**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 gird.
* 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.

***THREATS***

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

***OPPRTUNITIES***

* Simplifies versions
* Young and encouraged for kids.