**CZHiller’s Tic Tac Toe**

**General Rules:** <https://en.wikipedia.org/wiki/Tic-tac-toe>

**How to run the code:**

1. Download, install and run NetBeans 8.2
2. Clone the git repo: <https://github.com/czhiller/TicTacToeGame.git>
3. Open the TicTacToe project in NetBeans
4. Click Run:
   1. Change the properties as needed

**Design decisions:**

1. Tried to use an MVC model but failed in the verge of taking less time to code:
   1. Separated properties service in utils, this package could include other utils, like parsing objects.
   2. The only object created to prove my OOP skills is in a data package.
   3. The input property file is in a dedicated resources package.
   4. All the game logic is in the main class, this shoud be separated in several controllers.
2. Documented whole code to make it understandable and easy to modify.

**Assumptions:**

1. Even though the rules said any player can start the game, I assumed an order, of course this can be changed for a future version.
2. The grid is a matrix, initialized with empty spaces in order to check if a position is free before each player makes a move.
3. Every input can be invalid, which is why you’ll see the most “while’s” I’ve ever coded in my life.
4. Every message is hardcoded and won’t be configurable in this release.
5. JUnit is overrated (nah, I didn’t have enough time), but for what its worth, most of the times I manually test my code in every way I can imagine the user will interact with it, or try to break it.
6. Empty spaces are the only invalid input for player’s chars.
7. Only the first char in a property will be taken in consideration for all the inputs.
8. Each property name is always the same, can’t be modified.
9. If any player property is invalid, including the name, it will ask for a new player char and a default name is used.