Connect Four

Project Description

Group SM-3

https://github.com/group-sm3/connect4-sm3

*Overview*

Drawing from the battleship example in TRACs, we will create a game of Connect Four. The program will present three options from the main menu: single player (easy and hard mode), two-player (between two users), and leaderboard stats. There will be an option for the traditional 7x6 grid, wherein players drop color disks into columns. To be a victor in a match, one must drop their disks such that they create a line of four (i.e. horizontally, vertically, or diagonally).

*Design*

Easy mode will involve the program randomly selecting a column to drop a disk. Hard mode will follow a simple algorithm to increase the program’s chance of winning. The program will open to a menu where a user chooses the gaming mode, or to view the leaderboard.

*Live Play*

In single-player mode, the user chooses their disk color. In two-player mode, the color and first move are determined by a virtual coin flip. Each disk color alternates automatically, as the players will share the same screen. Should a user choose to quit a game early, the game is considered a loss.

*Desired Features*

Given the month to complete the project, we are considerate of time constraints, but would like to add a two-player mode from distinct hardware. Given that this will require a connection (LAN or WAN to be determined). In addition to this remote gaming mode, we’d also have a chat log for in-game play.