict the main use cases.
  (2) Provide a detailed textual description for each of the main use cases in (1). Every member must contribute independently at least one use case description.
  (3) Describe a use case scenario for each of the use cases in (2) and a sequence diagram for the realization of the corresponding use case scenario. Every member must contribute independently at least one use case scenario and sequence diagram.

- **Section III. Design** (as many pages as needed):
  (1) Summarize the user-interface design of your program, using a combination of screenshots and textual descriptions.
  (2) Provide a class diagram that captures the main classes and their relationships in your final program.
  (3) Describe the algorithm for determining when a mill is formed based on the data structures used in your program.
  (4) Describe the algorithm for determining when the game is over and who is the winner based on the data structures used in your program.
  (5) Describe the algorithm for the automated computer player in your program.

You may use pseudo code, but not the actual source code, for describing an algorithm. The descriptions of your algorithms should be understandable without referring to the source code of your program. Every member must be involved in the description of at least one algorithm in this report.

- **Section IV. Testing** (as many pages as needed)
  (1) Describe how you have tested your program against the use case scenarios in Section II. List the steps for each test.
  (2) Describe the detailed steps of two system tests where a human player plays against the computer player. One test demonstrates a complete game where the human player is the winner; the other test demonstrates a complete game where the computer player is the winner.

  Every member must be involved in at least one of the above testing tasks.

- **Section V. Lessons Learned (each member** 1-2 pages)
  (1) What did you personally gain from the project?
  (2) What does your program do well, and what could your program do better?
  (3) How could you improve your development process if you develop a similar game from scratch?

Grading Policy and Deadlines

(1) **Final Presentation/Demonstration: 15%. Due: Thursday December 12th in class.**

(2) **Final Report: 45%. Due: Thursday December 12th in class.**
Section I Team Organization and Buddy Rating: 1%
Section II Requirements Specification: 14%
Section III Design: 14%
Section IV Testing: 14%
Section V Lessons Learned: 2%
Section VI: Complete Source Code

Extra credit: Up to 5% may be added to your ***final grade*** for program enhancement, for exceptionally well-written reports, and for overall impression of the project, which the instructor deems to be deserving of special recognition.