Announcements

- For today, please sit next to the people from the group you were in during last week's session.

- Reminder: Friday, Nov 11 is the deadline for the first drafts of your writing pieces.

- I'd like to start visiting the classrooms of those of you who teach this quarter. (I'll be an observer.)

- In a few days I'll ask you to fill out a brief anonymous survey about how the class goes, what works well so far and what doesn't.

Session 05:
Active Learning (cont.);
Managing Difficult Classroom Situations

Valentin Razmov

Outline

- Active learning exercises and group discussions (cont.)
- Challenging scenarios – examples, where they come from, how to deal with them
- Meta-cognitive discussion

Resources

Active learning: see reading list from last week, plus
- Kinesthetic Learning Activities
  - http://sequoia.cs.berkeley.edu/kla/

Managing difficult classroom situations:
- *Teaching Tips*
  - Ch.5 (pp.49, 50-52), Ch.8 (pp.101-103), Ch.10 (pp.116-117, 120-121), Ch.14, Ch.15 (pp.208-210)
- *The Nuts and Bolts of Classroom Management: How to Teach Like a Pro*, Chautauqua workshop, 2003.

Let's Try Active Learning (continued)

- Rejoin the group you were in during the previous session.
- Remind each other what the theme of the active learning exercise was for your group.

Rules:

- (5 mins) Groups continue developing an active learning exercise that supports the learning goals I gave.
- (10 mins) Groups briefly demo to the class the fruits of their labor.

Active Learning Exercise: Learning Goals to Strive For

- Group #1: the importance of testing one's own code
- Group #2: the importance of commenting one's own code
- Group #3: the evils of tightly coupled software components / modules
- Group #4: the concept and mechanism of hash tables
- Group #5: the concept and mechanism of polymorphism

Barriers to Active Learning: Brief Summary

- Instructors have less control over the exact script of the lecture.
- Some instructors think, "There just isn't enough time to fool around in class."
- It takes time to come up with activities: "It's easier to follow the textbook."
- Active learning is not the best approach for every student.
- Inertia may lure instructors to resort to old-style ineffective teaching techniques.

Managing Difficult Classroom Situations

Behavior that is rewarded shall be repeated.

First do no harm.

There is no right answer to the wrong question.

Difficult Classroom Situations – Where They Originate

- Think of a few problem situations you've seen in your own experience as a student or teacher / tutor.
- Work with your neighbor to assemble a joint list.
- Do you see a pattern among these situations? Are they examples of the same recurring overarching themes? What are those themes?

- Next, I'll show you the generalized themes I wrote up.
- Do your themes overlap with my broad categories or do they form a new and important category?

Difficult Classroom Situations – My View of Their Origins

- Miscommunication of expectations
  - (Un)Acceptable classroom behavior
  - Assignment requirements
  - Activity goals
- Incorrectly placed incentives
  - Competition with other students
  - Penalizing for mistakes vs. rewarding for good work
  - Potential benefits vs. penalties for cheating
  - Slow or indecisive reaction to unacceptable behavior
- Students feeling much stress
  - Attempt to reduce stress by bending the rules