

# Odds and Ends

12/2/2009

# Opening Discussion

- Do you have any questions about the quiz?

# Motivation

- I got some suggestions, but none seemed exactly inspired, so I want to throw out a few things that you could use to make something more interesting.
- I want us to make a simple keyboard controlled applet that can load in some things from file over the network.
- Don't try to follow along this week. Stop me if you have questions.

# Jumping Physics

- One idea I did get was for a game like Mario where a character jumps.
- Let's make an actor we can move side to side with arrow keys and jump with the space bar.
- Gravity is a constant acceleration so we want to keep position and velocity for the character. Apply a downward acceleration if the character isn't supported.

# Simple User Interactions

- Our infinite notepad used keyboard input to get strings. This can be a pain.
- What if we want to ask questions, give information, or present options to a user?
- The `javax.swing.JOptionPane` class has a set of methods that will bring up basic dialog boxes.
- We could make it so one pops up under certain conditions.

# Reading Network Files

- The day before Thanksgiving we added the ability to read image files.
- What about other files? What about having files for a “map” in our little game?
- Alternately, we could have an option to change the image of the player, or to set a background image.

# Maps

- We have used Lists and arrays in Java. There is another data structure worth talking about just a bit called a map.
- The List and the array let you store values and look them up by their indexes. The map lets you look up a value by any type of key.
- An example is a phone book where you look up a phone number by a person's name.

# Minute Essay

- What questions do you have about the topics for today?
- Remember that the design for project #2 is due on Friday.