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Description

We want to make Othello the board game that allows two human players to play against each other.

Interface

It will be played in the terminal, the players can use arrow keys to navigate the board and press enter when they've found a spot to place their piece.

Technical design

Topics covered in class

- We will allocate memory for arrays
- We will store the board in a text file and interact with the pieces by writing to it
 - We will store the players' chat in another text file
- We will find information from this text file when we save games and let the system reenact the match
- Fork to serve 2 players
- Signal handlers to handle rage quitting and (arrow keys to navigate the board?)
- Semaphores to control players writing to the chat file
- Networking to let server handle the 2 players

Breaking down tasks

Md - converting between the 2D array and the board, creating the network

Yiduo - taking user input and, developing algorithms, implementing the replay system

Data structures

We will use a 2D array for the board. This array, along with the pieces within it, will be converted to a more human-friendly form and written into the board text file.

Algorithms

We will make an algorithm to determine the color switches that happen when a user places a piece.

Timeline

- Displaying the board - Dec 25
- Getting user input - Dec 26
- User interaction with the game - Dec 29
- Network - Jan 1st
- Replay system - Jan 4th
- Completion by January 7th

