cgt project

For each submission, use 12-point LaTeX article format and submit in class, on paper. Use BibTeX for any bibliography. Late work will be docked 10% for each part of each day late: .5 hours late = 20% deduction, 24.5 hours late = 40% deduction, etc. Grading scheme: needs improvement < 50%, satisfactory 50 – 75%, good 75% – 100%.

**project.** Spend about 20 hours per person. Either implement a computer program (e.g. solver or player or visualizer or tutor or . . . ) or explore a problem (e.g. write a short research report, or try to solve an open problem) related to some combinatorial game. **Before you start, check with me that your project is appropriate.** You can work in groups of size up to 4, with graduate students counting as 2 (so at most 4 undergrads, or 1 grad and at most 2 undergrads, or 2 grads). If you work in a group (so, more than 1 person) then — for each report — add an extra page, signed and dated by each member, that explains each member’s contribution.

**Jan 23, in class.** 1 page proposal due. If your group has more than 1 member, explain how the work will be divided. What game did you choose and why? What links (wiki?) are useful for people who want to play this game?

If a program, what kind — solver? player? visualizer? tutor? other? — do you plan to write, and why? How much of the project code will be written by you (or your group) this semester, and how much will be written by others, or previously?

If an exploration, what exactly is your plan? What problem will you investigate, and how?

**Apr 2, in class.** Final report due: 2 or 3 pages plus 1 page for acknowledgements and references (including anyone who helped in some way, either by discussion, reviewing code, supplying code base, etc.). How many hours did you spend on this project? Summarize the highs and lows of your progress throughout the term. Did you reach your goals? If you continue on this project later, what are the next steps? Anything else?

If you explored a problem, write an additional 2 pages summarizing your results.

If you wrote a program, be prepared to demo it. Include a link to your code, which should be publicly accessible on github. Give the main features of your program.
This is for graduate students only.

**Jan 23, in class.** 1-page topic description due. Mention the main relevant websites and papers you are already aware of.

**March 19, in class.** Final annotated bibliography due. At most 5 pages.