A Maze Game Created in Scratch

http://cs.oregonstate.edu/~mjb/scratch

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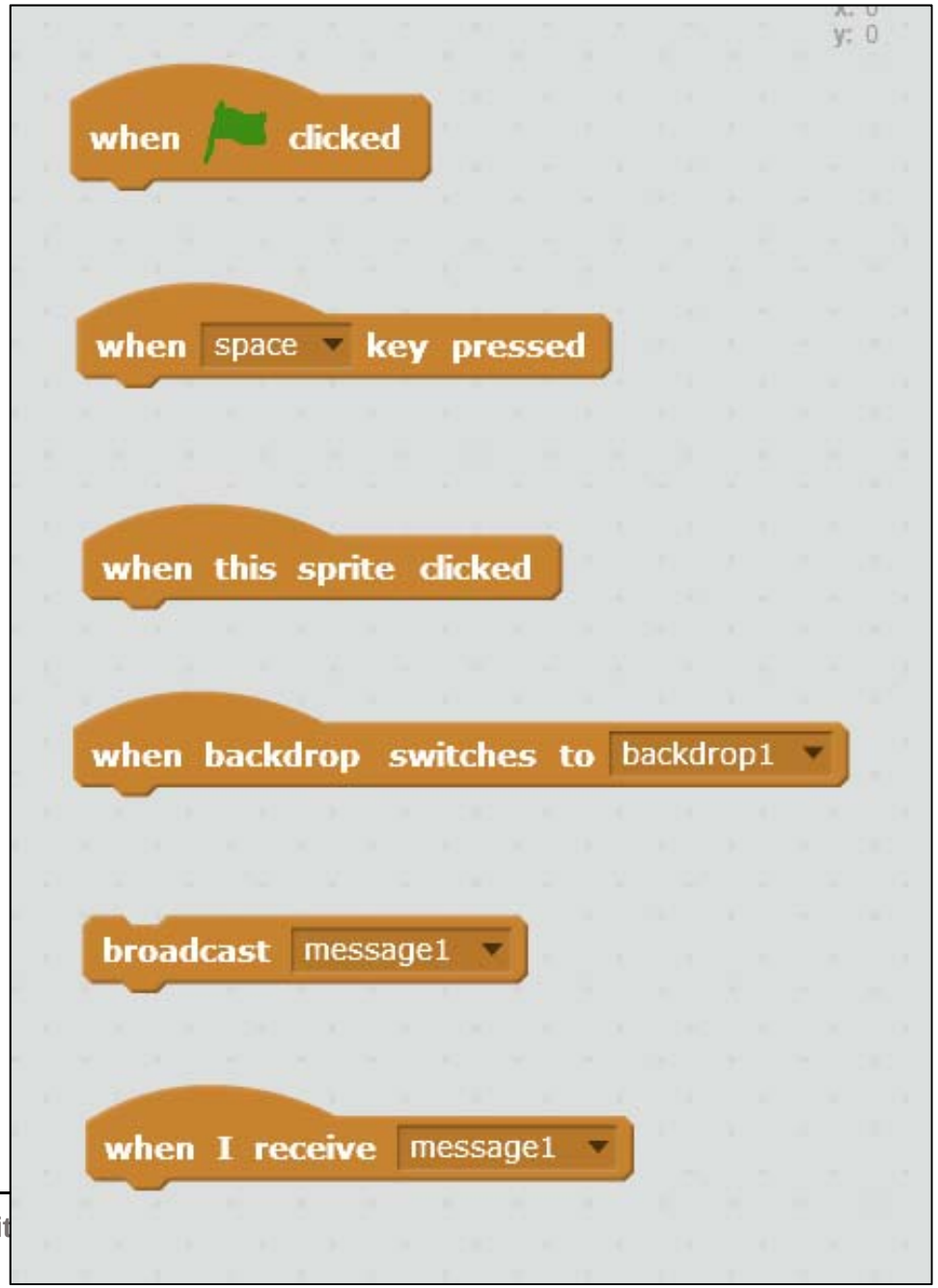
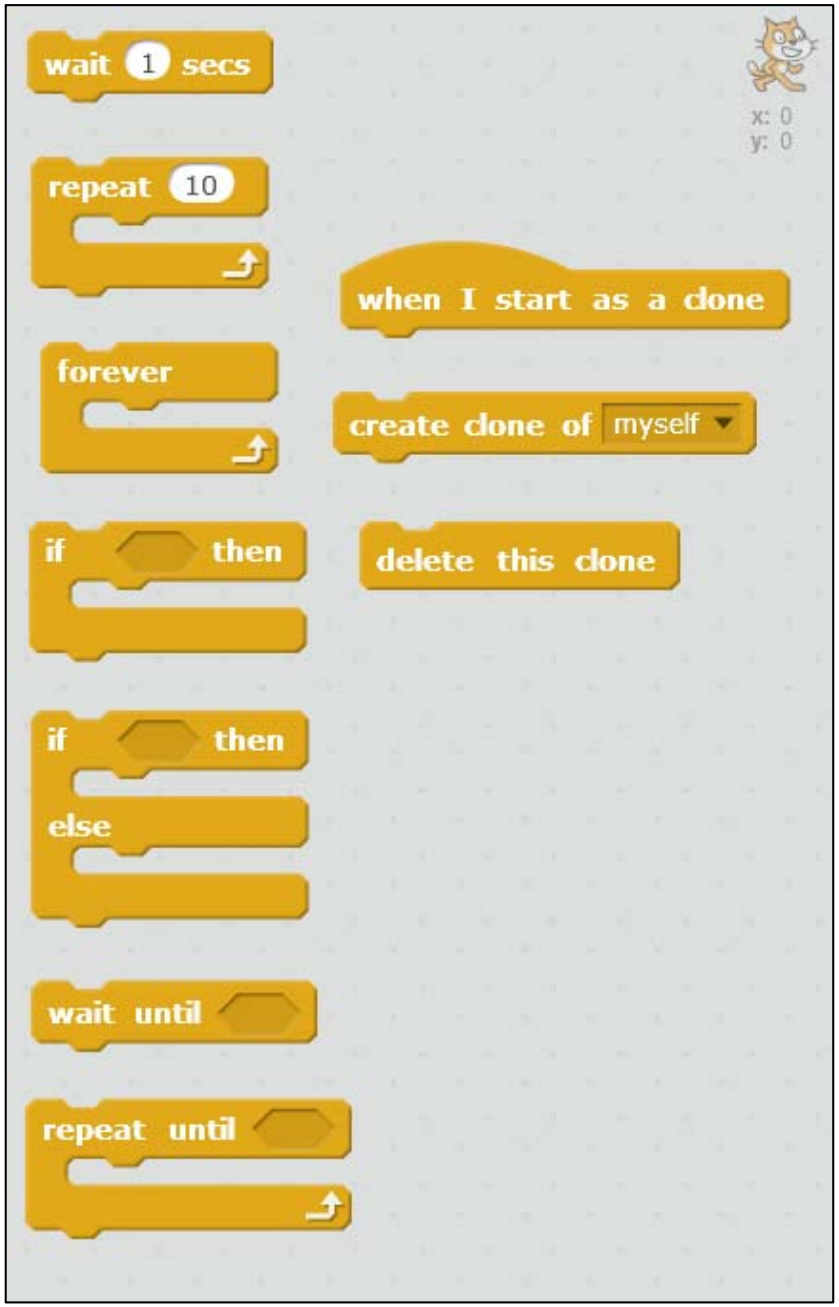
Events


y: 0
when clicked
when space key pressed
when this sprite clicked
when backdrop switches to backdrop1
broadcast message1
when I receive message1

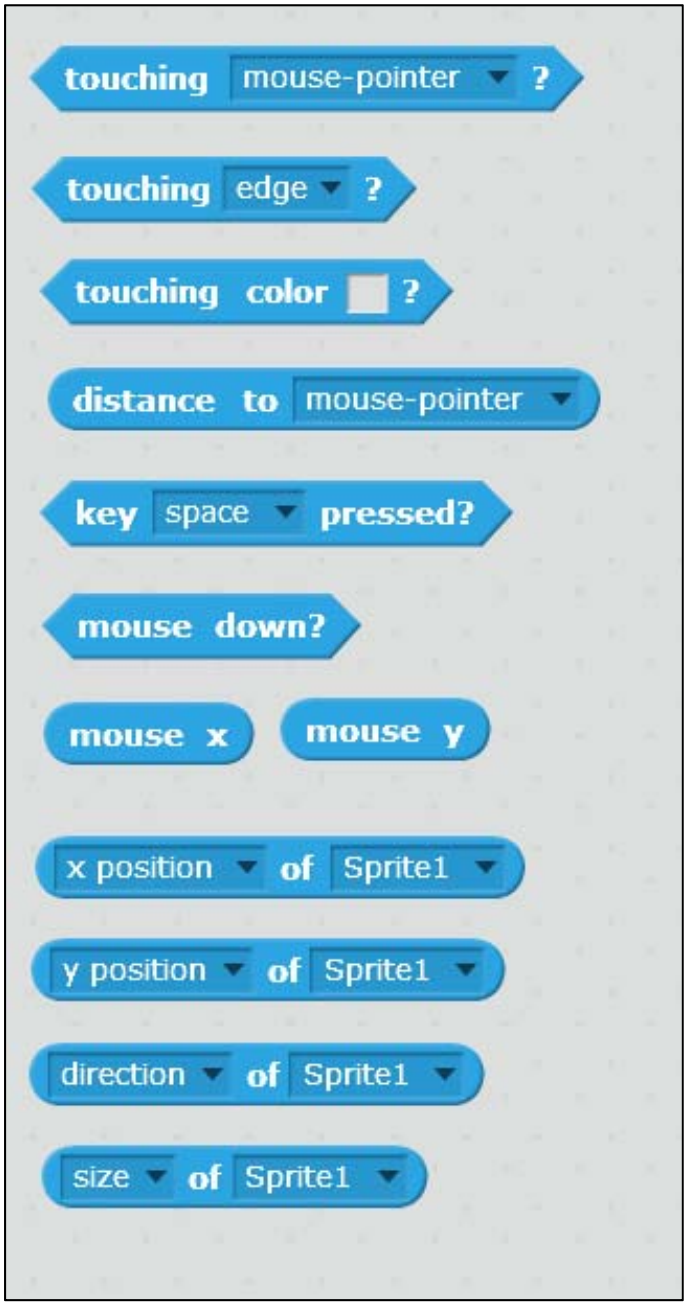
Data

Pen
Operators
Data
More Block
Make a Variable
Speed
set Speed to 0
change Speed by 1

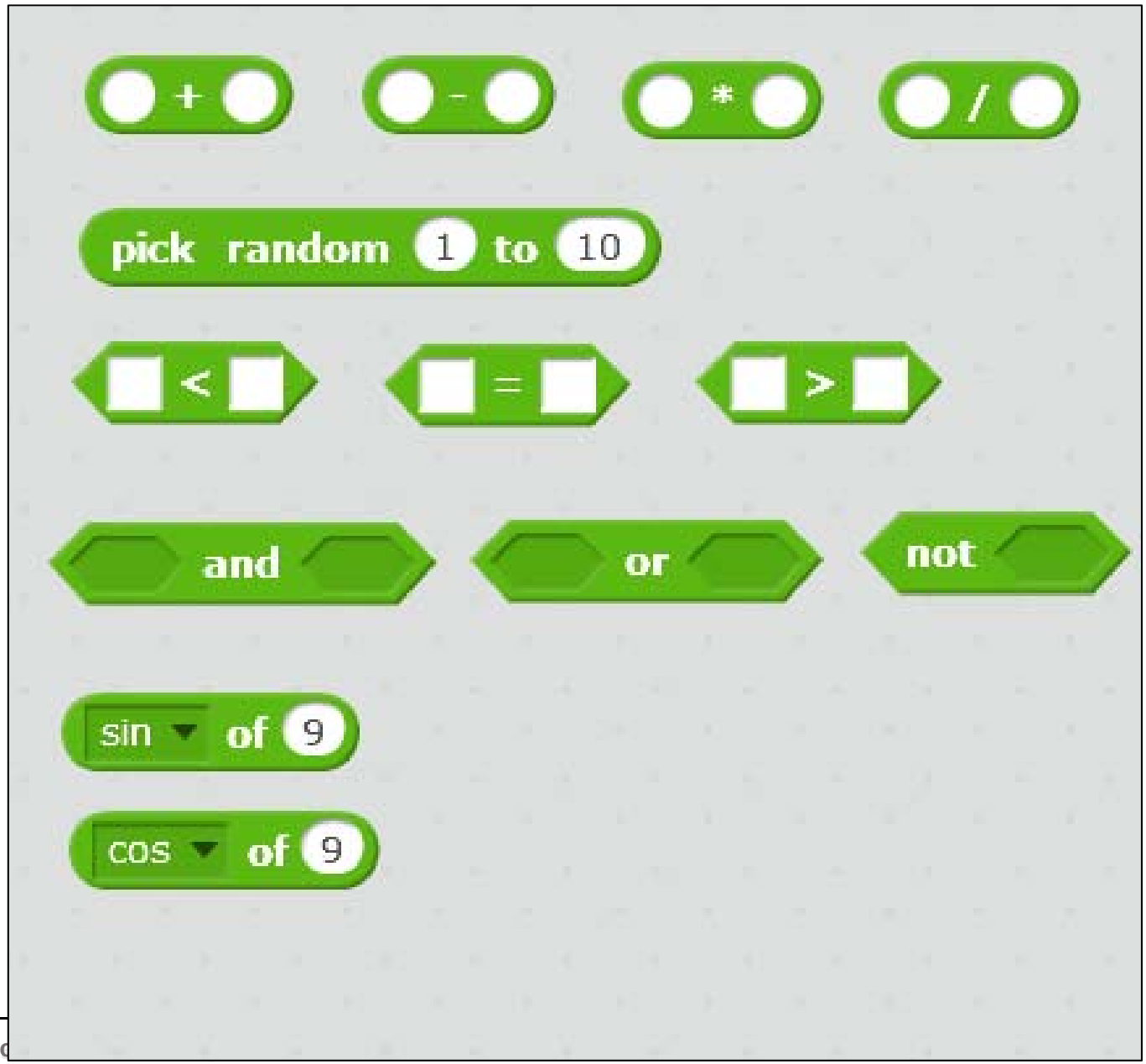
Control


wait 1 secs
repeat 10
forever
if then
if then
else
wait until
repeat until
when I start as a clone
create clone of myself
delete this clone
x: 0
y: 0

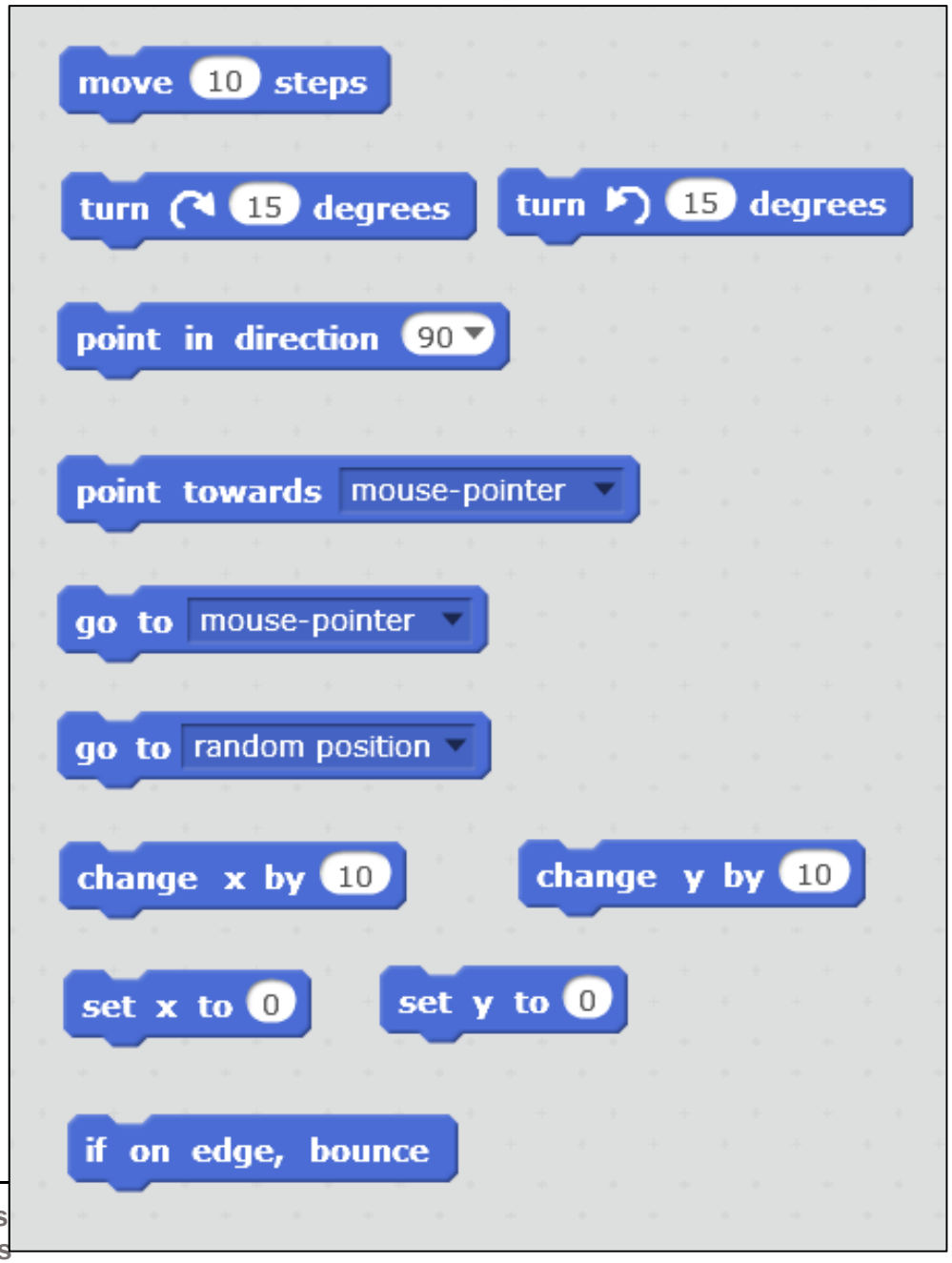
Sensing

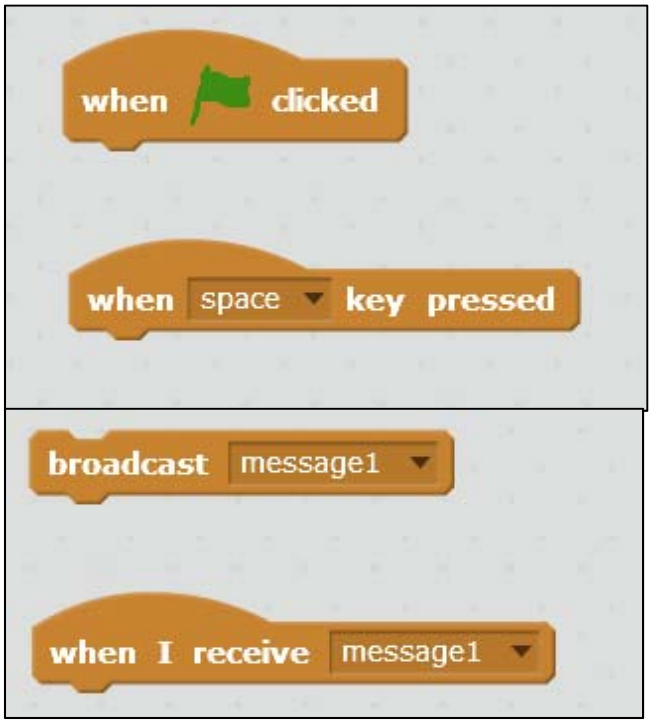

touching mouse-pointer ?
touching edge ?
touching color ?
distance to mouse-pointer
key space pressed?
mouse down?
mouse x
mouse y
x position of Sprite1
y position of Sprite1
direction of Sprite1
size of Sprite1

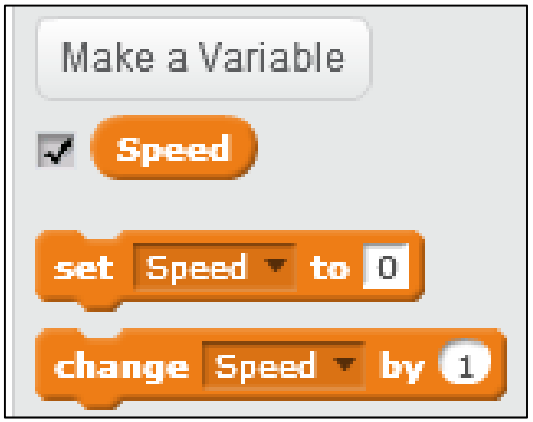
Operators



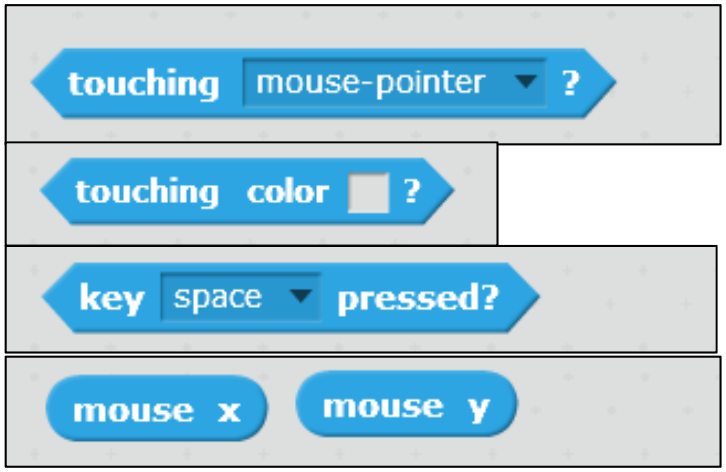
Motion

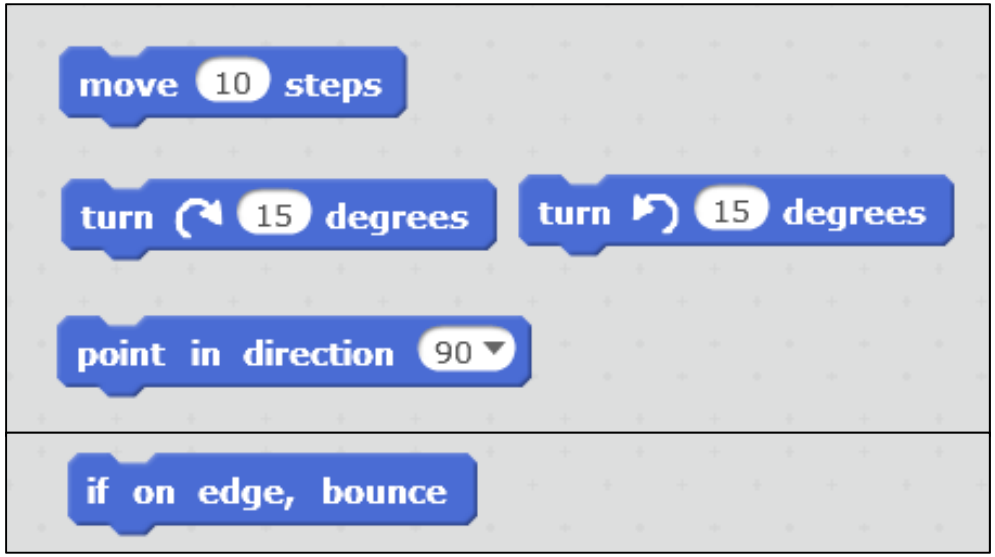

move 10 steps
turn 15 degrees
turn 15 degrees
point in direction 90
point towards mouse-pointer
go to mouse-pointer
go to random position
change x by 10
change y by 10
set x to 0
set y to 0
if on edge, bounce

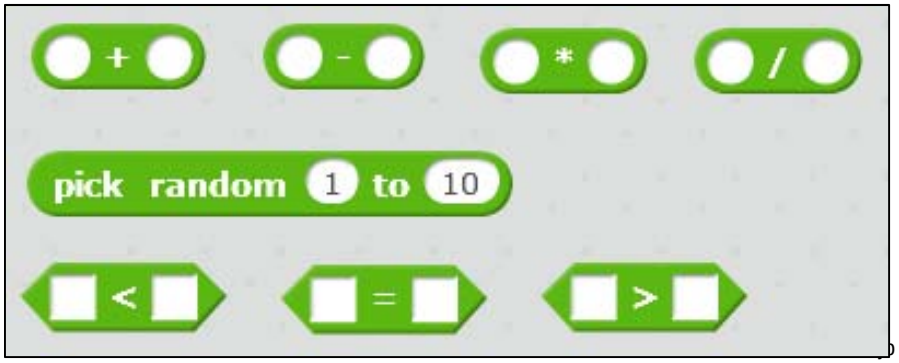

when clicked
when space key pressed
broadcast message1
when I receive message1


Make a Variable
Speed
set Speed to 0
change Speed by 1

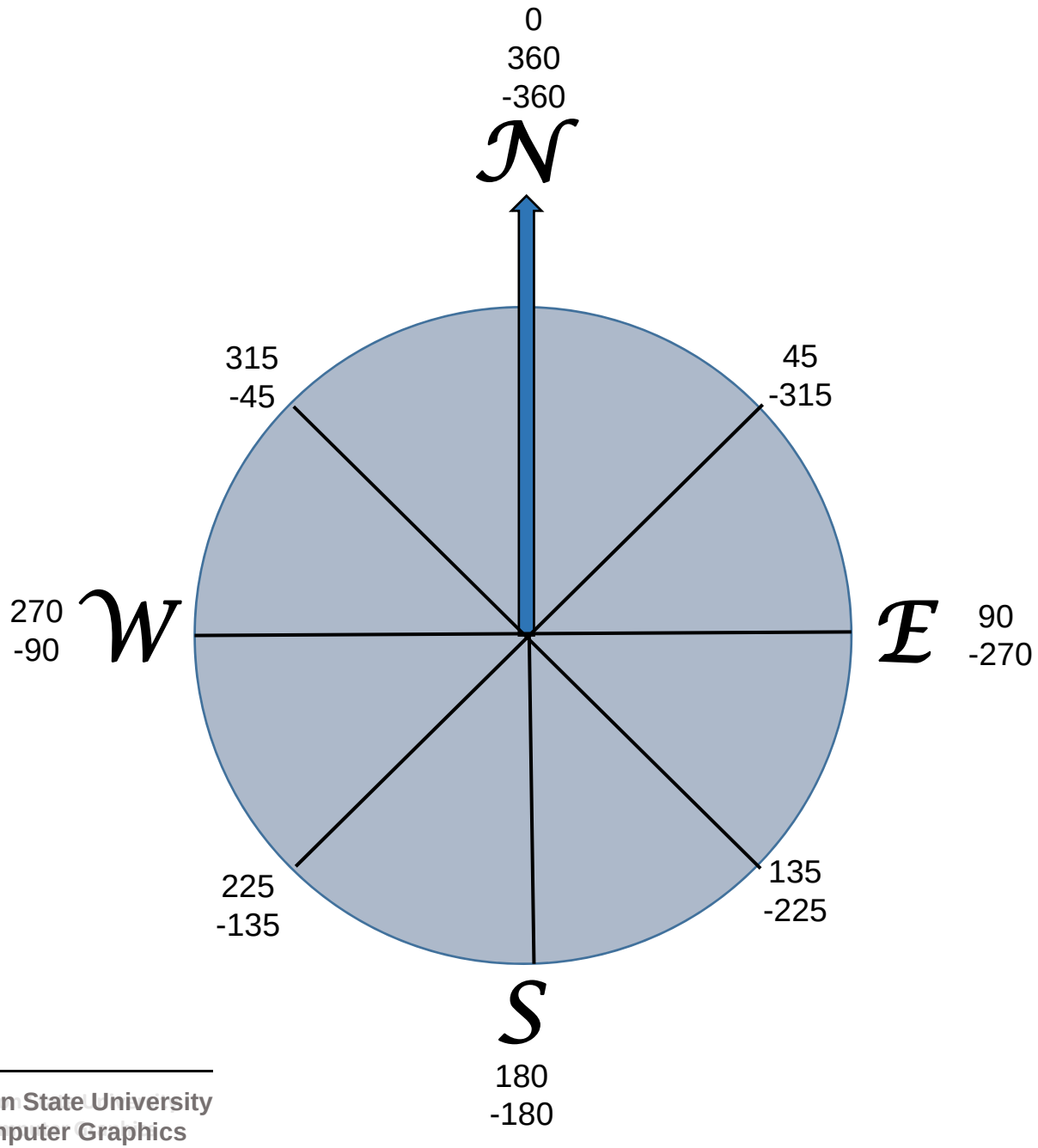
when I start as a clone
create clone of myself
delete this clone


touching mouse-pointer ?
touching color ?
key space pressed?
mouse x
mouse y

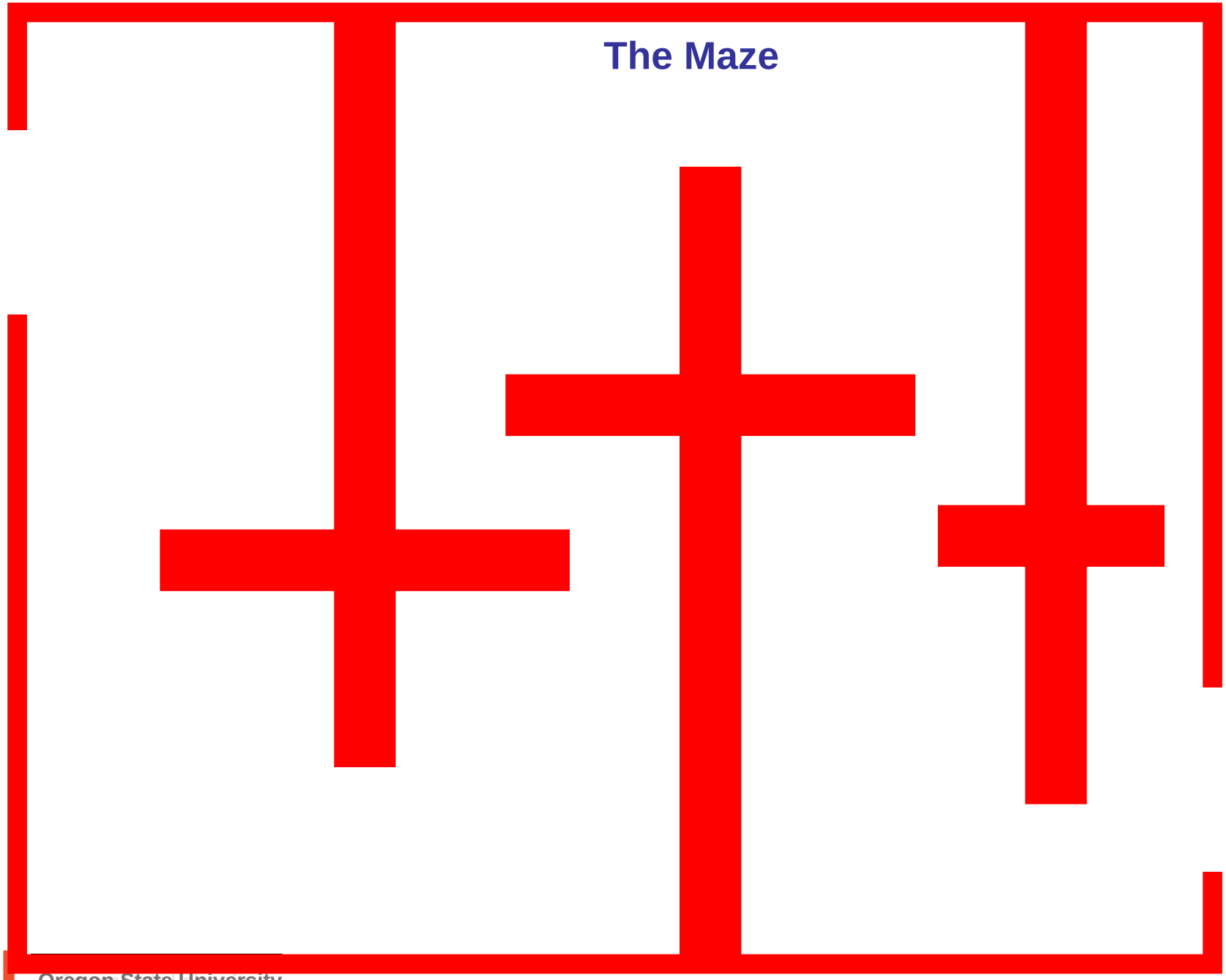

move 10 steps
turn 15 degrees
turn 15 degrees
point in direction 90
if on edge, bounce


+
-
*
/
pick random 1 to 10
<
=
>

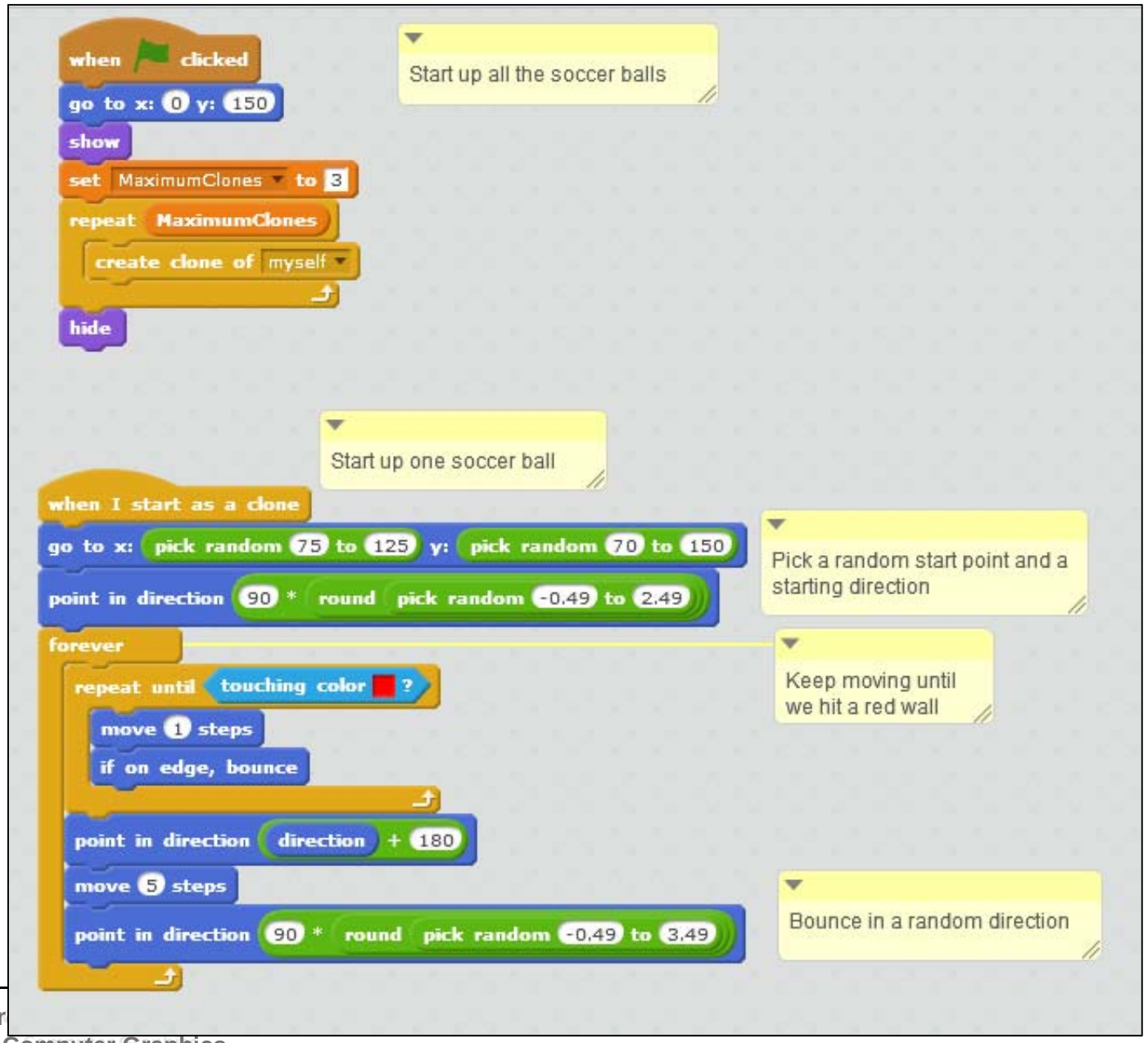
Scratch Handles the Directions you are Going Like a Compass Does



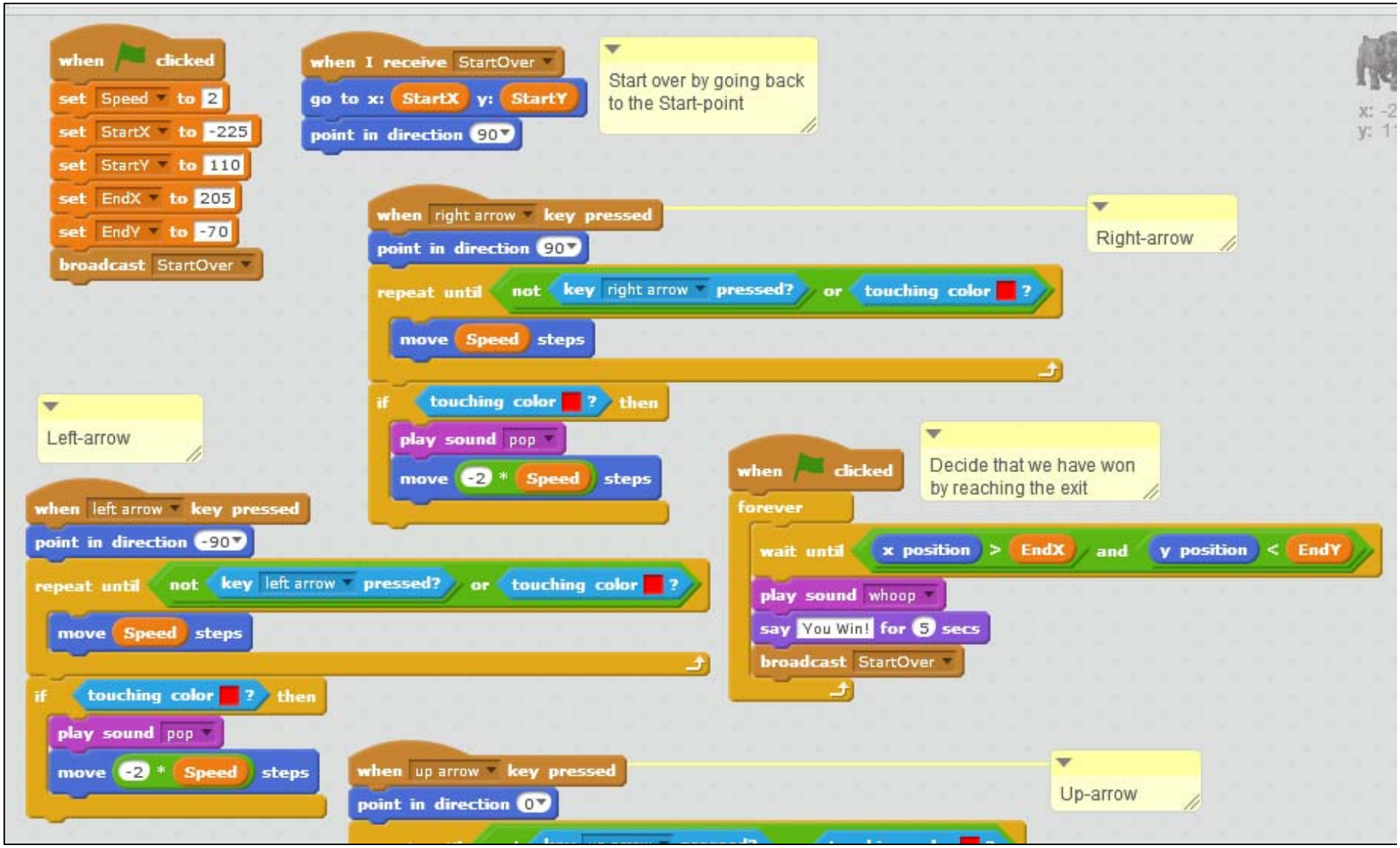
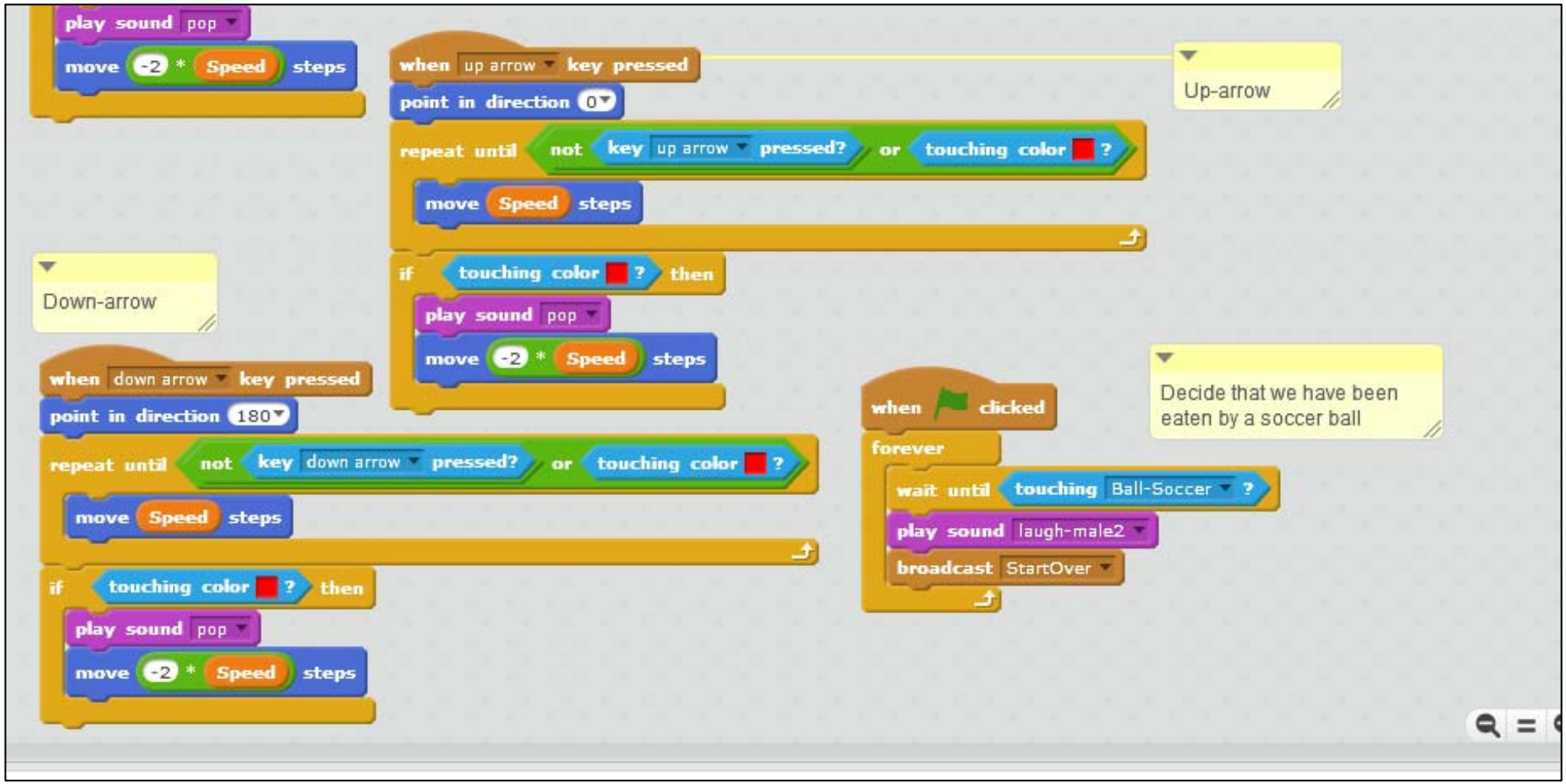
The Maze



Soccer Ball


when clicked
go to x: 0 y: 150
show
set MaximumClones to 3
repeat MaximumClones
create clone of myself
hide
Start up all the soccer balls
Start up one soccer ball
when I start as a clone
go to x: pick random 75 to 125 y: pick random 70 to 150
point in direction 90 * round pick random -0.49 to 2.49
Pick a random start point and a starting direction
forever
repeat until touching color ?
move 1 steps
if on edge, bounce
Keep moving until we hit a red wall
point in direction direction + 180
move 5 steps
point in direction 90 * round pick random -0.49 to 3.49
Bounce in a random direction

Dog – top code


when clicked
set Speed to 2
set StartX to -225
set StartY to 110
set EndX to 205
set EndY to -70
broadcast StartOver
when I receive StartOver
go to x: StartX y: StartY
point in direction 90
Start over by going back to the Start-point
when right arrow key pressed
point in direction 90
repeat until not key right arrow pressed? or touching color ?
move Speed steps
if touching color ? then
play sound pop
move -2 * Speed steps
Right-arrow
Left-arrow
when left arrow key pressed
point in direction -90
repeat until not key left arrow pressed? or touching color ?
move Speed steps
if touching color ? then
play sound pop
move -2 * Speed steps
when clicked
forever
wait until x position > EndX and y position < EndY
play sound whoop
say You Win! for 5 secs
broadcast StartOver
Decide that we have won by reaching the exit
when up arrow key pressed
point in direction 0
Up-arrow

Dog – bottom code