CSSE 220 Day 10

Exam review
Game of Life work time

Today

- Turn in your questions on material in preparation for exam 1 (HW9)
- Exam 1 review
- Work time for Game of Life

Exam Coming!

- Test on Thursday
  - In-class exam
  - Meet in your usual room at the usual time
- Topics from Chapters 1-7
- Will include:
  - An open computer exam with:
    - A paper part: short answer, fill-in-the-blank, trace-code-by-hand, draw box-and-pointer diagrams, find-errors-in-code, write short chunks of code, etc
    - A programming part: a few small programs, unit tests provided for some of them, you write unit tests for others
- Review in class today
  - What questions did you bring?
  - What topics would you like to review?
  - I didn't prepare anything but I'm happy to cover whatever you want, including working examples

Have you done these?

- Reviewed chapters 1 to 7 from Big Java
- Prepared a sheet of notes to help you summarize what you consider important
- Reviewed the slides, in-class quizzes, homework from sessions 1 to 9
- Practiced programming, unit testing, documenting your code, & using the Java API
- You can ask questions by email to the csse220-staff mailing list or your instructor
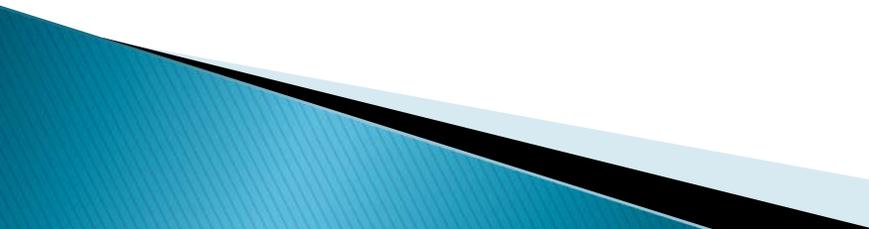
Game of Life hints:

- Follow the TODO's. *Test as frequently as practical.*
  - If a part is hard, break it down into sub-parts and test each sub-part as you go.
- There are at least 3 clever ways to avoid cluttering code that references cells with IF's to ensure that they are not "off the edge of the board", namely:
  - "Wrap". For example, if the board is 10x10, attempts to reference `board[10][3]` are converted to `board[0][3]` (use the `%` operator).
  - Write a "getter" that gets the value of a cell and returns a sensible value (0?) if the reference is off the edge of the board. Ditto for a "setter" if needed.
  - For a 10x10 board, declare a 12x12 board and make the outer shell all empty cells. You will find that you never make them non-empty (loop from 1 to 10, not 0 to 11), so all is well.

Animating Game of Life

- How: use **Timer** class to automatically "click" button

- Details: in **GameOfLifeMain**:
  - Introduce local variable for **UpdateButton** object
  - Add timer code to end of main:
    - ```
      Timer mrClicker =
              new Timer(INTERVAL, updateButton);
      mrClicker.start();
      ```

- Learn more: Big Java, Ch. 9.9

Work Time

- Work with your partner on the Game of Life project
  - Get help as needed
- Remember:
  - Exam 1, Thursday during class
  - There is nothing to turn in for Homework 10
    - It just points you toward resources in preparing for the exam (or in taking it!)
  - There IS something to do and turn in for Homework 11
    - Reading, assessment on Angel over the reading, and finish Game of Life
    - Due at the beginning of Session 12

Before you leave today, make sure that you and your partner have *scheduled a session to complete the Game of Life project*
- Where will you meet?
  - *Try the CSSE lab F-217/225*
- When will you meet?
  - *Consider Thursday and Sunday evenings*, 7 to 9 p.m. (sometimes an assistant is there to 11 p.m.)
- *Exchange contact info* in case one of you needs to reschedule.
- **Do it** *with your partner.* If your partner bails out, DON'T do it alone until you communicate with your instructor.