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Administrivia

- Reminder: Homework 5 code due today.
- Homework 6 due dates posted (design next Tuesday, code Thursday).
- Courses next semester (shameless self-promotion?):
 - CSCI 3294 (Unix Power Tools) — similar to course two years ago, syllabus and notes on the Web, linked from my home page under “Old course materials”.
 - CSCI 3366 (Parallel Processing).

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GUIs in Java — A Little More

- (Look briefly at sample program with dialogs, other examples.)

Graphics in Java — Custom Components

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- Predefined components (`JButton`, etc.) do a lot, but what if you want something that's not provided? in particular, you want to control the image yourself?
- Make a custom component — define a subclass of a component that provides some of the needed functionality, and override the method that defines what's displayed.
E.g., subclass `JPanel` and override `paintComponent`, to include your code to "paint" the panel.
- Call `repaint` when ready to redisplay.

Custom Painting

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- Method to override is

```
public void paintComponent(Graphics g).
```

`g` is a "graphics context" that you can draw on. (Actually it's a `Graphics2D`.) Tutorial recommends calling `super.paintComponent(g)` before doing anything else.
- Can get dimensions of panel with `getSize`, `getHeight`, `getWidth`, `getInsets`.
- Can set colors, draw shapes, lines, text, etc., etc. — see `Graphics` and `Graphics2D` class. Coordinate system is similar to what you're using in your game. See code in `BasicBlock` for simple example.

Custom Painting, Continued

- General advice — look over the methods of `Graphics` and `Graphics2D`; if confused, follow links to tutorial(s) and look for a suitable example to adapt.
- Let's look at example(s) ...

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Minute Essay

- None — sign in.

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