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1  #include<stdio.h>
2  #include<stdlib.h>
3  #include<time.h>
4  #include<unistd.h>
5  #include<conio.h>
6
7  struct myDataType{
8      int i;
9      char ch;
10 }inputValue();
11
12 void run();
13 int check(char sym[9],char ch,int count);
14 struct myDataType inputValue(char sym[9],int count);
15 void Display(char sym[9]);
16
17 int main(){
18     char reStart;
19     again:
20     run();
21     printf("\nIf You Want To Play Again Press 1: \nElse Any:");
22     scanf("%s",&reStart);
23     if(reStart == '1')
24     {
25         system("cls");
26         goto again;
27     }
28     else
29         exit(0);
30 }
31
32 void typewriter(const char* letter, int rate)
33 {
34     for (int i = 0; letter[i] != '\0'; i++)
35     {
36         printf("%c", letter[i]);
37         fflush(stdout);
38         usleep(1000 * rate);
39     }
40 }
41
42 void run(){
43     int count = 0;
44     struct myDataType info;
45     char symbol[9] = {'1','2','3','4','5','6','7','8','9'};
46     Display(symbol);
47     again:
48     info = inputValue(symbol,count);
49     symbol[info.i] = info.ch;
50     system("cls");
51     Display(symbol);
52     if(check(symbol,info.ch,count)==1);
53     else{
54         count++;
55         goto again;
56     }
57 }
58 int check(char sym[9],char ch,int count){
59     int i;
60     for(i = 0;i<=6; i+=3)//it's for row
61         if(sym[i] == ch && sym[i+1]==ch&&sym[i+2]==ch){
62             printf("\nThe Winner is : %c",ch);return 1;
63         }
64     for(i = 0;i<3; i++)//it's for column
65         if(sym[i]==ch && sym[i+3]==ch&&sym[i+6]==ch){
66             printf("\nThe Winner is : %c",ch);return 1;

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67     }
68     if(sym[0]==ch && sym[4]==ch&&sym[8]==ch){
69         printf("\nThe Winner is : %c",ch);return 1;
70     }
71     else if(sym[2]==ch && sym[4]==ch && sym[6]==ch){
72         printf("\nThe Winner is : %c",ch);return 1;
73     }
74     else if(count==8){
75         printf("\n-----The game was a draw-----");
76         return 1;
77     }else return 0;
78 }
79 struct myDataType inputValue(char sym[9],int count){
80     char value;
81     struct myDataType info;
82     inputAgain:
83     if(count%2 == 0){
84         typewriter("\n\nEnter Your Choice X:\n",20);
85     }else{
86         typewriter("\n\nEnter Your Choice O:\n",20);
87     }
88     scanf("%s",&value);
89     for(int i=0;i<9;i++){
90
91         if(value == sym[i]){
92             info.i = i;
93             if(count%2 == 0)
94                 info.ch = 'X';
95             else
96                 info.ch = 'O';
97             break;
98         }else{
99             info.i = -1;
100             info.ch = ' ';
101         }
102     }
103     if(info.i == -1){
104         printf("\nInput invalid");
105         goto inputAgain;
106     }
107     return info;
108 }
109
110 void Display(char sym[9])
111 {
112     typewriter("Hello everyone.\nWelcome to the game.\nThis game was developed by Chaitrika,Harshini and
Ashwini\n",40);
113     printf("
-----\n");
114     typewriter("\t\t ---TIC TAC TOE---\n",10);
115     printf("
-----\n");
116     printf("\n\nPlayer 1's Symbol: X\n");
117     printf("\n\nPlayer 2's Symbol: O\n");
118     printf("\n\t\t\t\t\t-----");
119     printf("\n\t\t\t\t\t|       |       |");
120     printf("\n\t\t\t\t\t%c   |   %c   |   %c   |",sym[0],sym[1],sym[2]);
121     printf("\n\t\t\t\t\t-----|-----|-----");
122     printf("\n\t\t\t\t\t%c   |   %c   |   %c   |",sym[3],sym[4],sym[5]);
123     printf("\n\t\t\t\t\t-----|-----|-----");
124     printf("\n\t\t\t\t\t%c   |   %c   |   %c   |",sym[6],sym[7],sym[8]);
125     printf("\n\t\t\t\t\t|       |       |");
126     printf("\n\t\t\t\t\t-----");
127 }

```