

# Final Exam Review Topics

## Fall 2015

# Exam technical details

- When: Friday, December 18<sup>th</sup> @ 8am (!)
- Seats are assigned
- Up to five pages of notes allowed
  - 8.5x11 paper (double sided is fine). Typed or handwritten.
- No electronic devices
  - Including calculators, watches, iwatches, phones, laptops, tablets, ...
- Mostly multiple choice
- Can grade multiple choice as you exit the exam

# Topics from Exams 1&2 Are Still In Play

## Exam 1:

- Basic OOP
- Inheritance
- Polymorphism
- Overriding vs overloading
- Abstract classes and interfaces
  - Comparable vs Comparator

# Topics from Exams 1&2 Are Still In Play

## Exam 2:

- Generics
- Java Collections Framework
- Enums
- Graphical User Interfaces
  - JFrame, JPanel, JButton, JRadioButton, JLabel, JTextField
  - Layout managers

# Graphics

Low-level mechanisms that allow a Component to draw itself

- Basics of the Graphics class: drawing lines and strings, defining color
- `repaint()` vs `paintComponent()`

# Event-Driven Programming

- Button presses (Action events)
- Keyboard events
- Mouse events
- Timers

# Recursion

- Breaking big problems into smaller problems
- Defining base and recursive cases
- Recursion vs iteration

# Ethics

- Basics of the different ethical theories
- Ethical principles & their sources
- Apply ethical principles and rules to novel problems of privacy and property

Same form as the labs