# Problem Set 4

### Due: Tuesday, 7/31, 4:00am

**Objectives:**
- **Practice implementing design patterns**

### Detailed Requirements

For this assignment you will implement Connect Four.  The game is played by two players who alternate dropping chips into a 7-column, 6-row grid.  The first player to get 4 in a row wins.

Feature requirements include:
- A Swing GUI
- Support for 2-players playing at the same machine
- Support for a computer opponent that looks ahead a single move and makes that move if it results in a win.

Design requirements include:
- Proper use of the Observer, Builder, Factory, and Singleton factory patterns.
- Unit tests for the non-GUI code.