

## Problem Set - Connect Four

### Objectives:

- Practice design patterns and unit tests.

### 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. Refer to [Head First Design Patterns](#) for help with the various patterns we've studied.

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:

- Use of the Observer, Builder, Factory, and Singleton factory patterns when appropriate.
- Unit tests for the non-GUI code.