

COMS W1114 - Java Lab

Lab 8
Wednesday, March 24, 2004
&
Thursday, March 25, 2004

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Note

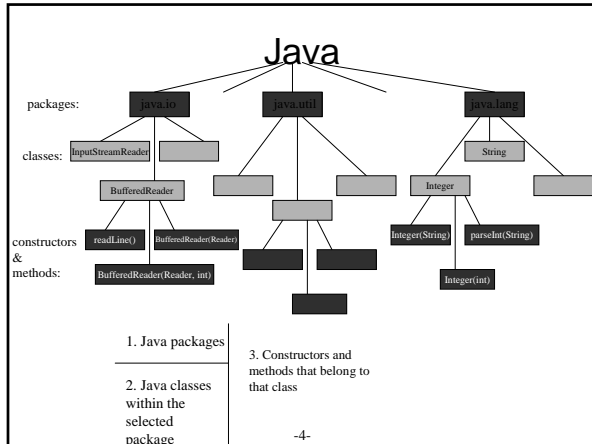
- HW4 out
- You should have your grades for hw1, hw2, and your midterms

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What we are covering today

- Review from Lab 6
 - How to use the Java API
- Object Oriented design
 - Example.java

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Example.java

- PROBLEM DESCRIPTION
- We want to keep a record of all the students in cs1004
 - Two objects Lab
 - Lab object
 - 4 Member Variables of this object are:
 - » lab number, lab instructor, number of students in the lab, Student students in the lab
 - Student object
 - 3 Member Variables of this object are
 - » first name, last name, midterm grade

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Notes

- For classes which are only going used as data objects *you don't need a main method*
- Note that if you specify a method will throw an exception *at the method declaration* you must try – catch the **method call**
- **One more time: method calls vs. method declarations**

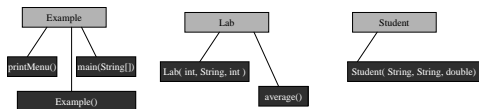
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To Do:

- Comment the code to show you understand what's going on
- Add an attribute called "average" to your lab object – this will represent the midterm average of the students in the lab
- In Lab.java, add a method `average()` that will go through each student in the list, and compute the average of their midterm grades
- After every time you add a new student to a lab, calculate the new average by calling that lab's average method.
- In the "lab info" print statement, also print out the lab's midterm average

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Structure of our classes



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Next Time

- Method/Constructor Overloading
- More Object Oriented design

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