Drawing and Mouse Input

10/30/2009

Opening Discussion

- Minute Essays
  - The comma separator is how the CSV file format works.
  - Tracing column average.
  - You get to make up names (for classes, variables, and methods). Other things are specified.
  - Studying without book chapters.
  - Checking code is right (like average).
  - Designs for ICPs?

Objectives

- Over the next week we are going to learn how to get input from the mouse and how to do custom drawing.

- Today I want to do two things using the mouse. I want to have an Actor that follows the mouse and I want other actors that disappear when clicked on.

MouseInfo

- In order to get mouse input in Greenfoot, we call the Greenfoot.getMouseInfo() method.

- This returns an object of type MouseInfo.

- Let's look at the API for these.

An act() Method in World

- Because getMouseInfo() returns null if there hasn't been a change since the last call, we likely want to make sure it only gets called once each round of acting.

- This is similar to what caused us problems with getKey().

- If our world remembers the mouse information, then any actor can ask about it and act accordingly.

Following the Mouse

- Let's make an actor that follows the mouse around.

- The idea is that it should move toward where the mouse it, but do so one square at a time.

Click to Kill

- Now I want to make another actor that the user is supposed to click on. This actor should move around randomly and disappear when clicked on.

Minute Essay

- Do you have any questions about what we talked about today? What are your plans for Halloween?

- Next time we will do custom drawing so that we can change what things look like based on what is happening.