

# TIC TAC TOE

## Introduction:

Tic-tac-toe, alternatively called noughts and crosses, X's and O's, and many other names, is a pencil-and-paper game for two players, O and X, who take turns marking the spaces in a 3×3 grid, usually X going first. The player who succeeds in placing three respective marks in a horizontal, vertical, or diagonal row wins the game or in Tic-Tac-Toe a game can end with a player winning (getting 3 of his pieces in row) or end in a draw (no spaces left on the board with no-one winning).

## 4W's and 1H

### What

- The Tic-Tac-Toe game is 2 player game on a computer-one plays with X's and the other as O's.
- The game starts with one of the players and ends with one of the players who has one whole row/column/diagonal filled with their respective character ('X' or 'O'). If no one wins then the game is said to be draw.

### Why

- Tic Tac Toe game helps to apply the logic and develop strategy at an early age. Tic-tac-toe helps develop coordination, fine motor skills and visual skills.

### When

- The Tic Tac Toe is a great way to pass your free time whether you're standing in a line or spending time with your kids.
- When bored with the day to day tats one can play it for refreshment.

### Where

- It can now be played online in the computer rather than using the pen paper.

### How

- The game is played on a grid that's 3 squares by 3 squares.

- You are X, your friend (or the computer in this case) is O. Players take turns putting their marks in empty squares.
- The first player to get 3 of her marks in a row (up, down, across, or diagonally) is the winner.
- When all 9 squares are full, the game is over.

## REQUIREMENTS

### High-Level Requirements

- Maximum high definition.
- Design whole system with efficient manner.
- The game has to be user friendly.
- Instructions must be provided, which help the user throughout the game. This is useful for new users.

### Low-Level Requirements

- Displaying the grid.
- Determining the winner of the game.
- Providing the options to play again.

## SWOT Analysis

### ***STRENGTHS***

- Efficient in terms of time.
- Returns an optimal action by assuming the opponent play.

### ***WEAKNESS***

- Game cannot be played by more than 2 players.
- It doesn't contain levels.
- It is error prone.

### ***OPPORTUNITIES***

- Simplifies versions
- Young and encouraged for kids.

### ***THREATS***

- Players might get bored.
- Emerging of different attractive games.