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#include <stdio.h>
char board[3][3];
void initializeBoard() {
    int i, j;
    for (i = 0; i < 3; i++) {
        for (j = 0; j < 3; j++) {
            board[i][j] = ' ';
        }
    }
    int count = 1;
    printf("\n\n\t ");

    for (i = 0; i < 3; i++) {
        for (j = 0; j < 3; j++) {
            printf("%d", count++);
            if (j < 2) {
                printf(" | ");
            }
        }
        if (i < 2)
            printf("\n\t-----\n\t ");
    }
    printf("\n\n\n");
}

void showBoard(int x, int y) {
    printf("\n\n\t ");
    int i, j;
    for (i = 0; i < 3; i++) {
        for (j = 0; j < 3; j++) {
            printf("%c", board[i][j]);
            if (j < 2) {
                printf(" | ");
            }
        }
        if (i < 2)
            printf("\n\t-----\n\t");
    }
    printf("\n\n\n");
}

int updateBoard(int cell, char playerSign) {
    int row = (cell - 1) / 3;
    int col = (cell - 1) % 3;
    int isValid = 1;

    if (board[row][col] != ' ') {
        printf("\n Invalid: Cell is already Filled!\n");
        isValid = 0;
    } else {
        board[row][col] = playerSign;
    }
    showBoard(row, col);
}
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    return isValid;
}
int checkWinner(char sg) {
    if (board[0][0] == sg && board[0][1] == sg && board[0][2] == sg ||
        board[1][0] == sg && board[1][1] == sg && board[1][2] == sg ||
        board[2][0] == sg && board[2][1] == sg && board[2][2] == sg) {
        return 1;
    } else if (board[0][0] == sg && board[1][0] == sg && board[2][0] == sg ||
        board[0][1] == sg && board[1][1] == sg && board[2][1] == sg ||
        board[0][2] == sg && board[1][2] == sg && board[2][2] == sg) {
        return 1;
    } else if (board[0][0] == sg && board[1][1] == sg && board[2][2] == sg ||
        board[0][2] == sg && board[1][1] == sg && board[2][0] == sg) {
        return 1;
    }
    return 0;
}
void playTicTacToe() {
    int gameResult = 0;
    int cell = 0;
    int playCount = 0;
    int updationResult = 1;
    char playerSign = ' ';
    while (!gameResult && playCount < 9) {
        if (playCount % 2 == 0) {
            printf("\n Player 1 [X]:");
            playerSign = 'X';
        } else {
            printf("\n Player 2 [O]:");
            playerSign = 'O';
        }
        scanf("%d", &cell);
        if (cell > 0 && cell < 10) {
            updationResult = updateBoard(cell, playerSign);
            if (updationResult) {
                gameResult = checkWinner(playerSign);
                if (gameResult) {
                    printf("\t ***Player %d WOn!!!***\n", playerSign == 'X' ? 1 : 2);
                }
                playCount++;
            }
        } else if (cell == -1) {
            printf("\n\tGame Terminated\n");
            return;
        } else {
            printf("\nPlease Enter a Valid cell value\n");
        }
    }
    if (!gameResult && playCount == 9) {
        printf("\n\t*** Draw... ***\n");
    }
    printf("\n\t --- Game Over --- \n");
}
int main() {
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printf("-----Tic Tac Toe-----\n\n");
printf("\n * Instruction \n\n");
printf("\tPlayer 1 sign=X\n");
printf("\tPlayer 2 sign=O");
printf("\n\t To exit from game,Enter -1\n");
printf("\n\n* Cell Number on Board\n");
initializeBoard();
char start;
start = ' ';
printf(">>>> Press Enter to start...");
scanf("%c", &start);
if (start) {
    int userChoice = 1;
    while (userChoice) {
        playTicTacToe();
        printf("\n* Menu\n");
        printf("\nPress 1 To Restart");
        printf("\nPress 0 for exit");
        printf("\n\nChoice:");
        scanf("%d", &userChoice);
        if (userChoice) {
            initializeBoard();
        }
        printf("\n");
    }
}
printf("\n :: Thanks for playing Tic Tac Toe game! :: \n");
return 0;
}
```