

Problem Solving in Greenfoot

1/21/2009

Opening Discussion

- Were you able to get Greenfoot installed on your computer?
- What did we talk about last time?
- Minute Essays
 - Difference between object and actor.
 - Purpose of Greenfoot. Use of programming in the working world. Website creation?
 - Can the Wombat die?
 - Will you need Linux?

More Minute Essay Comments

- Are programming languages still being created in English?
- Do you need to memorize every method? Are the numbers for directions always the same?
- What is the most complex scenario that can be created in Greenfoot?

Algorithms

- An algorithm is a systematic description of how to solve a problem. Programming is basically putting algorithms into a language a computer can understand.
- You can view the computer as being very simple minded. It only understands simple instructions, not complex ones.
- Blowing up a balloon example.

Let's Play a Game

- Go to the course web site and next to today's lecture you will find a link to a zip file that has three scenarios for today.
- Extract the files in your personal space then open the first scenario in Greenfoot.
- This is a puzzle game that should be fairly intuitive. Click run and play it some.

Steps in the Game

- Now I want you to open the second scenario.
- For this one you can't use run. Instead, you will move the selector around manually and use a right click on the selector and the world to “play” the game.
- What steps do you have to do in order to make the game work?

Last Case

- Now open the third scenario and try to play the game.
- What has changed?
- How does this change the steps we wrote down?

Minute Essay

- Recipes are a standard, yet simple example of something algorithmic that everyone can identify with. What do you see as a significant difference between recipes and what we looked at today?