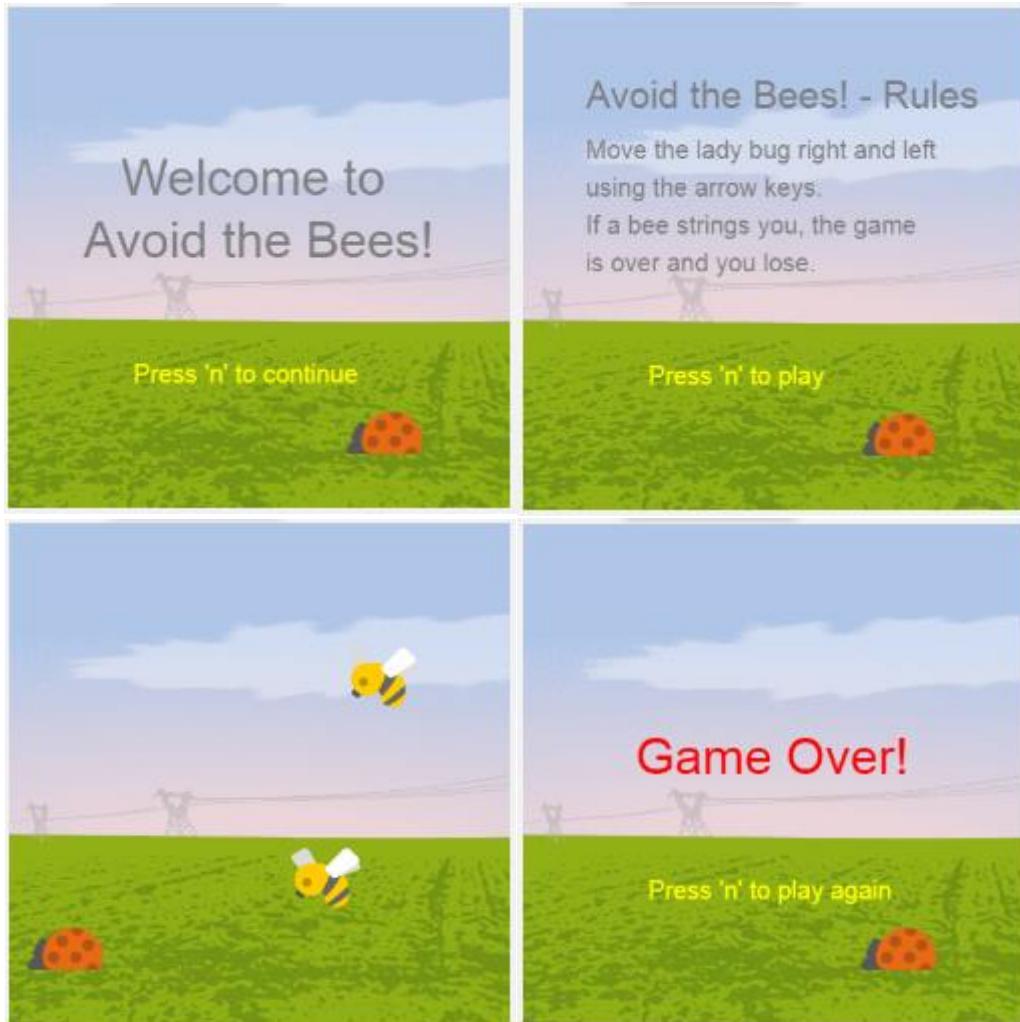


## Screens (Avoid the Bees)

This game has 4 screens:



We will use a variable, called screen, to remember which screen we are on. The draw loop will have an if that draws the correct screen.

To start, you need three animations:



First make the variables and the sprites you will need.

Note that the bees start OFF the screen.

```
1 //tracks what screen you are on
2 var screen = 1;
3
4 //the background
5 var back = createSprite(200, 200);
6 back.setAnimation("farm_land_1");
7
8 //user's character
9 var ladyBug = createSprite(300, 340);
10 ladyBug.setAnimation("ladybug_1");
11
12 //the enemy - you need to avoid them
13 var bee = createSprite(-20, -100);
14 bee.setAnimation("bee_1");
15 var bee2 = createSprite(-100, -150);
16 bee2.setAnimation("bee_1");
17 createEdgeSprites();
```

We will use a series of functions to divide up the code so it is easier to read. The first function will be used to draw Screen1.

```
19 function drawScreen1() {
20     //Prints the welcome screen
21     textSize(40);
22     text("Welcome to", 90, 150);
23     text("Avoid the Bees!", 60, 200);
24     fill("yellow");
25     textSize(20);
26     text("Press 'n' to continue", 100, 300);
27 }
```



The next function will be used to draw screen2, the rules screen.

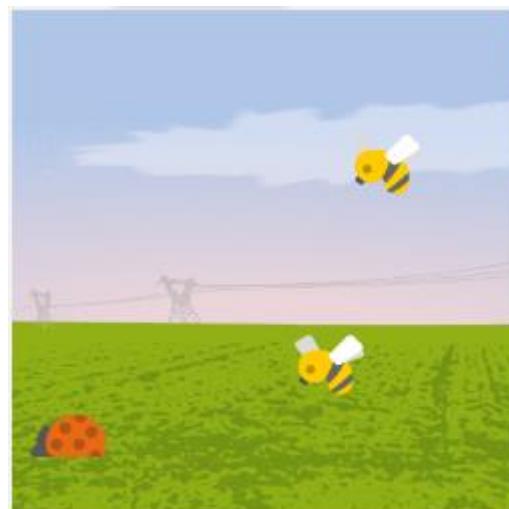
```
29 function drawScreen2() {  
30     //Prints the rules  
31     textSize(30);  
32     text("Avoid the Bees! - Rules", 50, 80);  
33     textSize(20);  
34     text("Move the lady bug right and left", 50, 120);  
35     text("using the arrow keys.", 50, 150);  
36     text("If a bee strings you, the game", 50, 180);  
37     text("is over and you lose.", 50, 210);  
38     fill("yellow");  
39     textSize(20);  
40     text("Press 'n' to play", 100, 300);  
41 }  
42 }
```



The next function will be used to activate all of the bees and start them moving. This code was placed outside the draw loop in our other games.

First we move the bees onto the screen. Second, we start their velocity moving.

```
43 function activatePieces() {  
44     //Gets the game ready to play  
45     //position bee #1, start moving  
46     bee.x=20;  
47     bee.y=100;  
48     bee.velocityX=-2;  
49     bee.velocityY=-3;  
50     //position bee #2, start moving  
51     bee2.x=100;  
52     bee2.y=150;  
53     bee2.velocityX=-3;  
54     bee2.velocityY=-2;  
55 }  
56 }
```



Then, we make a function for our game.

This was the code in the draw loop in our other games.

In this section:

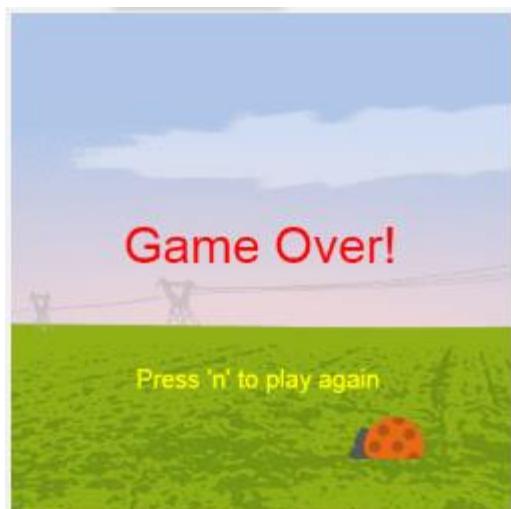
- We move the ladybug left and right
- We make the bees bounce off the walls
- We will also code the losing condition. It will call a new function... gameOver. That may give you an error when you build the code, but it will straighten out later, after we add that method.

```
57 function playGame() {  
58     //To move the user's ladybug with arrow keys  
59     if ( keyDown("left") || ladyBug.x > 380 ) {  
60         ladyBug.x -= 5;  
61     } else if ( keyDown("right") || ladyBug.x < 20 ) {  
62         ladyBug.x += 5;  
63     }  
64     //Make the bees bounce  
65     bee.bounceOff(edges);  
66     bee2.bounceOff(edges);  
67     //If a bee touches a ladybug, move to gameover  
68     if( bee.isTouching(ladyBug) ){  
69         screen=0;  
70     }  
71     if( bee2.isTouching(ladyBug) ){  
72         screen=0;  
73     }  
74 }  
75 }
```

In the game over method:

- We stop the bees from moving
- We move the ladybug
- Then, we write the game over message on the screen.

```
78 function gameOver() {  
79     //kill bee #1, stop moving  
80     bee.x = -20;  
81     bee.y = -100;  
82     bee.velocityX = 0;  
83     bee.velocityY = 0;  
84     //kill bee #2, stop moving  
85     bee2.x = -100;  
86     bee2.y = -150;  
87     bee2.velocityX = 0;  
88     bee2.velocityY = 0;  
89     //move ladybug over  
90     ladyBug.x = 300;  
91     ladyBug.y = 340;  
92     //message  
93     fill("red");  
94     textSize(40);  
95     text("Game Over!", 90, 200);  
96     fill("yellow");  
97     textSize(20);  
98     text("Press 'n' to play again", 100, 300);  
99 }
```



The draw method is simply an if statement that chooses between your screens.

```
100
101 function draw() {→
102   drawSprites();
103
104   //move through the screens with n
105   if( keyWentDown("n") )
106     screen++; + →
107
108   //based on the screen value, show
109   // the correct items on the screen
110   if( screen==0 ){
111     gameOver(); →
112   } else if( screen==1 ){
113     drawScreen1(); →
114   } else if( screen==2 ){
115     drawScreen2(); →
116   } else if( screen==3 ){
117     activatePieces(); →
118     screen++;
119   } else {
120     playGame(); →
121   }
122 }
```