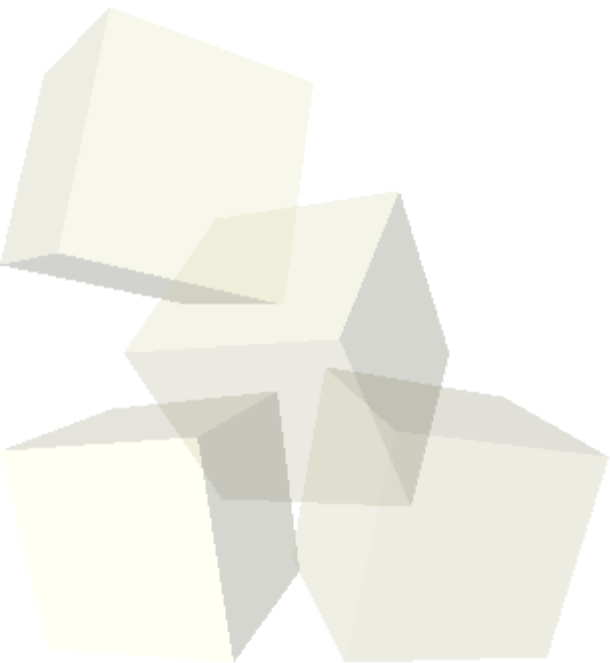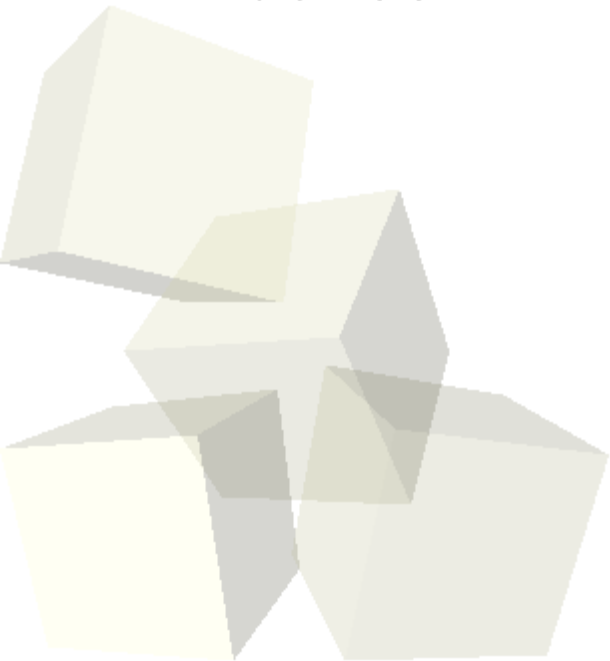4/28/2008

- Do you have any questions about the quiz?
- Let's look at solutions to the interclass problem.
- Do you have any questions about the project?
- Minute Essays
  - Tables with headers and variable numbers of lines.
  - Getting information into listeners.
  - Multiple options – radio buttons, checkboxes, or drop boxes.

- Setting up GUIs is nice, but for some applications you need to draw things that aren't part of the standard GUI library. For that we need to draw our own graphics.
- The classes for drawing graphics are in java.awt and the packages under it. We will also use some help from Icon code in javax.swing. In particular the ImageIcon class.
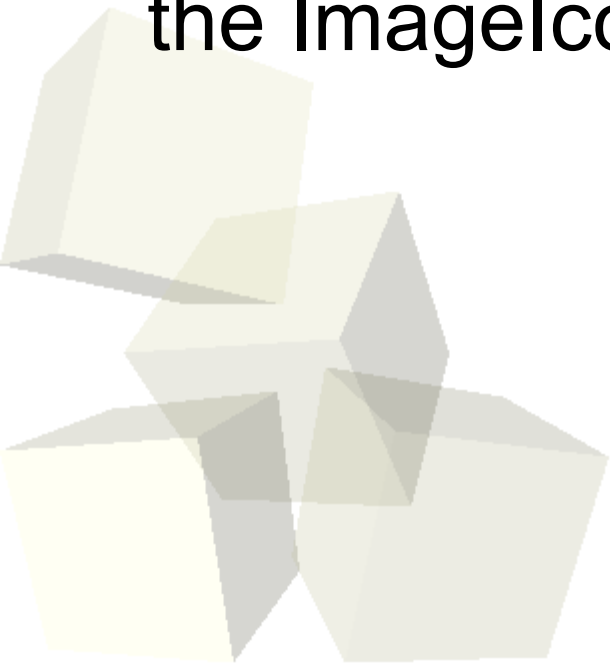
- The classes we use to actually draw are the java.awt.Graphics and java.awt.Graphics2D classes.
- Graphics2D inherits from Graphics so it has all the capabilities of Graphics, plus extras.
- For our purposes we only need to worry about Graphics2D.
- Let's look at the API for some of the key methods.
  - draw(Shape s)
  - fill(Shape s)
  - setPaint(Paint p)
 - setStroke(Stroke s)
- Shapes are in java.awt.geom.

- A simple way to get our graphics onto the screen is to make a BufferedImage, use that in an ImageIcon, then have a JLabel in the GUI that displays the ImageIcon.
- The BufferedImage has a method called createGraphics() that gives us a Graphics2D object we can draw to to change the image.
- A more standard method is described in "From C to Java".
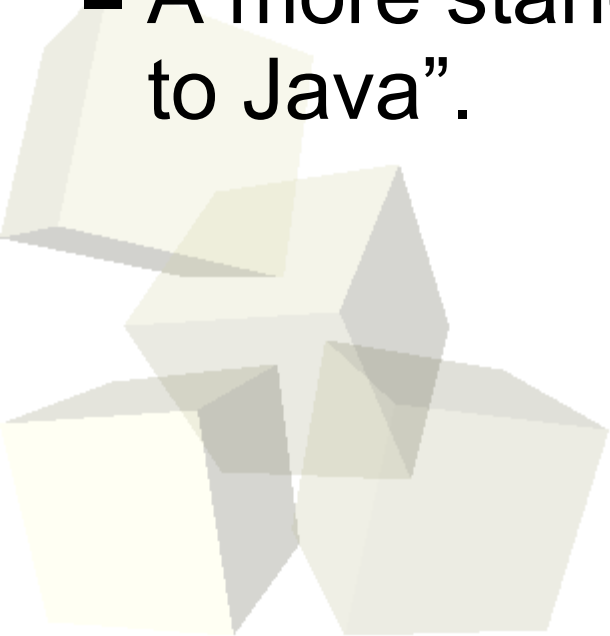
- Let's spend the rest of the time coding. We should write up a little bit of code that makes an image and draws it in a GUI.
- We should also try to attach a listener to something. Making something that draws when we click on the image would be a good application.
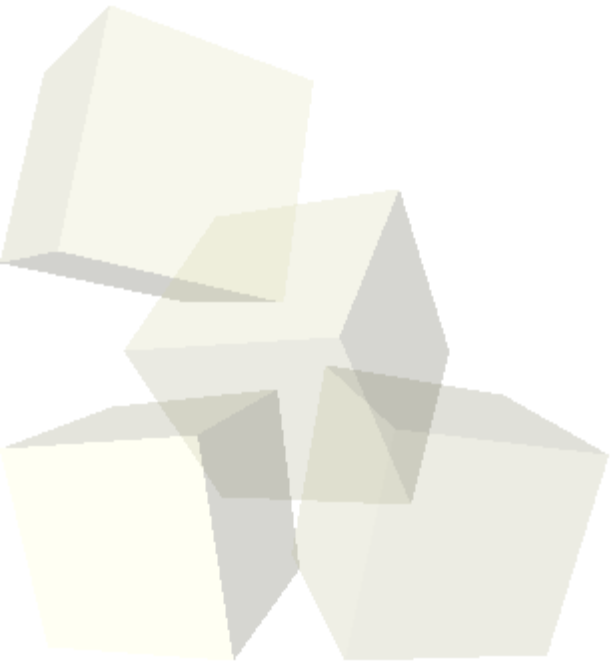
- How are you coming with your design for your project?
- Remember that the project design is due next class. This is a document telling me how you are going to make things work. If you are going to have a GUI it should show what that will look like and describe the layout. All classes you expect to use should be listed as well as the significant methods in each one.
- Interclass Problem – Write a program that shows three shapes of different colors in a window.