

Keyboard Input

2/4/2009

Opening Discussion

- Minute Essay responses
 - Fuzzy logic
 - Variable names, different names for the same things?
 - Order of statements in methods is important. They happen in the order you write them. Order of methods doesn't matter.
 - We ignored the boolean return on enterHouse.
 - enterHouse always happens. Doesn't do anything if not on the house.

More Responses

- Boolean logic can be confusing, requires some thought. Definitely expands our options.
- Role of the `getWorld()` method.
- Can you nest if statements?
- Can multiple people enter different houses in the world?

Goal for the Day

- Today I want to make it so that you can control the movement of the person on the screen with the arrow keys.
- How should we go about doing this?

Keyboard Input

- If you look in the API you will find that the Greenfoot class has a method called `getKey()`.
- What is the return type of this method? What does the API say the value of this return will be?

Strings

- A string is a sequence of characters. Words and sentences are strings.
- The type of strings in Java is String. Note it starts with a capital letter.
- We write string literals in Java by putting whatever we want in quotes.
- The web page has a link to the API page for String.

Key Methods of String

- `equals(String s)` - This was mentioned last class as the proper way to compare object types.
- `length()` - Returns the number of characters in the string.
- `indexOf(...)` - Many options for arguments. Returns the location in the string where first found.
- `+` - Not really a method. The plus sign is overloaded in Java to do String concatenation.

Printing

- Sometimes you need more information than what is being displayed on the world to figure out what a program is doing.
- You can print and whatever you print will appear in the console.
- To do this use the `System.out.println()` method. You can pass it one argument of basically any type.

Writing the Code

- Now we can make it so that the person moves based on keyboard input.
- Where should this code go?
- What should it look like?

Minute Essay

- Do you have any questions about what was covered today? Is it clear how to use keyboard input in Greenfoot?
- Feel free to do multiple interclass problems. Practice is key to learning this.