**CS201 Lab 8**

**40 points**  **Due**: 03/30/15

**Problem:** Your professor needs a program that will choose a random student in class to call on when no one is raising their hands to offer an answer.



**Purpose:** This lab gives you practice with:

* Designing and programming methods
* Storing data in arrays
* File processing

**Details:**

You will have a file with one name per line of people in a class. You must ask the user two things: the name of the file to read the names from, and the number of names in the file. Your program must read in all of the information stored in the file, store it in the program, and then give the user a randomly chosen new person. After each person, they should be given the option to continue or to quit.

Your program must use JOptionPane for user input and output.

*Hint:* you will need *throws IOException* on any method that deals with file input.

**Design:**

You must design your methods and their algorithms before you start coding. Your design should be in the same style as Lab7 and PA4. Think about the tasks that need to be solved in this program.

**Steps:**

1. Write you Algorithm. It must be approved by Dr. Olsen before you start your code.
2. Create a new Java file.
3. Write your Java code. Write one method at a time, and make sure it compiles.
4. Test your code to make sure it is working correctly. You may need to add some extra System.out.print statements to see what values are being used (remove them for your final version). **Be sure to test with all 3 input files.**
5. Write comments in your code to make it clear what it is doing.
6. Write comments for each method in your code. See the example at the end of this file.
7. Include an updated version of the header comments. Many lines should change!

**Extra credit:**

You may only attempt once your code works.

Modify your program so that if your or your partner(s)’s name comes up, it is skipped, and the next person is called.

**Submit:**

1. To GitHub:
   * Your completed algorithm
   * Your .java file
2. On paper in class:
   * A short (250 words or less) individual reflection about what you did in lab, what it was like working with your partner, and what you learned. (1 per person)