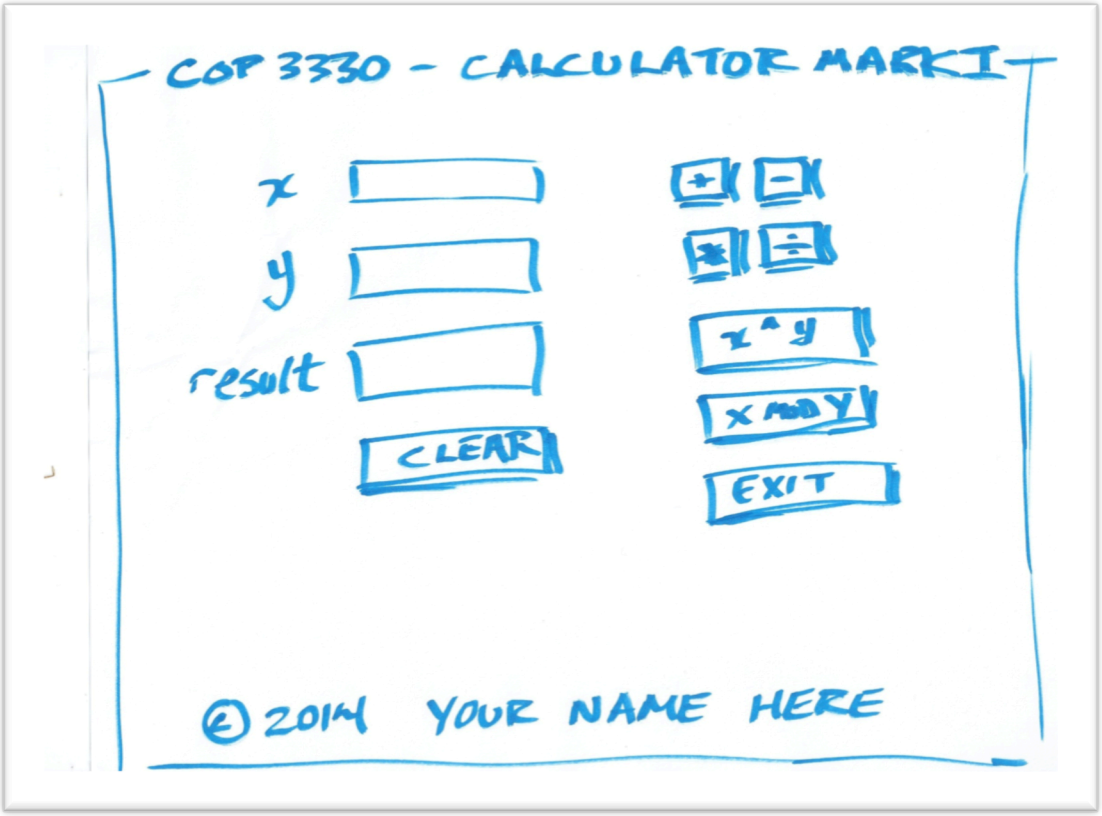

The Bonus Assignment has the following requirements:

- Accept two numerical inputs, labeled **x** & **y**.
- Produce a numerical output in the **result**.
- Support the following functions:
  1. Addition of x and y with the result in the result's text box.
  2. Subtraction of y and x with the result in the result's text box.
  3. Multiplication of x and y with the result in the result's text box.
  4. Division of x by y with the result in the result's text box.
  5. Exponentiation of x to the power of y with the result in the result's text box.
  6. Modulo processing of ***integer*** x by ***integer*** y with the integer result in the result's text box. (If a floating point number is entered, cast it to an integer.)
  7. Clear which resets the input for x and y and the results output to blank spaces.
- Your name MUST BE in the area shown adjacent to the copyright symbol © or its equivalent of (c).

GRADING:

The total possible score for this program is 100 points.

The following point values will be deducted for the reasons stated:

-100 points The program does not successfully run as a "jar" file from the command line. (See "Additional notes:" below.)

-90 points The BonusAssignments.java was not submitted.

-90 points The "© 2014 YOUR NAME HERE" footer does not display. (It is acceptable to display "(c) 2014" as an equivalent copyright symbol — but your name MUST BE DISPLAYED.)

-50 points The program does not accept inputs — that is either from the appropriate text boxes or the buttons. Likewise, the program does NOT PRODUCE a result when appropriate.

-10 points **For each function that FAILS to produce the correct result.** So, if the exponentiation button fails to produce a valid result, -10. Similarly, if the modulus function fails to product a valid result another 10 points will be deducted, and so on up to a maximum of 80 points, that is -10 for addition, subtraction, multiplication, division, exponentiation, modulus, clear, and exit.

no deductions The program *"just works"*™.

Additional notes:

1. Create a NetBeans GUI project named "BonusAssignment".
2. In order for you to get ANY credit, the "BonusAssignment.jar" file must work directly from the command prompt. We will not have time to troubleshoot compile errors, run-time errors, or project configuration issues.
3. Therefore, submit the BonusAssignment.java and the BonusAssignment.jar files.
4. Building a "jar", the Java standard for stand-alone application delivery, requires the following configuration in NetBeans:
    a. Set the Main project from "Run->Set Main Project" and select "BonusAssignment".
    b. Compile and build from "Run->Clean and Build Main Project". (This will build the .jar file in the project's "dist" directory.)
5. Confirm the BonusAssignment.jar file runs by executing the following command from the console or terminal window:
    a. CONFIRM that you're in the project's "dist" directory. Change to that directory FIRST.
    b. Enter the command "java –jar BonusAssignment.jar"
    c. Double check your process by sending a copy of the jar file to another computer with the appropriate version of Java installed. Test that the jar file runs on that computer.
6. Upload both the BonusAssignment.jar and BonusAssignment.java files as part of your project submission.
7. We will not have time to solve your distribution or configuration issues. If you want the Bonus Assignment grade the Bonus Assignment must work the first time.

Test data:

1. 4 * 3 = 12
2. 4.5 * 2 = 9
3. 3 + 2 = 5
4. 30 + -40 = -10
5. 50 / 2 = 25
6. 50 / 7 = 7.14
7. 50 – 51 = -1
8. 42 – 14 = 28
9. 2 ^ 3 = 8
10. 9 ^ 2.5 = 243
11. 18 MOD 7 = 4
12. 21.5 MOD 3 = 0