This project is a duplication of the Connect4 game. The objective of your color pieces in a row. This could be horizontal, vertical, and two diagonals. When one of these four combinations are achieved, the player wins and a message is displayed, at this point the game is over. While there are some graphical glitches with the falling pieces, the game should be 100% logically working and should produce the correct win messages.

Build and run this using the unity program, I will include a build from my PC but if you download the folder : <https://svn.cs.kent.edu/courses/cs38101/svn/cellio16/Project/Connect4%20Project/>

And import it directly into Unity and build.

The algorithm used to check for four in a row was very complex. It involved going through every position, each direction for another piece of the same color, then recursively check that next piece while making sure it is valid. That algorithm as well as the rest of the game code can be found here:

<https://svn.cs.kent.edu/courses/cs38101/svn/cellio16/Project/Connect4%20Project/Assets/Scripts/GameController.cs>

That algorithm is bot h the global\_win and local\_win methods.

The logical\_place method takes the piece in game and calculates where it lands and assigns it into a list in code, to be used in the other methods.

Gameplay:

Use the left and right arrow keys to align the piece with the slot you wish, then press the down arrow key to drop the piece

Here are some screenshots of play:







