### Actors

#### 4-20-2012

# **Opening Discussion**

- Minute essay comments:
  - Database records.
  - How close is Cleverbot to passing the Turing Test?
  - The indexes are stored in a file, not an array.
  - Finals schedule.
  - Can computers be creative? Will they have aesthetics?
  - Seek to middle and write overwrites.
  - Seek past and and write check API.
  - Impact of AI on humanity? Good or bad?



• Strong AI vs. weak AI. Human level computers?

### **Short Version**

- There is a helper method in the Actor object that takes a function for the body of the act method.
- You should import scala.actors.Actor, then you can call actor { *body* }.

### Receive

- To make an actor deal with a message use receive. The argument is a partial function with cases you want that receive to deal with.
- Most likely this needs to happen multiple times so you put it in a loop.
- Receive is always handled in the actors thread.



Let's make some actors that utilize receive.

#### React

- You only want so many threads, so applications with lots of actors need an alternate approach.
- The react method works like receive, but allows thread sharing and doesn't return.
- To make it happen multiple times embed in a call to loop.
- The actor framework balanced threads and actors share threads.

# Code Again

 Let's come up with a fairly large actor program to write and implement it.

# **Playing with Actors**

 Let's play a little with Actors given what we know so far.

## Minute Essay

- Questions?
- What features do you think would need to go into a program that allows you to take my quizzes or do self-check exercises on the computer?
- Turn in assignment #3.