Project Documentation – Connect Four

User Interaction

If the program is correctly compiled. Once executed the terminal will open printing a standard 7 x 6 connect four board. Since this program has an AI Player, you will be alternating moves with the AI. Depending on which checker you select you will move first or second ‘X’ for first ‘O’ for second. Standard connect four win patterns will register i.e. 4 vertical, horizontal or diagonal. The game will end itself when one of the players gets a win.

Due to complications, we were unable to get the AI Player class to work. What happens right now is that the AI moves many times before the player gets to move. Because of this, instead of being a game where it is the user against the AI, we changed it to be a two-player game. Player X moves first and can decide on where they want to place the piece.

Program Files

The connect four program is split into 7 files:

* main.cpp
* Board.cpp
* Board.h
* AI\_Player.cpp
* AI\_Player.h
* Player.cpp
* Player.h
* 2Player.cpp
* 2Player.h

All the files need to be linked together in order for proper operation. All the documentation for each function and there well functions can be found in the .h files and .cpp files respectively.

For now only the 2Player.cpp needs to be run in order for it to work.

There are three classes created to make this work: the Player class, the Board class, and the AI\_Player class. The Player class is responsible for handling the ‘player’ of the game. This creates the player and does checks to make sure that moves on the board are legal. The AI\_Player class is responsible for the ai opponent the player is playing.