Note

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

What we are covering today

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

- **PROBLEM DESCRIPTION**
- We want to keep a record of all the students in CS1004
  - Two objects
    - Lab object
      - 4 Member Variables of this object are:
        » Lab number, lab instructor, number of students in the lab, list of students in the lab
    - Student object
      - 3 Member Variables of this object are
        » First name, last name, midterm grade

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
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 labs average method.
- In the “lab info” print statement, also print out the lab’s midterm average

Structure of our classes

Next Time

- Method/Constructor Overloading
- More Object Oriented design