Other Announcements

• Project #1 (Orioles Baseball) has been posted.
  • Common errors
  • Style (at the end today)
Recall: “else if” style

One more example:
• Cascading3.java
Programming Errors

• Syntax Errors
• Semantic Errors
• Logical Errors

• Debugging
  • Later we’ll learn the “debugger”
  • For now, lot’s of “trace outputs”

• Advice: Write code incrementally and test, test, test!
Scope of Local Variables

• Local variables have “block scope”. What is this?

• Will the following work?

```java
if (x < y) {
    int z = 4;
}

if (y < 12) {
    z = 8;
}
```
Regarding Initialization of Variables

Examples:
• Initialization1.java
• Initialization2.java
• Initialization3.java
Java Identifiers

Rules

• Can only use: A-Z a-z 0-9 _ $
• Cannot begin with a digit (0-9)
• Must avoid keywords

Style

• For variables, methods, and packages use “lower camel case”
  numberOfCats, ambientTemperature, rows, centerOfGravity...
• For classes and interfaces use “upper camel case”
  InputStream, Scanner, String, StringBuffer...
Choosing Meaningful Identifiers

Identifier should be made of English word(s) describing the role of the entity

• Can we abbreviate?
• Can we ever use single-letter identifiers \((i, j, x, y)\)?
• Can we be too verbose?
Named Constants

• What is a “named constant”?

• Style:

  MAX_WEIGHT, PI, SPEED_OF_LIGHT, ...

• When should we use them (and why is this important)?

• final variables

Examples: WithoutNamedConstants.java, WithNamedConstants.java

See: www.whereisroadster.com
Style Requirements for Project #1

- Good variable names
  - Meaningful identifiers
  - Camel Case for conventional variables
- Symbolic constants
  - Well-chosen
  - Named correctly
- Proper braces
- Proper indentation
- No lines longer than 80 characters! (Sorry.)

- Try to eliminate duplicative code. (You will not be penalized for it yet, but try.)