Administrivia

- Reminder: Homework 5 design due today, code next Tuesday.

GUIs in Java — Recap of Main Ideas

- Components and containers.
- Layout — grouping components in containers, layout managers. Components have minimum and preferred sizes; layout managers readjust sizes differently.
- Event handling — listener interfaces, “add listener” methods.
- Painting — predefined components do for you, or you can roll your own using graphics classes.
GUI-Based Programs in Java

- A common way to structure simple programs: Put most/all setup code in constructor, have main method just create an instance and call setVisible. Sun's tutorial shows another approach, said to be more thread-safe. Main class can extend JFrame or have a JFrame variable.

- Usually need instance variables to represent persistent data — anything needed by more than one method (including ones to handle events). This include components needed by more than one method.

  If data becomes complex, considering making a separate class for it — “Model / View / Controller” paradigm.

- There are some compiler pitfalls with variables used in anonymous inner classes — if local, may have to declare final.

- Let's do another example ...

Minute Essay

- None — quiz.