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.

Minute Essay

- Questions?

- Remember to be thinking about your project.