The following are a set of rules for a game that mixes the rules of Tic-tac-toe with the topology and mechanics of a Rubik's Cube. Usual Rubik's Cube's color scheme is ignored; this game would be played with a completely blank Cube and tools to draw on it.

Proposed core rules:

- Like in Tic-tac-toe, each turn a player draws an X or an O in the front face of the cube. (drawing phase)
- After drawing, they must rotate any one of the cube's faces that can be accessed via the frontal face, meaning that the bottom and standing faces are not valid rotations. (turning phase)
- They can only draw on the frontal face.
- Rotations must be a $\pm 90°$ turn only
- If in any face of the cube there is a winning Tic-tac-toe board, the game is over and the winner is whoever won in that face. A tie with two winners might occur (unlike regular tic-tac-toe, where ties can only occur by running out of moves)
- The game is over only after the final turn has been made. Getting to a winning Tic-Tac-Toe configuration will not win you the game at the "drawing phase".

Possible or alternative rules:

- The cube can only be seen from the front face, so that all other faces are always hidden. A less severe limitation could be allowing the cube to be seen only during the drawing phase.
- If the front face is full at the start of a player's turn, instead of declaring the game a draw, that player may skip the drawing phase.

In the following pages there's an example match of a *Rubik'd Tic-Tac-Toe* game (name not final).

Turn 1, Player 1

P1 draws at the center and then turns the equator to right side, hiding the mark.

Turn 1, Player 2:

P2 draws on the upper left corner, done turns the left side downwards, also hiding their mark.

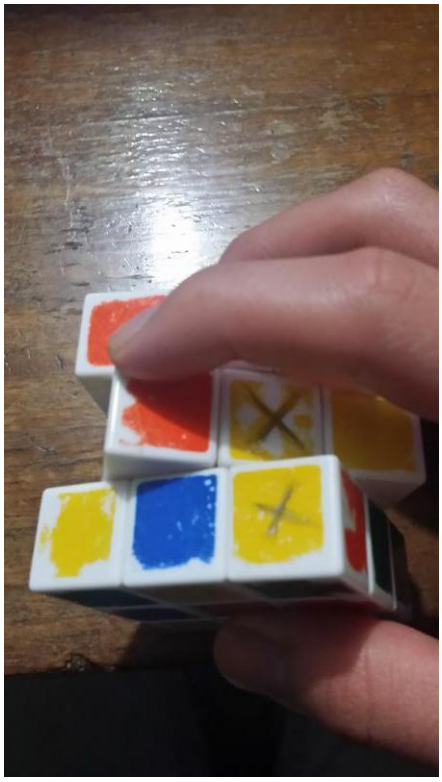
Turn 2, Player 1:

P1 draws on the upper right corner, then turns the front face clockwise, shifting the O that P2 had drawn just in the previous turn.

Turn 2, P2:

Knowing that the O has been moved by P1, P2 draws another one on the right side of the middle part of the front face, and then rotates it to the left, so that it gets aligned with the first O.

However, upon completing the turn, the very first X that had been drawn returns to the front face, to its original position. P2 had forgotten about it.



Turn 3, P1:

Thanks to P2's careless rotation (that P1 cleverly induced by changing the position of the first O), P1 is now free to complete a whole line of 3 Xs and win the game.