

TIC TAC TOE GAME - SOURCE CODE

```
#include <stdio.h>

#include <conio.h>

#include <windows.h>

char square[10] = { 'o', '1', '2', '3', '4', '5', '6', '7', '8', '9' };

int checkwin();

void board(string,string);

int main()
{
    char name1[50];

    char name2[50];

    int player = 1, i, choice;

    SetConsoleTextAttribute(GetStdHandle(STD_OUTPUT_HANDLE),BACKGROUND_BLUE|BACKGROUND_GREEN);

    printf("\n\t We have added the background colour..... ");

    SetConsoleTextAttribute(GetStdHandle(STD_OUTPUT_HANDLE),BACKGROUND_BLUE|BACKGROUND_GREEN|BACKGROUND_RED|BACKGROUND_INTENSITY);

    printf("\n\n\tQUANTUM UNIVERSITY ,ROORKEE    ");

    printf("\n\n\t    PROJECT    \n\n");

    SetConsoleTextAttribute(GetStdHandle(STD_OUTPUT_HANDLE),BACKGROUND_BLUE|BACKGROUND_RED|BACKGROUND_INTENSITY);

    printf("\n\n Enter First Gamer Name: ");

    scanf("%s",name1);

    SetConsoleTextAttribute(GetStdHandle(STD_OUTPUT_HANDLE),BACKGROUND_BLUE|BACKGROUND_GREEN|BACKGROUND_INTENSITY);

    printf("\n\n Enter Second  Gamer Name: ");

    scanf("%s",name2);

    char mark;
```

```
do
{
    board(name1, name2);
    player = (player % 2) ? 1 : 2;
    if(player==1){
        printf(" %s your turn, enter a number: ", name1);
        scanf("%d", &choice);
    }
    else
    {
        printf(" %s your turn, enter a number: ", name2);
        scanf("%d", &choice);
    }
}
```

```
mark = (player == 1) ? 'X' : 'O';
```

```
if (choice == 1 && square[1] == '1')
    square[1] = mark;
```

```
else if (choice == 2 && square[2] == '2')
    square[2] = mark;
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```
else if (choice == 3 && square[3] == '3')
    square[3] = mark;
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```
else if (choice == 4 && square[4] == '4')
    square[4] = mark;
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```
else if (choice == 5 && square[5] == '5')
    square[5] = mark;
```

```
else if (choice == 6 && square[6] == '6')
    square[6] = mark;
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else if (choice == 7 && square[7] == '7')
    square[7] = mark;

else if (choice == 8 && square[8] == '8')
    square[8] = mark;

else if (choice == 9 && square[9] == '9')
    square[9] = mark;

else
{
    printf("Invalid move Again !!");

    player--;
    getch();
}
i = checkwin();

player++;
}while (i == - 1);

board(name1,name2);

if (i == 1)
    printf("==>\n\a\t Congratulations %s , you won !! ",name1);
else
    printf("==>\aGame draw");
getch();
return 0;
}

/*****
FUNCTION TO RETURN GAME STATUS

```

1 FOR GAME IS OVER WITH RESULT

-1 FOR GAME IS IN PROGRESS

0 GAME IS OVER AND NO RESULT

*****/

int checkwin()

{

if (square[1] == square[2] && square[2] == square[3])

return 1;

else if (square[4] == square[5] && square[5] == square[6])

return 1;

else if (square[7] == square[8] && square[8] == square[9])

return 1;

else if (square[1] == square[4] && square[4] == square[7])

return 1;

else if (square[2] == square[5] && square[5] == square[8])

return 1;

else if (square[3] == square[6] && square[6] == square[9])

return 1;

else if (square[1] == square[5] && square[5] == square[9])

return 1;

else if (square[3] == square[5] && square[5] == square[7])

return 1;

else if (square[1] != '1' && square[2] != '2' && square[3] != '3' &&

square[4] != '4' && square[5] != '5' && square[6] != '6' && square[7]

!= '7' && square[8] != '8' && square[9] != '9')

```

        return 0;

    else

        return - 1;

}

/*****

FUNCTION TO DRAW BOARD OF TIC TAC TOE WITH PLAYERS MARK

*****/

void board(name1,name2)

{

    system("cls");

    printf("\n\t    Tic Tac Toe\n\n");


    printf("\n\n\tQUANTUM UNIVERSITY ,ROORKEE");

    printf("\n\n\t    END SEMESTER EXAM\n\n");

    printf("\n\tDeveloped by - NAVIN KUMAR.... \n\n");

    printf("\t  %s - (X) & %s - (O)\n\n\n",name1,name2);

    printf("\t-----\n");

    printf("\t  |  |  \n");

    printf("\t %c | %c | %c\n", square[1], square[2], square[3]);

    printf("\t____|____|____\n");

    printf("\t  |  |  \n");

    printf("\t %c | %c | %c\n", square[4], square[5], square[6]);

    printf("\t____|____|____\n");

    printf("\t  |  |  \n");


    printf("\t %c | %c | %c\n", square[7], square[8], square[9]);


    printf("\t-----\n\n\n");

}

/*****

END OF PROJECT *****/

```

