## CS100J, Spring 2001 Project 3 Due Tuesday 2/27

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## 1. Objective

Completing all tasks in this assignment will help you:

- practice using selection and repetition statements
- use nested control-structures (e.g., re-prompting for input and prompting to "play again")
- write methods to replace redundant code

First skim, and then, carefully read the entire assignment before starting any tasks!

## 2. Tic Tac Toe

Write a program called **p3sp01.java** that plays a game of Tic Tac Toe<sup>\*</sup> with all the features demonstrated in **p3sp01.class**. (See the Hints next to the project assignment.) Your code must use only the Main Class, "regular" (non-static) variables and control structures, static variables, and static methods. For full credit, make sure that you use static methods and variables!<sup>†</sup> To compare strings **s1** and **s2** (which you will likely need to do), use the built-in method **equals**, as in **s1.equals(s2)**. Except for **equals**, no other **String** methods are allowed. For output, include 1 session where neither player wins and 1 session where someone does win. With the same or additional output, you must also demonstrate that the user may choose to continue playing and the handling of illegal input.

## 3. Submitting Your Work

Submit all programs, write-ups, and output described in this assignment. Follow the submission guidelines stated on the <u>Projects</u> page for CS100J. Remember to include a title sheet. You should also supply a table of contents (which may be combined with the title sheet) and number all pages to help the graders find each portion of the assignment.

<sup>\*.</sup> For a more OOP solution and a chance to play, check out *http://www.tictactoe.com/*. To see how the program is included on the website, select **View** $\rightarrow$ **Page Source** from your browser.

<sup>&</sup>lt;sup>†</sup>. For anyone who recognizes that this assignment would be a breeze with arrays, you're out of luck *;* - ) No arrays allowed!