TIC-TAC-TOE

- ## INTRODUCTION
  In this tic tac toe on c, both players must enter a particular number one to nine based on the grid position in order to make a mark X or O. In the tic tac toe game, winner will be the first player who successfully position three of their marks in a horizontal, vertical, or diagonal row. This game is build using C language.

- ## REQUIREMENTS

High Level Requirements

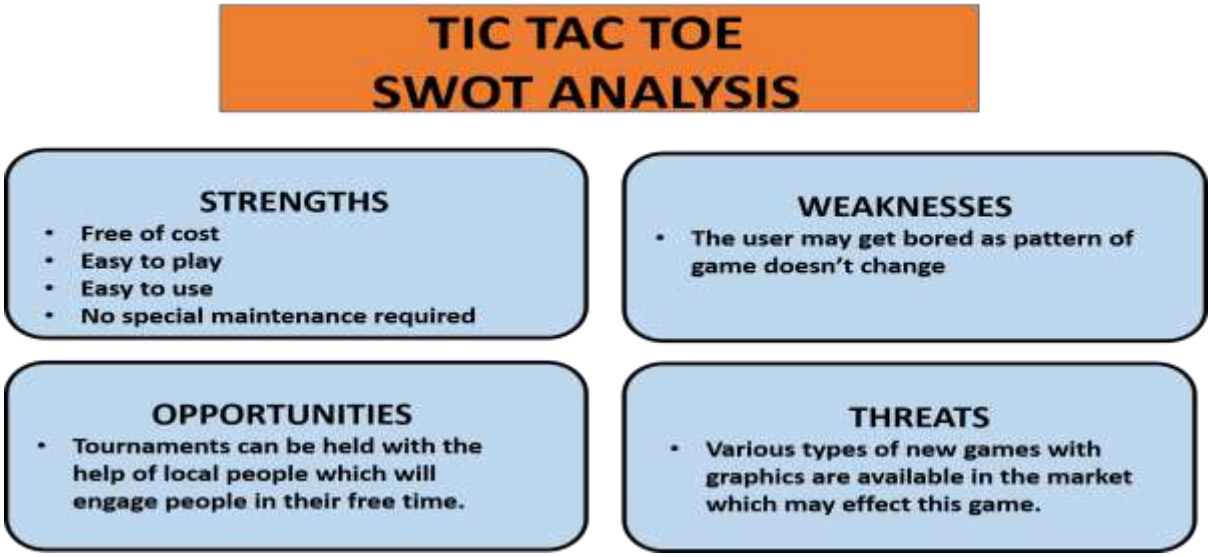
ID	**Description**
HR01	User should be able to choose 'X' or 'O' to play
HR02	User should be able to Exit the game
HR03	User should win or lose
HR04	User should end up in a Drawn situation

Low level Requirements

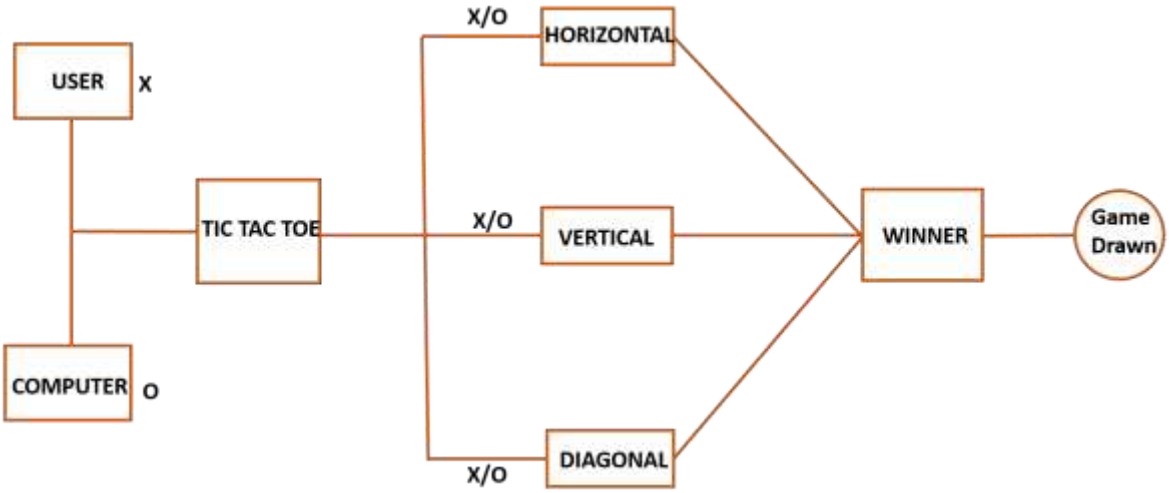
ID	**Description**	**HLR ID**
LR01	If the user presses '1', he'll be play with 'X'.	HR01
LR02	If the user is playing with 'X', he'll get the first turn.	HR01
LR03	If the user presses '2', he'll be play with 'O'.	HR01
LR04	If the user is playing with 'O', he'll get the second turn.	HR01

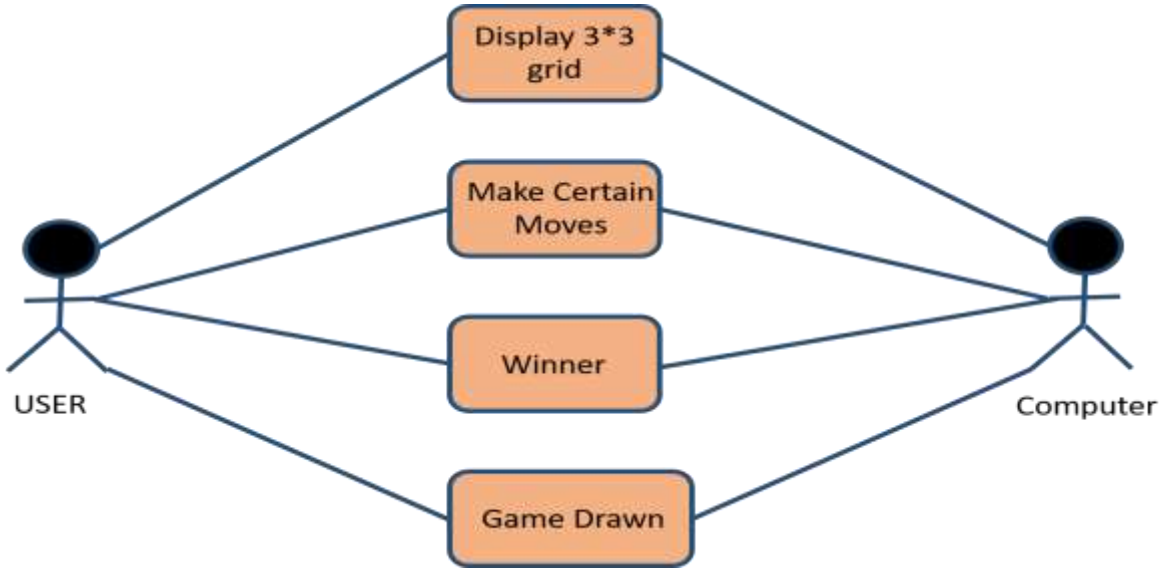
LR05	If the user presses '3', it'll exit the game.	HR02
LR06	If the computer gets 3 Xs or 3 Os in vertical, horizontal or diagonal row, User will lose.	HR03
LR07	If the user gets 3 Xs or 3 Os (as per his choice), in vertical, horizontal or diagonal row, User will win.	HR03
LR08	If the total number of moves, i.e., 9 moves have been completed and neither the user nor the computer has won, it'll end up in a draw.	HR04

- **SWOT ANALYSIS**



- **ARCHITECTURE**





- **TEST PLAN**

Table: High level test plan

Test ID	Description	Exp I/P	Exp O/P
H_01	Check whether the grid being drawn or not.	No input.	3*3 grid is drawn.
H_02	Check if User/Computer got 3 of his inputs in vertical, horizontal or diagonal format.	'X' or 'O' input from the User/Computer	The User/Computer won the game.
H_03	Check for draw.	9 inputs from (User + Computer)	The game is over.

Table: Low level test plan

Test ID	Description	Exp I/P	Exp O/P
L_01	Checking for the basic requirement to the game, i.e., a 3*3 grid is drawn or not.	Not input expected from the user.	3*3 graph is drawn.
L_02	Check whether the user/computer can make certain moves. Check who first finishes with 3 marks in a row (vertical, horizontal or diagonal).	'X' or 'O' input from the User/Computer.	The User/Computer won the game.
L_03	Check if a total of 9 moves have been made (combining that of user and computer), the game ends up in a draw.	9 inputs from (user + computer).	The game is over.