

### Connect 4 Semester Project

- Gist of the Game
  - Connect 4 has a 6 row by 7 column game board in which players will take turns dropping disc down columns. The first person to get 4 disc in a row whether it be horizontally, vertically, or diagonally wins the game.
- Procedure of Game
  - The Connect4 Board is displayed in the user window.
  - In each turn, the player selects a coordinate to place his/her marker.
  - The marker fills up the bottom-most open spot.
  - The markers will continuously stack upon each other until the row is full.
  - If the row happens to be full, the computer will print out an error message and ask the user to choose another row. ("That row is full! Please choose another row.")
  - As players go with their turns, the board will become more and more full until a connect4 is reached
  - Once the computer recognizes a Connect4, a winning message will pop up. ("Congratulations! You have won Connect4.")
  - If the game recognizes no one won the game, It will display a message( "Draw")
  - After displaying the winner message, the computer will ask if the users want to replay the game. ("Would you like to restart the game?")
  - If the user says yes, the process is repeated over again until a new winner is found.
  - The board will be wiped clean in the event the players decide to play again.
  - If the user says no, the computer throws a ("Goodbye!") message and exits the game.
- Our Code
  - To create the board, we created two functions - one to build the board and one to display the board. Both of these functions implemented nested for loops
  - Our Board:

