

Data Structures for Problem Solving Quoridor Battle Royale Tournament Information

May 10, 10am-12pm, location [REDACTED] (CS Mentoring Center)

1 Summary

At the end of the term, students compete with other teams in their course's sectional tournament. The top teams then graduate to compete against the winners of other course sections in the *Battle Royale*. The top teams receive prizes for their achievements at the end of the competition.

Rules for the Quoridor game, as implemented by the *RIT Game Playing Engine*, are found at

[https://\[REDACTED\]docs/?cat=12](https://[REDACTED]docs/?cat=12)

along with links to download the system code.

Retrospective Reminder

The student's project *retrospective survey* is due Sunday May 16th and can be accessed on the MyCourses page through "Surveys". Make sure that, if you do the survey at different times and save parts, you finally make sure to upload and submit at the end. Failure to do this may result in a zero for this part since the instructor cannot access surveys in progress.

2 Student Player Modules

Each team's final submission will be the version that is eligible for the two-player competition in the Battle Royale. Teams may make further enhancements for a separate release that they may use if they wish to compete in the four-player competition. The final submission is the last one for all stages of the tournament. Each team must make sure its player module runs with the latest version of the system.

NOTE: If a player module interferes in any way with another player's ability to play the game (e.g. alters data illegally), the player in violation will be ejected from the tournament. Students may also face disciplinary action.

3 Refreshments

Free refreshments will be provided.

4 Sectional Tournament Rules

All sections of the course will hold a sectional tournament during the lab session of the final week of the term. This is a competition for the teams who wrote player modules. *All students* in a section meet on the same day *in their lecture room*.

The Sectional Tournament is a sequence of two-player games.

1. For all of the game runs described below, the move timeout limit will be the default value in the game's configuration file.
2. Before the class meeting, the section's instructor will play team player modules round-robin to determine the ranking for the sectional tournament and the play bracket.
3. The tournament bracket will pit teams' players against each other in a series of single elimination, two-player games. The winner of two out of three games advances to the next level.
4. The starting player alternates between the teams for the first two games. If a tie-breaker game is necessary, the starting team will be chosen randomly and a small number of walls from each player's initial allotment will be pre-placed on the board in order to distinguish the game from either of its two predecessors.
5. The top teams from the sectional tournaments advance to the Battle Royale.

5 Battle Royale Tournament Rules

The Battle Royale tournament proceeds following the rules of the sectional tournament except for the final competition. The final two teams play head-to-head in a *best of five match*. If no single team wins the first three games, the same pre-placement of walls will be used in game 4 as was used in game 3. If a fifth game is required, a different wall placement will be used.

6 Prizes

6.1 Student Player Modules

The top teams receive gift certificates to Barnes and Noble as follows:

- 1st place: \$100 (4 certificates)
- 2nd place: \$50 (2 certificates)

7 Open Tournament

At the end of the standard competition, there will be an open *four-player* competition. No pre-ranking or seeding will be done. Students sign up during the two-player competition.