Program 3 In-Review

COMP 110
Summer II 2012

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Announcements

- Lab 6 was due at 9:45 am
- Program 3 is graded
  - See Sakai for scores and comments
Questions?

- Friday:
  - Inheritance
Today in COMP 110

- Program 3 In-Review
- Lecture: More About Inheritance
- Lab 7
Missing Components

- Assignment Specification
  - Return zero if a divide by zero would occur
  - Return zero if the number of destructions is zero
Variable Names

- All non-final instance and local variables and method arguments should use camelCase variable names

- Avoid using single-letter variable names anywhere
Instance v. Local Variables

- If a piece of information must persist among multiple method calls, use an instance variable
  - E.g. the number of attempts and destructions

- If a piece of information is only used within a single method call, use a local variable
  - E.g. the percentage computations
Instance Variables

- All should be private

- Declare one variable per line

- Add Javadoc comments to instance variables that may be unclear

- Add Javadoc comments to all constants
Variable Types

- Use `int`s for all counting variables

- Use `double`s for all decimal variables
  - `float` technically works, but is less precise than `double`

- If you need to perform a division computation for which the input is `int` and the output is `double`, cast the operands
Comments

- Add Javadoc comments to all constructors
- Add Javadoc comments to all methods
Use Javadoc style comments: /** ... */

/**
 * Creates a new spreadsheet with the specified rows and columns
 *
 * @param rows
 * the number of rows in the spreadsheet
 * @param cols
 * the number of columns in the spreadsheet
 */

public DataSheet(int rows, int cols)
Use Javadoc style comments: /** ... */

/**
 * Returns the number of rows in the spreadsheet
 * @return the number of rows in the spreadsheet
 */

public int getNumRows()
Method Header Comments

- Use Javadoc style comments: /** ... */

/**
 * Sets the name of the person
 * @param name
 *   the new name of the person
 */

public void setName(String name)
Method Header Comments

Use Javadoc style comments: /** ... */

/**
 * Computes the value of base to the power of exponent
 * 
 * @param base
 * the base of the expression
 * @param exponent
 * the power to which to raise the base
 * @return base raised to the exponent-th power
 */

public static double pow(double base, double exponent)
Statement Comment Verbs

- Be aware of the meaning of particular verbs

- Sets, Assigns
  - Stores the value of a literal or an expression in a variable

- Declares
  - Create a new variable of a given type

- Initializes
  - Both declares and assigns a variable
Statement Comment Verbs

- Gets
  - Obtains the value of something
  - Indicates a getter method

- Returns
  - Passes a value back to the caller of a method

- Prints, Displays
  - Presents a result on the screen
    - Console I/O, JOptionPane
Questions?
Logistics

Next:

- More About Inheritance

Later:

- Lab 7