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R1000

Assignment 1

1. Understanding the Problem

a. The problem is asking for me to create a 2D array based Connect Four game, traditionally 2 players. The program will take in number of rows/columns and the number of pieces needed to win. This program will support user input through command line arguments provided in any order, with error checking. The program will check which user has p pieces connecting first and let that player win. This program will be run with Makefile as well, further organizing the code.

2. Devising a Plan/Design

- a. Take in user input through command line prompt
- b. Error check as well, this should be two separate functions
- c. Create 2D array with data input and print array too
- d. Once all initial input error checking is done, officially start game
- e. include check tie and allow players to take turns while making moves
- f. check winner to complete

3. Looking Back/Self-Reflection

a. Looking back, I find that I could have made the code much more readable for myself during my initial attempts on the assignment. Including a couple more comments would have been nice as well. From this assignment, I learned the power of arrays and everything we've learned in EECS 161 with PUTTY and C++. I also learned how fully utilize makefiles.

4. Design for Assignment #2

- a. Design
 - i. Classes

```
class game{
    class deck{
    int cards;
    }
    class player{
    int cards;
    int moves;
```

}

I will test for my game through checking where the cards are, whether they are in deck or in player hands and when they are transferred from deck to hand, delete from deck. When player makes match, delete from game completely and add point to that player.