CSE 219 - Fall 2017
Computer Science III

Recitation 8 - Java Object Model

Notify your Recitation TA once you have completed this recitation so that they may verify your work.

Recitation Goal: in this recitation you will implement appropriate **hashCode** and **equals** methods to make a simple board game application function correctly.

Recitation Setup

To start, download the **Recitation8.zip** ZIP file. Open NetBeans and using **File>Import Project>From ZIP**, import the project contained in the ZIP file. You should end up with a **Recitation8** project, containing a package **boardgame**, which is a framework for implementing simple board games, a package **tictactoe**, which is an implementation of the game of Tic-Tac-Toe using the framework, and a package **tictactoe.textui** which is a textual user interface for the Tic-Tac-Toe game.

Introduction

- Look over the classes in the **boardgame** framework, to get an idea of what is provided there.
- Look over the classes in the **tictactoe** package, including the **tictactoe.textui** package, to get an idea of how they relate to the classes in the **boardgame** framework.
- Launch the TicTacToe game by running the **TextualTicTacToeGame** class. Enter "X" or "O" in response to the initial prompt. When prompted for a move, the game is expecting you to enter a move in the form "(r,c)" (no spaces), where r is the row number and c is the column number, starting from 0. You will notice that the game does not work: moves that you type are never accepted as legal.

Recitation Requirements

- The reason the TicTacToe game fails to function properly is because there are some classes that have neglected to properly override **equals** and **hashCode**. Identify these classes and provide proper implementations of these methods. A good place to start is to use the debugger to step through the **chooseMove** method in the **InteractiveMover** class.

When you are done, demonstrate your working game to one of the TAs.
