Connect Four, New Scenarios, and Arrays

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Opening Discussion

• Projects

• Minute essay comments
  - Keeping up with coding in class.
  - Why is there a check for the house being locked in the Person?
  - Could we make it so that people are abducted in the Person class?
  - What does closestHouse.lock() do?
  - Can't our ships pick up people inside houses?
Making New Scenarios

- Greenfoot makes it fairly easy to create new scenarios.
  - Select Scenario > New.
  - Give the Scenario a name.
  - Right click on World to make the world type for this scenario.
  - Right click on Actor to make actors for this scenario.
Arrays

- Lists are not the only way of storing multiple values. Arrays are often simpler.
- Arrays have a different syntax and can't change size.
- Square brackets indicate an array type.
  - int[] numbers;
  - String[] words;
Making Arrays

- Use new to make an array or “shortcut” syntax.
  - int[] numbers=new int[50];
  - int[] fewNumbers={34,19,22,21,20,18};
- If the array hold primitives the values are 0 or false to start with.
- If the array holds objects the values are null to start with.
Using Arrays

• Instead of calling get, use square brackets.

• The following prints the values in an array.
  – for(int i=0; i<numbers.length; i++) {
    • System.out.println(numbers[i]);
  – }
Objectives

- I want us to write a working game of Connect Four.
- In the end I'd like it if our game could be played by clicking on the game board to play pieces.
- When the game ends we should detect that and stop the game.
ConnectFour Scenario

- We have a new scenario that we are going to work with.
- The Scenario contains a world that is the board and a class for our tokens that can be either red or black.
- Let's look at those then talk about the rules of the game and how we are going to make it work.
Questions?

Remember to be thinking about your project.