

**Today:** *Project Submission 3 due.* Synthesis, review, outlook, wrap-up.

**Next meeting:** *Final exam* Tuesday 2015-12-15 2:45–4:45pm (university schedule).

**Reminders:** *Monitor newsgroup.* Final project submission due before final exam; class exercises due at the end of the exam.

1. Write your group identifier (e.g., C3) and its members' names. Underline your name.
2. Explain how some ideas from our study of data structures may be applied to the organization of physical objects. Indicate the design options and goodness criteria.
3. Identify an algorithm in which the use of an appropriate data structure results in a significant simplification or a significant improvement in performance.
4. Repeat Question 3 swapping the roles of algorithm and data structure.
5. Identify as many abstract data types (ADTs) as you can, based on studies in this and prior courses.

6. Repeat Question 5 for data structures instead of ADTs.
  
  
  
  
  
  
  
  
  
  
7. Illustrate the many-to-many relationship between ADTs and data structures using the answers to Questions 5 and 6.
  
  
  
  
  
  
  
  
  
  
8. Identify something from Reynolds's paper on polyphase merging that you found interesting, surprising, or otherwise noteworthy. Explain briefly.
  
  
  
  
  
  
  
  
  
  
9. Is bubble sorting ever preferable to merge sorting? Explain briefly.
  
  
  
  
  
  
  
  
  
  
10. Identify an interesting data structure that we did not discuss (much) in class that you learned about (perhaps while working on your term project). Explain briefly what makes that data structure interesting.