Complex Spreadsheet Problems

3/18/2009

Opening Discussion

- Minute Essay comments
  - How do we get Excel into Greenfoot?
    - Export to CSV and put it in the directory of the scenario. If you put it someplace else it will be hard to find in Greenfoot.
  - Math functions in Java.
  - Using double vs. int.
  - Greenfoot spreadsheet vs. Excel spreadsheet.

Loops: for vs. while

- Technically the for-loop and while loop can do the exact same things.
  - for(A; B; C) {
    - D
  - }
- Same as:
  - A
  - while(B) {
    - D
    - C
  - }

Complex Spreadsheet Functions

- I have two examples that I want us to play with.

  - Calculating the value of money spent on a large project in adjusted dollars.

  - Averages for specific situations. For example you want to know how the company performed in months when certain subunits performed above or below certain levels.

- We should step through how to solve each of these first. What would you need to do to solve either on Excel?

More Files

- We can make our program a little more useful by doing two things.

    - I'd like to be able to specify the file name I want to read.

    - I'd like to have the ability to write our table back out to a CSV file.

Writing Files

- To write to a file we will use a java.io.PrintWriter. Like with the Scanner, we make a new PrintWriter and give it a File object. This time it is the file it should write to.

- We can then call print or println on the PrintWriter object.

- We should call the close() method when we are done.

Minute Essay

- Do you have any questions?

- What type of problems do you think we should work on next week?

- Remember we do interclass problems next period.