ONLINE LESSON SUMMARY

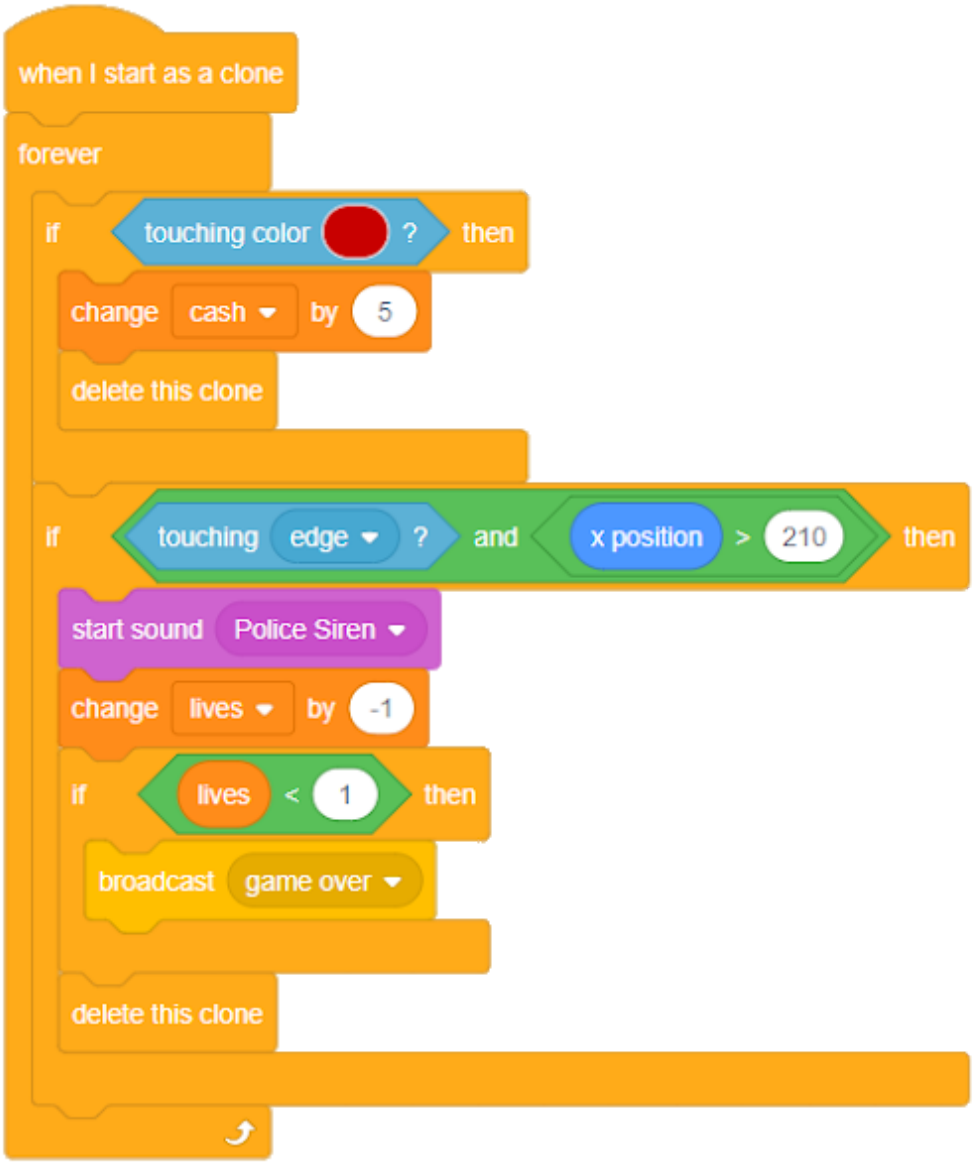
AUGUST 15, 2020

CHROME WORKS e-Learning Lab

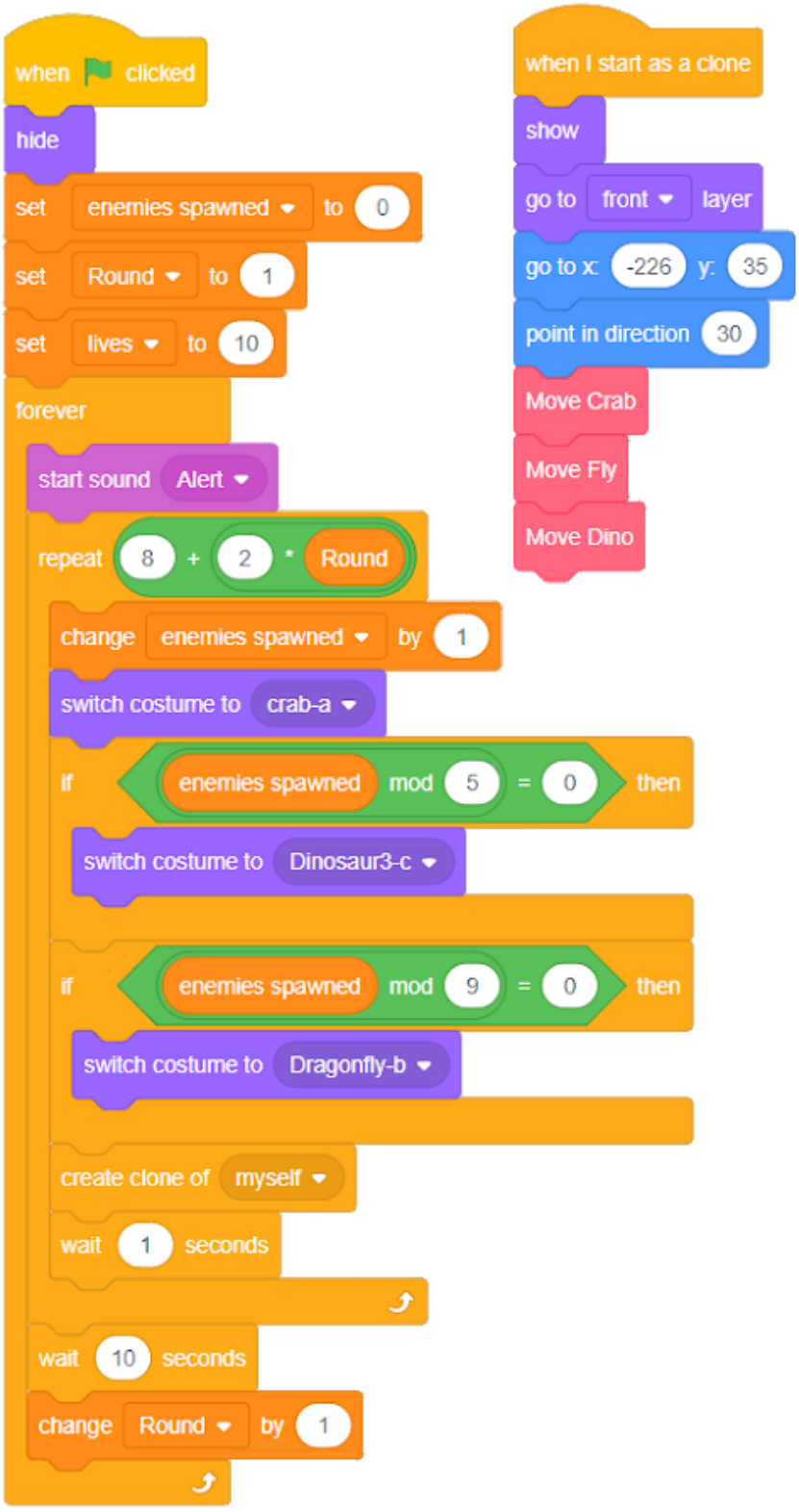
TOWER DEFENCE

Today we're going to be coding a simple tower defence game with two kinds of weapons and enemies that move along a path. You can find the starter file for this project here.

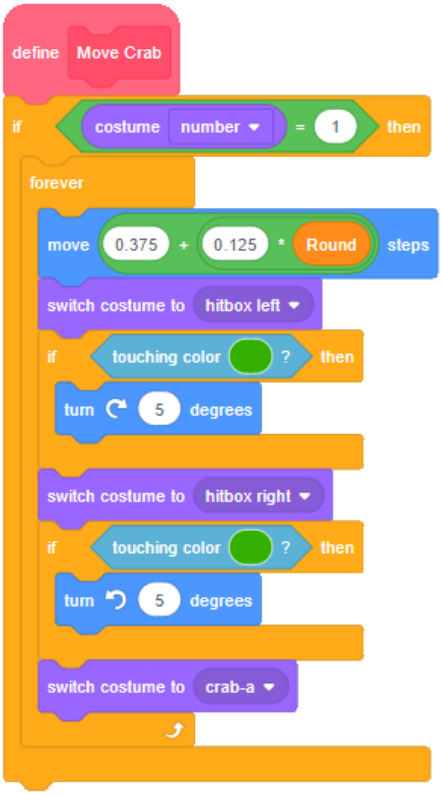
ENEMY

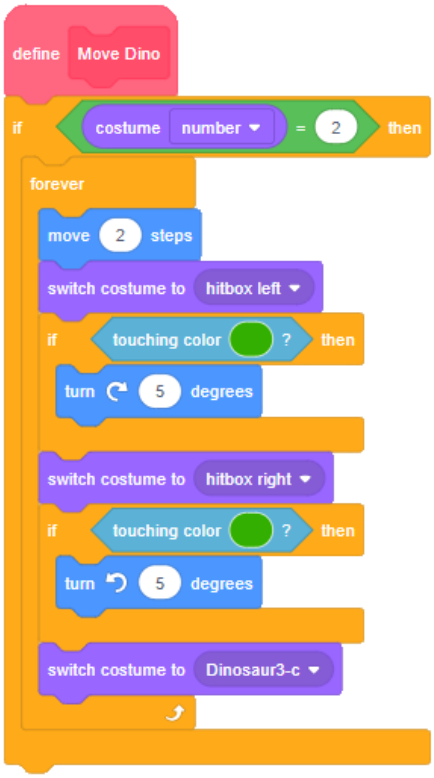


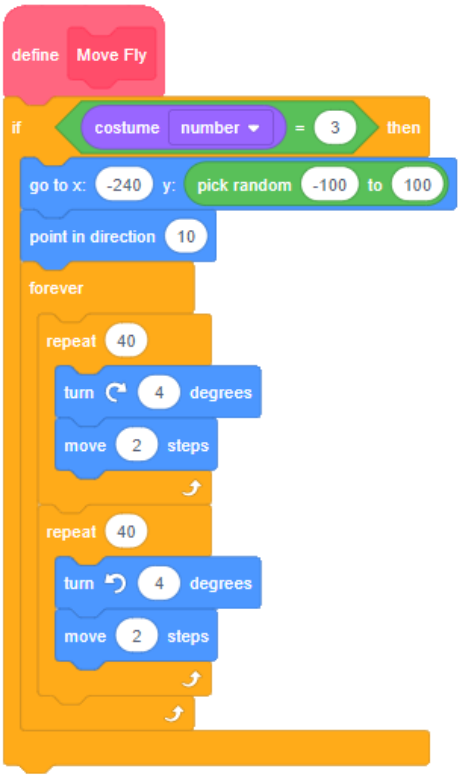
ENEMY (CONT)


when clicked
hide
set enemies spawned to 0
set Round to 1
set lives to 10
forever
start sound Alert
repeat 8 + 2 * Round
change enemies spawned by 1
switch costume to crab-a
if enemies spawned mod 5 = 0 then
switch costume to Dinosaur3-c
if enemies spawned mod 9 = 0 then
switch costume to Dragonfly-b
create clone of myself
wait 1 seconds
wait 10 seconds
change Round by 1
when I start as a clone
show
go to front layer
go to x: -226 y: 35
point in direction 30
Move Crab
Move Fly
Move Dino

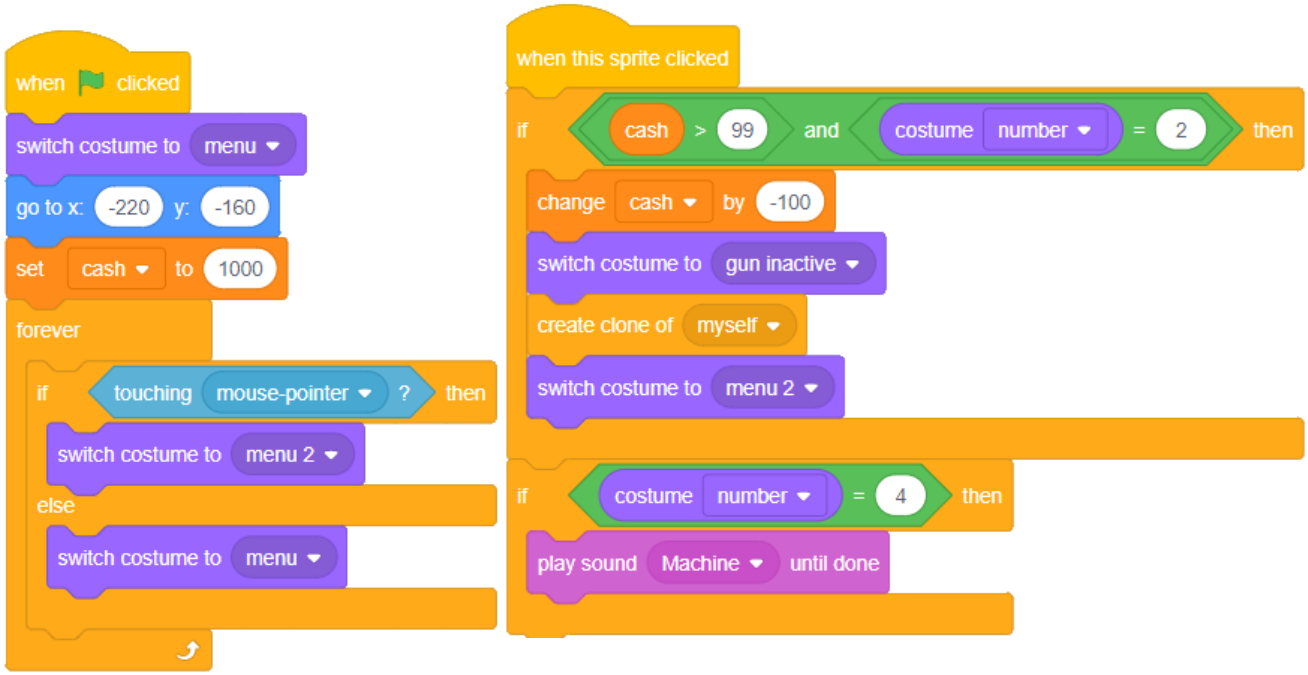
ENEMY (CONT)

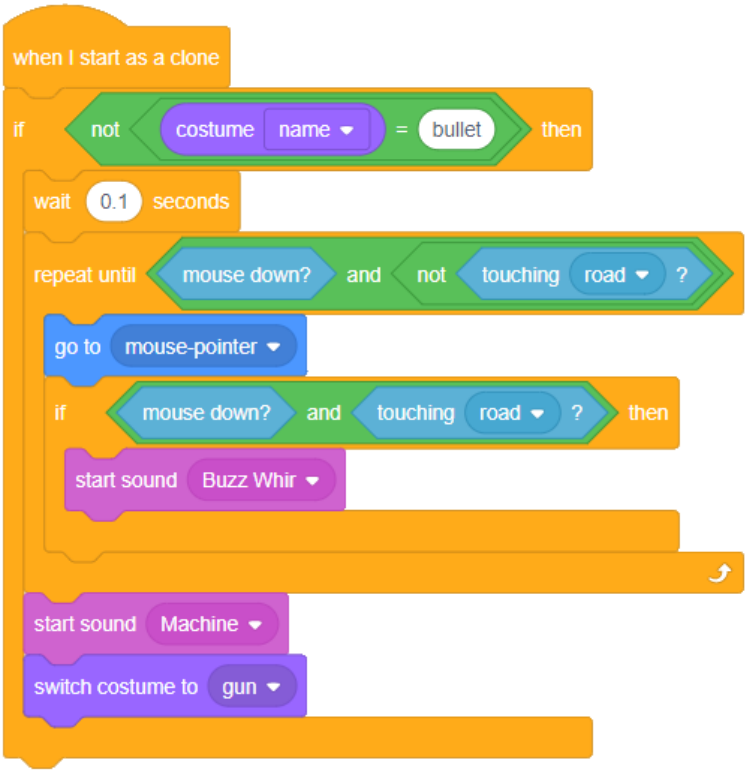

define Move Crab
if costume number = 1 then
forever
move 0.375 + 0.125 * Round steps
switch costume to hitbox left
if touching color ? then
turn 5 degrees
switch costume to hitbox right
if touching color ? then
turn 5 degrees
switch costume to crab-a


define Move Dino
if costume number = 2 then
forever
move 2 steps
switch costume to hitbox left
if touching color ? then
turn 5 degrees
switch costume to hitbox right
if touching color ? then
turn 5 degrees
switch costume to Dinosaur3-c

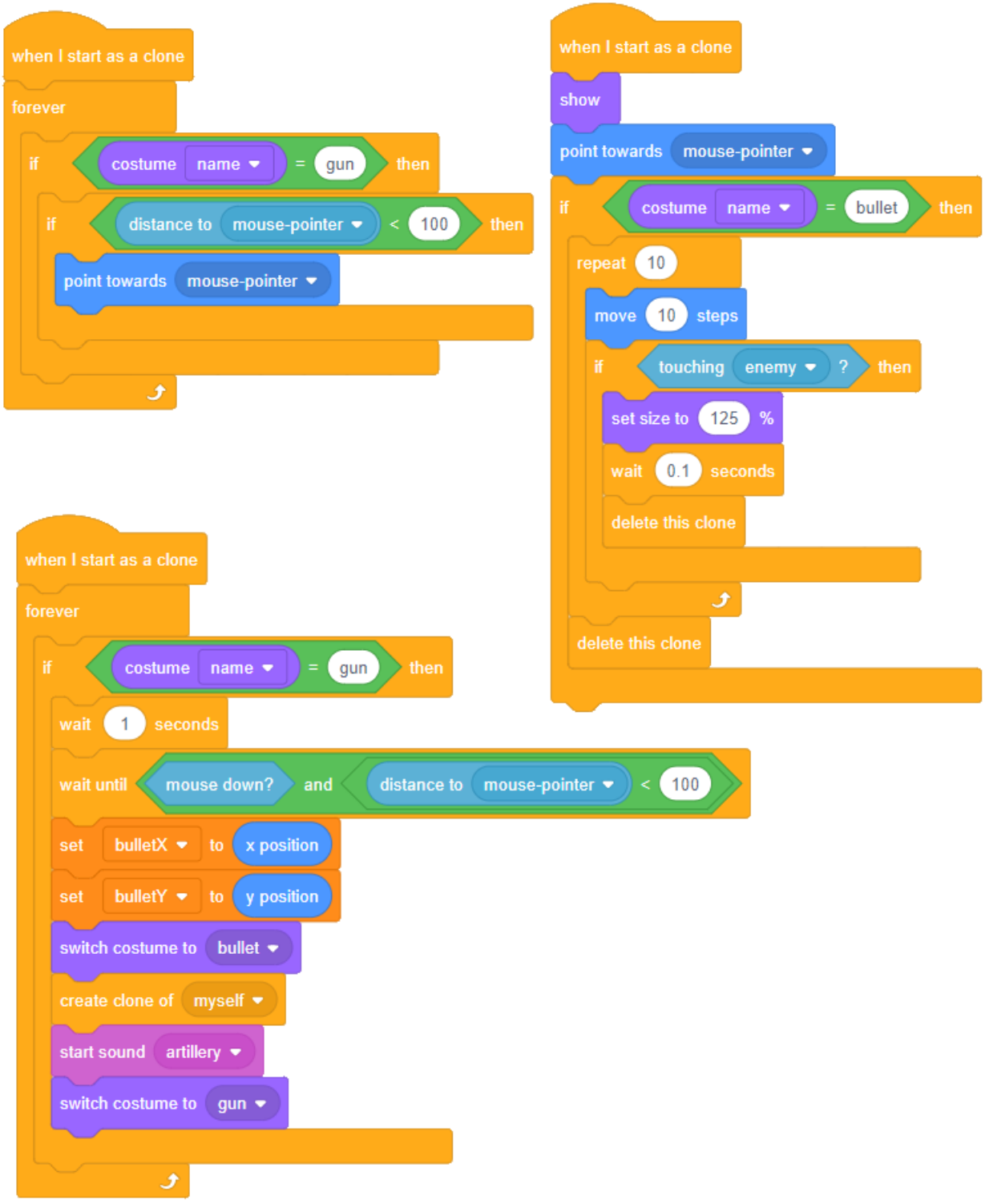

define Move Fly
if costume number = 3 then
go to x: -240 y: pick random -100 to 100
point in direction 10
forever
repeat 40
turn 4 degrees
move 2 steps
repeat 40
turn 4 degrees
move 2 steps

TURRET

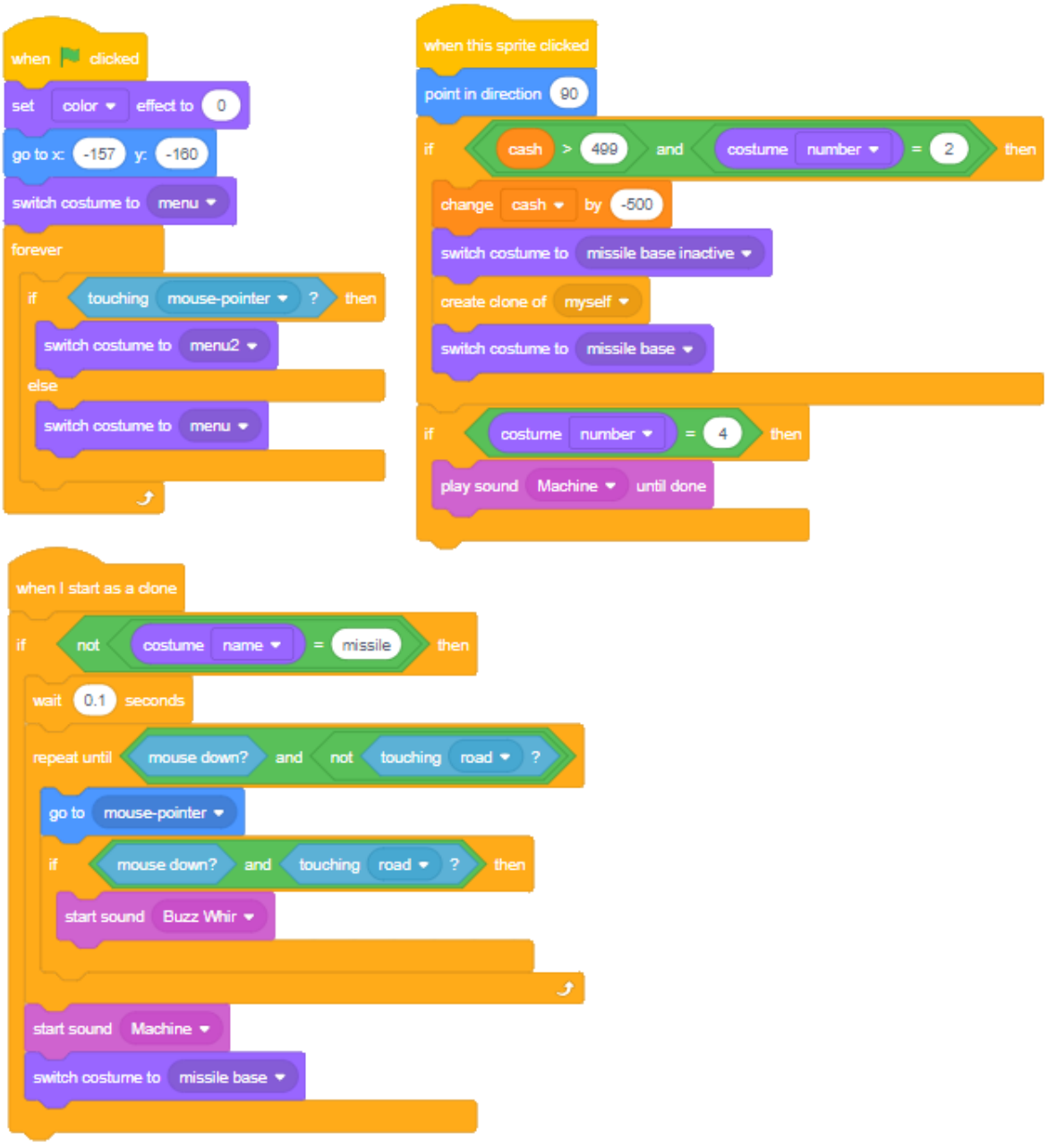

when clicked
switch costume to menu
go to x: -220 y: -160
set cash to 1000
forever
if touching mouse-pointer ? then
switch costume to menu 2
else
switch costume to menu
when this sprite clicked
if cash > 99 and costume number = 2 then
change cash by -100
switch costume to gun inactive
create clone of myself
switch costume to menu 2
if costume number = 4 then
play sound Machine until done


when I start as a clone
if not costume name = bullet then
wait 0.1 seconds
repeat until mouse down? and not touching road ?
go to mouse-pointer
if mouse down? and touching road ? then
start sound Buzz Whir
start sound Machine
switch costume to gun

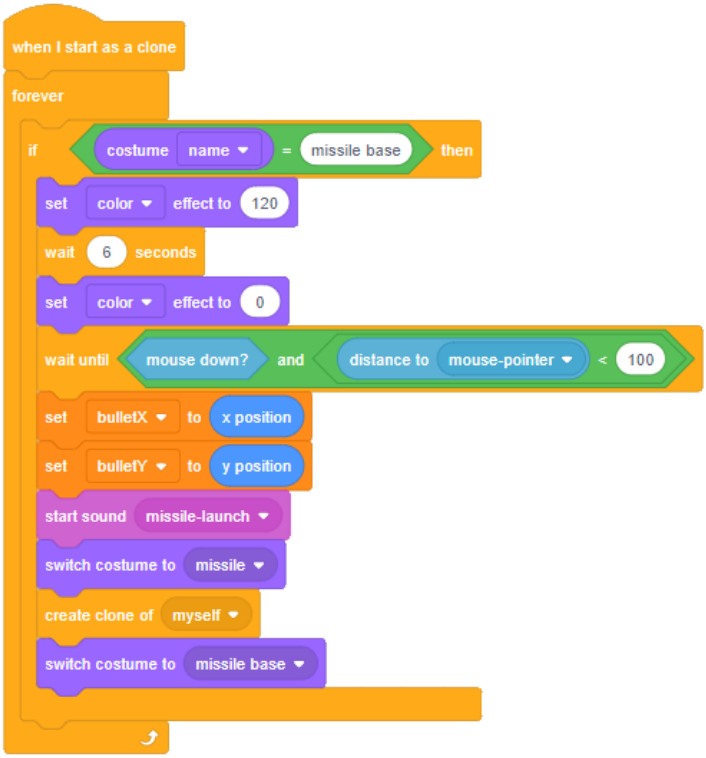
TURRET CONT

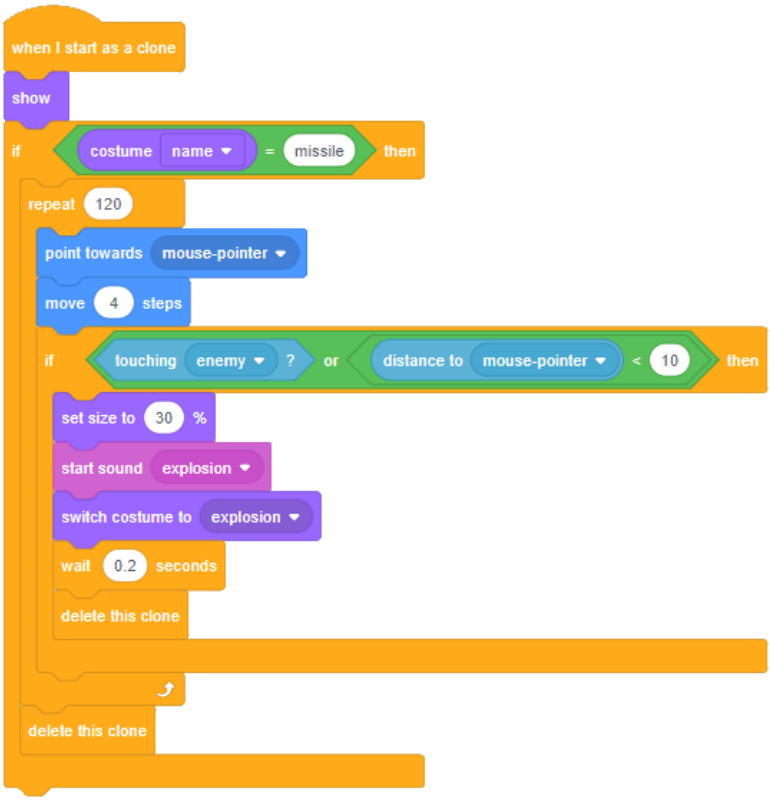

when I start as a clone
forever
if costume name = gun then
if distance to mouse-pointer < 100 then
point towards mouse-pointer
when I start as a clone
show
point towards mouse-pointer
if costume name = bullet then
repeat 10
move 10 steps
if touching enemy ? then
set size to 125 %
wait 0.1 seconds
delete this clone
delete this clone
when I start as a clone
forever
if costume name = gun then
wait 1 seconds
wait until mouse down? and distance to mouse-pointer < 100
set bulletX to x position
set bulletY to y position
switch costume to bullet
create clone of myself
start sound artillery
switch costume to gun

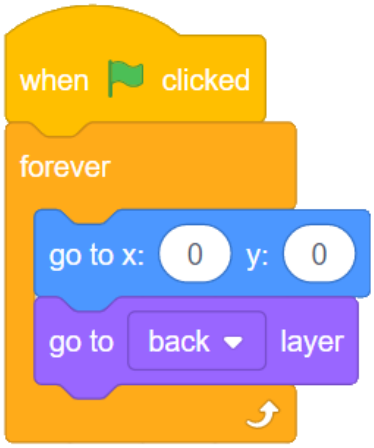
MISSILE


when clicked
set color effect to 0
go to x: -157 y: -160
switch costume to menu
forever
if touching mouse-pointer ? then
switch costume to menu2
else
switch costume to menu
when this sprite clicked
point in direction 90
if cash > 499 and costume number = 2 then
change cash by -500
switch costume to missile base inactive
create clone of myself
switch costume to missile base
if costume number = 4 then
play sound Machine until done
when I start as a clone
if not costume name = missile then
wait 0.1 seconds
repeat until mouse down? and not touching road ?
go to mouse-pointer
if mouse down? and touching road ? then
start sound Buzz Whir
start sound Machine
switch costume to missile base

MISSILE (CONT)





GAME OVER

ROAD