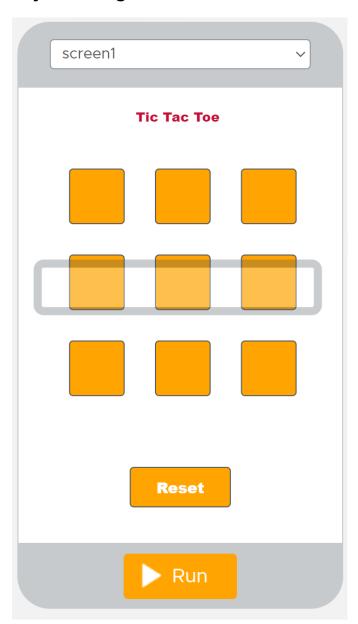
# **Tic Tac Toe**

#### 1. Introduction

Make the Tic Tac Toe game.

## 2. Layout design



### 3. Handle button click for player

First we need a variable to remember whose turn it is. We will make player X go first.

```
var player = "X";
```

Next for every onEvent button click we place the current player in the button text, and then switch to the other player.

```
onEvent( \nldow "button1", \nldow "click", function() {
    setText( \nldow "button1", player);
    if (player == "X") {
        player = "0";
    } else {
        player = "X";
    }
    }
}
```

#### 4. Check for winner

We need to check for a winner after every on Event button click, and there are 9 buttons. Instead of duplicating the code for checking for a winner in the 9 different on Event button clicks, we extract that block of code out and put it into a function so that we only have one copy of it in a function. We will then call that function to execute the code.

#### 5. checkWinner function

The checkWinner function contains the code to check for a winner. There are 8 different possible combinations for a win, so we need to ask 8 separate questions. These 8 questions are  $OR \parallel together$ .

```
function checkWinner() {→
                            player + " win");
    setText(▼"message lab",
    showElement(▼"message lab");
```

For each question, we need to ask 3 things:

- The text for button 1 is equal to the text for button 2 AND
- The text for button 2 is equal to the text for button 3 AND
- The text for button 1 is not a blank.

```
function checkWinner()
    setText(▼"message_lab", player + " win");
    showElement(▼"message lab");
```

Fill in the remaining questions. Make appropriate changes to the button names.