

```
1  var canvas = null;
2  var context = null;
3
4  var canvasBoundX = 700;
5  var canvasBoundY = 500;
6
7  var isOn = false;
8
9  var hornetCap = 10;
10 var hornets = new Array();
11 var meat;
12
13 var image = new Image();
14
15 var mouse = new Mouse(0, 0);
16
17 window.addEventListener("keydown", function(event){
18     if(event.key == " ")
19         onSpace();
20 },
21 true);
22
23 function onSpace(){
24     for(var i = 0; i < hornets.length; i++){
25         var currentHornet = hornets[i];
26
27         if(!currentHornet.isActive){
28             currentHornet.respawn();
29             break;
30         }
31     }
32 }
33
34 function update(){
35     resetBackground();
36
37     var numAlive = 0;
38
39     for(var i = 0; i < hornets.length; i++){
40         var currentHornet = hornets[i];
41
42         currentHornet.update(meat, hornets);
43
44         if(currentHornet.isActive)
45             numAlive++;
46
47         if(currentHornet.isStung(hornets)){
48             currentHornet.isActive = false;
49         }
50
51         if(currentHornet.touchesMeat(meat)){
52             currentHornet.strength += 5;
53
54             meat.respawn();
55         }
56     }
57
58     writeText("Hornets Active: " + numAlive, 0, 50);
59
60     meat.update();
61     //meat.place(mouse.x, mouse.y);
62
63
64
65 }
66
67 function initialize(){
68     canvas = document.getElementById("myCanvas");
69     context = canvas.getContext("2d");
```

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70
71     for(var i = 0; i < hornetCap; i++){
72         hornets[i] = new HorNet(canvasBoundX, canvasBoundY);
73         hornets[i].canvas = canvas;
74         hornets[i].context = context;
75     }
76
77     meat = new Meat(canvasBoundX, canvasBoundY);
78     meat.context = context;
79     meat.canvas = canvas;
80
81     turnOn();
82     resetBackground();
83 }
84
85 function writeText(text, x, y){
86     var canvas = document.getElementById("myCanvas");
87     var context = canvas.getContext("2d");
88
89     context.font = "30px Arial";
90     context.fillStyle = "#FF0000";
91     context.fillText(text, x, y);
92 }
93
94 function drawImage(){
95     var canvas = document.getElementById("myCanvas");
96     var context = canvas.getContext("2d");
97
98     context.drawImage(image, 50, 50, 50, 50);
99 }
100
101 function resetBackground(){
102     var canvas = document.getElementById("myCanvas");
103     var context = canvas.getContext("2d");
104     //paint the background of the canvas
105     context.fillStyle="#ADD8E6";
106     context.fillRect(0, 0, canvasBoundX, canvasBoundY);
107 }
108
109 function updateMouse(event){
110     mouse.x = (event.clientX - 350) - (canvasBoundX / 2);
111     mouse.y = -((event.clientY - 100) - (canvasBoundY / 2));
112 }
113
114 function toggleTimer(){
115     //if the timer is on the turn it off, if its not then turn it on
116     isOn ? turnOff() : turnOn();
117 }
118
119 //manually turns on the timer
120 function turnOn(){
121     //turns the timer on
122     timer = setInterval("update()", 20);
123     isOn = true;
124 }
125
126 //manually turns off the timer
127 function turnOff(){
128     //turns the timer off
129     clearInterval(timer);
130     isOn = false;
131 }

```