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

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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/klz/
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.
- 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