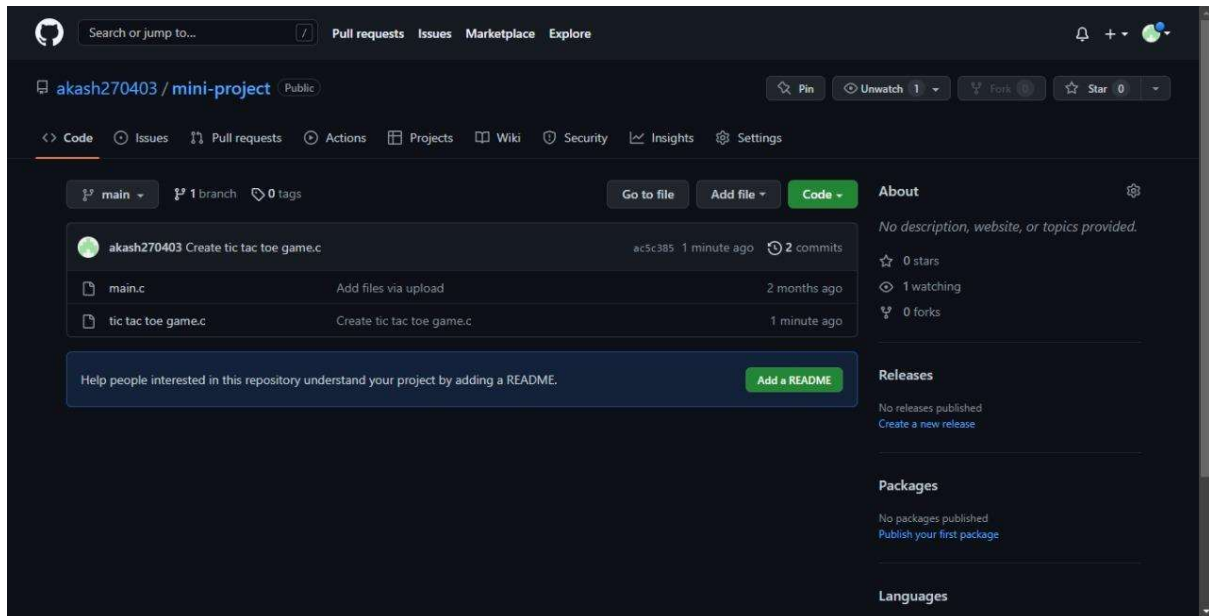


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## GIT HUB MINI PROJECT – TIC TAC TOE GAME



CODE:

```
#include<stdio.h>

#include<string.h>

char x,o;

char a[9]={'1','2','3','4','5','6','7','8','9'};

char u1[50],u2[50];

void board();

void rules();

int checkforwin();

int main()
{
    FILE *p;

    p=fopen("score.txt","a+");

    fclose(p);

    system("color 09");

    int player=1;
```

```

int choice,score=-1;

char symbol,re;

char start,dec;

int s;

rules();

printf("\n\nType 1 to start the game:-\nType 2 to view leader board:-\n");

scanf("%d",&s);

if(s==1)
{
    read:

        p=fopen("score.txt","a+");

        printf("\nEnter name of player1: ");

        scanf("%s",u1);

        fprintf(p,"\n%s",u1);

        printf("Enter name of player2: ");

        scanf("%s",u2);

        fprintf(p,"\t%s",u2);

        fclose(p);

        if(!strcmp(u1,u2))
        {

            printf("Enter names of different players!\n\n");

            goto read;

        }

    else

        decision();


    system("color fc");

    board();

do

```

```
{
```

```
    player=((player%2)?1:2);
    if(player==1)
        printf("%s Type any digit from 1-9 to fill your response:- ",u1);
    else
        printf("%s Type any digit from 1-9 to fill your response:- ",u2);
    scanf("%d",&choice);
    symbol=((player==1)?x:o);
    if(choice==1 && a[0]=='1')
        a[0]=symbol;
    else if(choice==2 && a[1]=='2')
        a[1]=symbol;
    else if(choice==3 && a[2]=='3')
        a[2]=symbol;
    else if(choice==4 && a[3]=='4')
        a[3]=symbol;
    else if(choice==5 && a[4]=='5')
        a[4]=symbol;
    else if(choice==6 && a[5]=='6')
        a[5]=symbol;
    else if(choice==7 && a[6]=='7')
        a[6]=symbol;
    else if(choice==8 && a[7]=='8')
        a[7]=symbol;
    else if(choice==9 && a[8]=='9')
        a[8]=symbol;
    else
        {printf("Wrong Selection\n");player--;}

    score=checkforwin();
```

```
    player++;  
    board();  
}while(score == -1);
```

```
p=fopen("score.txt","a+");
```

```
if(score==1)
```

```
{
```

```
    if(player==2)
```

```
    {printf("\n\nPlayer1 %s Wins!\n\n",u1);fprintf(p,"\t%s",u1);
```

```
    getch();}
```

```
    else
```

```
        {printf("\n\nPlayer2 %s Wins!\n\n",u2);fprintf(p,"\t%s",u2);
```

```
    getch();
```

```
        }
```

```
    fclose(p);
```

```
}
```

```
else
```

```
    printf("\n\nGame Draws!\n\n");fprintf(p,"\t%s","DRAW");
```

```
    getch();
```

```
}
```

```
if(s==2)
```

```
{
```

```
    int cho;
```

```
    system("cls");
```

```
    printf("\n\n");
```

```
    printf("\tLEADERBOARD\n\n");
```

```
    char c;
```

```
    p=fopen("score.txt","r");
```

```
    while((c=getc(p))!=EOF)
```

```

{
    printf("%c",c);
}

fclose(p);

printf("\n\nPress 1 to start the game:- ");

scanf("%d",&cho);

if(cho==1)
    goto read;
else
    getch();
}

else
{
    printf("\n\nShould have typed 1 to play the game!\nHope to see you back soon!\n\n");
    getch();
}
}

int checkforwin()
{
    if(a[0]==a[1] && a[1]==a[2])
        return 1;
    else if(a[3]==a[4] && a[4]==a[5])
        return 1;
    else if(a[6]==a[7] && a[7]==a[8])
        return 1;
    else if(a[0]==a[3] && a[3]==a[6])
        return 1;
    else if(a[1]==a[4] && a[4]==a[7])
        return 1;
    else if(a[2]==a[5] && a[5]==a[8])
        return 1;
}

```

```

else if(a[0]==a[4] && a[4]==a[8])
    return 1;
else if(a[2]==a[4] && a[4]==a[6])
    return 1;

else if(a[0]!='1' && a[1]!='2' && a[2]!='3' && a[3]!='4' && a[4]!='5' && a[5]!='6' && a[6]!='7' &&
a[7]!='8' && a[8]!='9')
    return 0;
else
    return -1;
}

```

```

void board()
{
    int i;

    system("cls");
    printf("\tTic-Tac-Toe\n\n");
    printf("\n\n");
    printf("%s:- (%c)\n%s:- (%c)\n\n\n",u1,x,u2,o);

    printf(" %c | %c | %c\n",a[0],a[1],a[2]);
    printf("  |  |  \n");
    printf("----|----|----\n");
    printf("  |  |  \n");
    printf(" %c | %c | %c\n",a[3],a[4],a[5]);
    printf("  |  |  \n");
    printf("----|----|----\n");
    printf(" %c | %c | %c\n",a[6],a[7],a[8]);
    printf("  |  |  \n");
}

```

```

void rules()

```

```

{
    char link;

    printf("\tTic-Tac-Toe\n\n");

    printf("Welcome to the most played 2D game and a sort of fun using X and O\n\n");

    printf("Rules:-\n");

    printf("\n1:Each player will be entering the number to put respective X or O in the desired position");

    printf("\n2:Player who gets a combination of 3 same characters either diagonal or horizontally or \n vertically will be declared as the winner");

    printf("\n\nEnjoy the game! Be a Winner!\n\n");

    printf("For more clarifications press Y else type any other character:- ");

    scanf("%c",&link);

    if(link=='y' || link=='Y')
    {
        system("start http://www.wikihow.com/Play-Tic-Tac-Toe");
    }

}

int decision()
{
    char dec;

    deci:

    printf("\n\nPlayer1 %s choose the X or O:",u1);

    dec=getchar();

    scanf("%c",&dec);

    {
        if(dec=='X' || dec=='x')
        {
            x='X';

            o='O';

        }

        else if(dec=='O')

```

```

        {
            x='0';
            o='X';
        }
    else
    {
        printf("Please enter either X or O only \n\n");
        goto deci;
    }
}
}

```

OUTPUT:

```

Tic-Tac-Toe
Welcome to the most played 2D game and a sort of fun using X and O
Rules:-
1:Each player will be entering the number to put respective X or O in the desired position
2:Player who gets a combination of 3 same characters either diagonal or horizontally or
   vertically will be declared as the winner
Enjoy the game! Be a Winner!
For more clarifications press Y else type any other character:- y
sh: 1: start: not found

Type 1 to start the game:-
Type 2 to view leader board:-
1
Enter name of player1: angu
Enter name of player2: akash

```



```
Player1 angu choose the X or 0:x
```

```
sh: 1: color: not found
```

```
sh: 1: cls: not found
```

```
Tic-Tac-Toe
```

```
angu:- (X)
```

```
akash:- (0)
```

```
  1 |  2 |  3  
  --|---|---  
  4 |  5 |  6  
  --|---|---  
  7 |  8 |  9  
  --|---|---
```

```
angu Type any digit from 1-9 to fill your response:- 9
```

```
sh: 1: cls: not found
```

```
Tic-Tac-Toe
```

```
angu:- (X)
```

```
akash:- (0)
```

1	2	3
4	5	6
7	8	X

akash Type any digit from 1-9 to fill your response:- 3  
sh: 1: cls: not found  
Tic-Tac-Toe

angu:- (X)  
akash:- (0)

1	2	0
4	5	6
7	8	X

angu Type any digit from 1-9 to fill your response:- 5

angu:- (X)  
akash:- (0)

1	2	0
4	X	6
7	8	X

akash Type any digit from 1-9 to fill your response:- 6

```
angu:- (X)
akash:- (0)
```

```
  1 |  2 |  0
  --|---|---
  4 |  X |  0
  --|---|---
  7 |  8 |  X
  --|---|---
```

```
angu Type any digit from 1-9 to fill your response:- 1
sh: 1: cls: not found
      Tic-Tac-Toe
```

```
angu:- (X)
akash:- (0)
```

```
  X |  2 |  0
  --|---|---
  4 |  X |  0
  --|---|---
```

```
angu:- (X)
akash:- (0)
```

X		2		0
----		----		----
4		X		0
----		----		----
7		8		X

Player1 angu Wins!

Should have typed 1 to play the game!  
Hope to see you back soon!