## **Appendix**

## Typical Sprite:

```
when this sprite clicked
   costume # = 1 then
   canMove = 0 then
   replace item me of State with turn
   replace item turn of remaining with item turn of remaining
   set turn v to 3 - turn
      previous > 0 then
      replace item me of State with item previous of State v
     replace item previous of State with 0
     set previous ▼ to 0
     set turn v to 3 - turn
   canMove = 1 and item me of State = turn
 set previous ▼ to me
 canTake = 1 then
 replace item me of State with 0
 set canTake ▼ to 0
oadcast check 🔻
```

Holds the different coloured costumes so it can change colour depending on whose turn it is or whether a piece needs taking or not

Detects whether the place is valid to be clicked on

Detects whose turn it is

Replace item of State with Turn to indicate which player is where on the board

Minuses one from Remaining to determine how many pieces each player has left before canMove=1

Once the 3-in-a-row button has been clicked, determines can Take

Computer science TSM 1

## The board:

```
when 🖊 clicked
set canMove ▼ to 0
replace item 17 of remaining v with 9
replace item 2 of remaining with 9
set turn v to 1
replace item 17 of State with 0
replace item 2 of State with 0
replace item 37 of State with 0
replace item 47 of State with 0
replace item 57 of State with 0
replace item 67 of State with 0
replace item 77 of State with 0
replace item 87 of State with 0
replace item 97 of State with 0
replace item 10 of State with 0
replace item 11 of State with 0
replace item 12 of State with 0
replace item 13 of State with 0
replace item 14 of State with 0
replace item (15 of State with 0
replace item 16 of State with 0
replace item 17 of State with 0
replace item 18 of State with 0
replace item 19♥ of State ♥ with 0
replace item 20 v of State v with 0
replace item 21 of State with 0
replace item 22 of State with 0
replace item 23 of State with 0
replace item 247 of State with 0
broadcast redraw ▼
```

When the green flag is clicked it refreshes the board:

Sets canMove to 0

Replaces item 1 and 2 of Remaining with

Sets the turn to 1

Sets whether a piece can be taken or not

The board has only one set appearance

```
when I receive check 

if item 1 of remaining = 0 and item 2 of remaining = 0 then

set canMove to 1

broadcast redraw
```

Computer science TSM 2

## 3-in-a-row Button



Set canTake to 1 when it's clicked, enabling the appropriate player to click on a piece of the oppositions to take it

Computer science TSM 3