created by Ioel

• Preparations

**Step 1:** Import the package

```
#import "@preview/tictactoe:1.0.0":
tictactoe
```

• How to Play

Step 1: Start a game

```
#let game = tictactoe[]
```

**Step 2:** Draw the field (centering optional)

```
#align(center, game.field)
```

**Step 3:** State current player and winner

```
#if game.winner != none {
  [Player #game.winner won!]
} else {
  [Player #game.current's turn]
}
```

**Step 4:** Play the game – each **valid** entry changes the current player to the other!

#let game = tictactoe[124123]

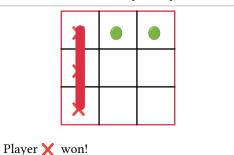
Note! – Basic filtering such as duplicate purging is done automatically!
So 111221332 will end up as (1,2,3) and for players (1,2,1) respectively.

The example (Steps 1-4) applied, results in:

X		
×	5	6
7	8	9

Player X 's turn

And in case of a winner [12437]:



#### Customization

Change Width and height

width The width of the whole game field default: 3cm

height The height of the whole game field
 default: 3cm

```
#ttt.tictactoe(
  width: 6cm,
  height: 2cm
)[].field
```

1	2	3
4	5	6
7	8	9

#### **Change Player Icons**

icons The respective player's icons given as an 2-element array of (main) type content. First position is player 1's icon, the second player 2's icon.

```
default: (
  emoji.crossmark, emoji.circle.green
)
```

next page for example!



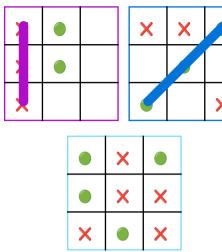


### **Change Player Color**

**color** color of the winners and draw condition.

```
default: (
  player1: rgb("#dd2e44"),
  player2: rgb("#78b159"),
  draw: orange
)
```

```
#ttt.tictactoe(
  color: (
    player1: purple,
    player2: blue,
    draw: aqua
  )
)[..].field
```



## Disable Raster Helper

helper draws field numbers into empty fields for easier play. default: true

```
#ttt.tictactoe(
  helper: false
)[..].field
```

 x
 x
 3
 x
 x

 4
 5
 0
 x
 0

 x
 0
 x
 0
 0

# What tictactoe()[] returns

The function tictactoe[]() returns three parameters all the time:

#box(..) environment. Gets updated automatically to the current state. Only the steps up until a winner is determined are rendered. After that helper numbers are removed and the game is essentially locked.

winner once the game is complete, the winner player's icon is returned or in case of a draw "draw" is returned. In other cases, none is returned.

**current** the current player's turn. The respective icon is returned.

This should be enough to for example build *Ultimate TicTacToe*.