02/11/2024, 15:55 tictactoe.c

~\Desktop\CPROGRAMMES\tictactoe.c

```
#include<stdio.h>
 1
 2
    int main(){
 3
        char ch[3][3],fill[2]={'0','X'};
 4
        int start,row,col,turn=0;
 5
        for(int i=0;i<3;i++){</pre>
            for(int j=0;j<3;j++){</pre>
 6
 7
                ch[i][j]=' ';
 8
            }
 9
        printf("press any number between 0-9 to proceed into \"TIC TAC TOE\" game\n");
10
11
        scanf("%d",&start);
12
        printf("The following are the instructions for the game:\n");
13
        printf("For player 1 fill 0\nFor player 2 fill X\n");
        printf("The table is like this:\n1 2 3\n4 5 6\n7 8 9\nwhich has 3 rows and 3 columns\n");
14
15
        for(int i=1;i<=9;i++){</pre>
16
            int player=turn%2;
17
            printf("Its turn for player %d\n",player+1);
            printf("In which row you want to fill the %c\n",fill[player]);
18
19
            scanf("%d",&row);
            printf("In which column you want to fill the %c\n",fill[player]);
20
21
            scanf("%d",&col);
            row--, col--;
22
23
          for(int j=0;j<3;j++){</pre>
24
             if(row>=0 && row<3 && col>=0 && col<3 && ch[row][col]==' '){
25
                ch[row][col]=fill[player];
                break;
26
27
             }
28
             else{
29
                printf("This cell is not empty\n");
             }
30
31
32
            }
            if((ch[0][0]==ch[0][1] \&\& ch[0][1]==ch[0][2] \&\& ch[0][0]=='0')||(ch[1][0]==ch[1][1]
33
    && ch[1][1]==ch[1][2] && ch[1][0]=='0')||(ch[2][0]==ch[2][1] && ch[2][1]==ch[2][2] && ch[2]
    [0]=='0')){
34
             printf("player 1 wins");
35
             break;
36
37
            else if((ch[0][0]==ch[0][1] && ch[0][1]==ch[0][2] && ch[0][0]=='X')||(ch[1][0]==ch[1]
    [1] && ch[1][1]==ch[1][2] && ch[1][0]=='X')||(ch[2][0]==ch[2][1] && ch[2][1]==ch[2][2] &&
    ch[2][0]=='X')){
38
             printf("player 2 wins");
39
             break;
40
            }
41
            else if((ch[0][0]==ch[1][0] && ch[1][0]==ch[2][0] && ch[0][0]=='0')||(ch[0][1]==ch[1]
    [1] && ch[1][1]==ch[2][1] && ch[0][1]=='0')||(ch[0][2]==ch[1][2] && ch[1][2]==ch[2][2] &&
    ch[0][2]=='0')){
             printf("player 1 wins");
42
43
             break;
44
            }
45
            else if((ch[0][0]==ch[1][0] && ch[1][0]==ch[2][0] && ch[0][0]=='X')||(ch[0][1]==ch[1]
    [1] && ch[1][1]==ch[2][1] && ch[0][1]=='X')||(ch[0][2]==ch[1][2] && ch[1][2]==ch[2][2] &&
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ch[0][2]=='X')){
            printf("player 2 wins");
46
47
            break;
48
           }
49
           [1] && ch[1][1]==ch[2][0] && ch[0][2]=='0')){
            printf("player 1 wins");
50
51
            break;
52
           }
53
           else if((ch[0][0]=ch[1][1] && ch[1][1]=ch[2][2] && ch[0][0]=='X')||(ch[0][2]=ch[1]
   [1] && ch[1][1]==ch[2][0] && ch[0][2]=='X')){
54
            printf("player 2 wins");
55
            break;
56
           }
57
         turn++;
58
59
       if(((ch[0][0]!=ch[0][1] || ch[0][1]!=ch[0][2])||(ch[1][0]!=ch[1][1] || ch[1][1]!=ch[1]
60
    [2])||(ch[2][0]!=ch[2][1]|||ch[2][1]!=ch[2][2]))&((ch[0][0]!=ch[1][0]|||ch[1][0]!=ch[2]|
    [0])||(ch[0][1]!=ch[1][1] || ch[1][1]!=ch[2][1])||(ch[0][2]!=ch[1][2] || ch[1][2]!=ch[2]
   [2]))&&((ch[0][0]!=ch[1][0] || ch[1][0]!=ch[2][0])||(ch[0][1]!=ch[1][1] || ch[1][1]!=ch[2]
     [1]) \mid (\mathsf{ch}[0][2]! = \mathsf{ch}[1][2] \mid | \mathsf{ch}[1][2]! = \mathsf{ch}[2][2]) ) \& ((\mathsf{ch}[0][0]! = \mathsf{ch}[1][1] \mid | \mathsf{ch}[1][1]! = \mathsf{ch}[2] ) 
   [2])||(ch[0][2]!=ch[1][1] || ch[1][1]!=ch[2][0]))){
61
         printf("its draw");
62
       }
63
       return 0;
64
   }
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```