

**Game Analysis: Cats (Ferry Halim)**  
<http://www.ferryhalim.com/orisinal/g3/cats.htm>

This elegant game starts off easy, but gets increasingly more difficult. To play the game, the player clicks on the *start* button, which brings up the game stage: six rows, each with one cat. The player then mouses over each cat to change its state, which must match that of the leader (highlighted in gray):

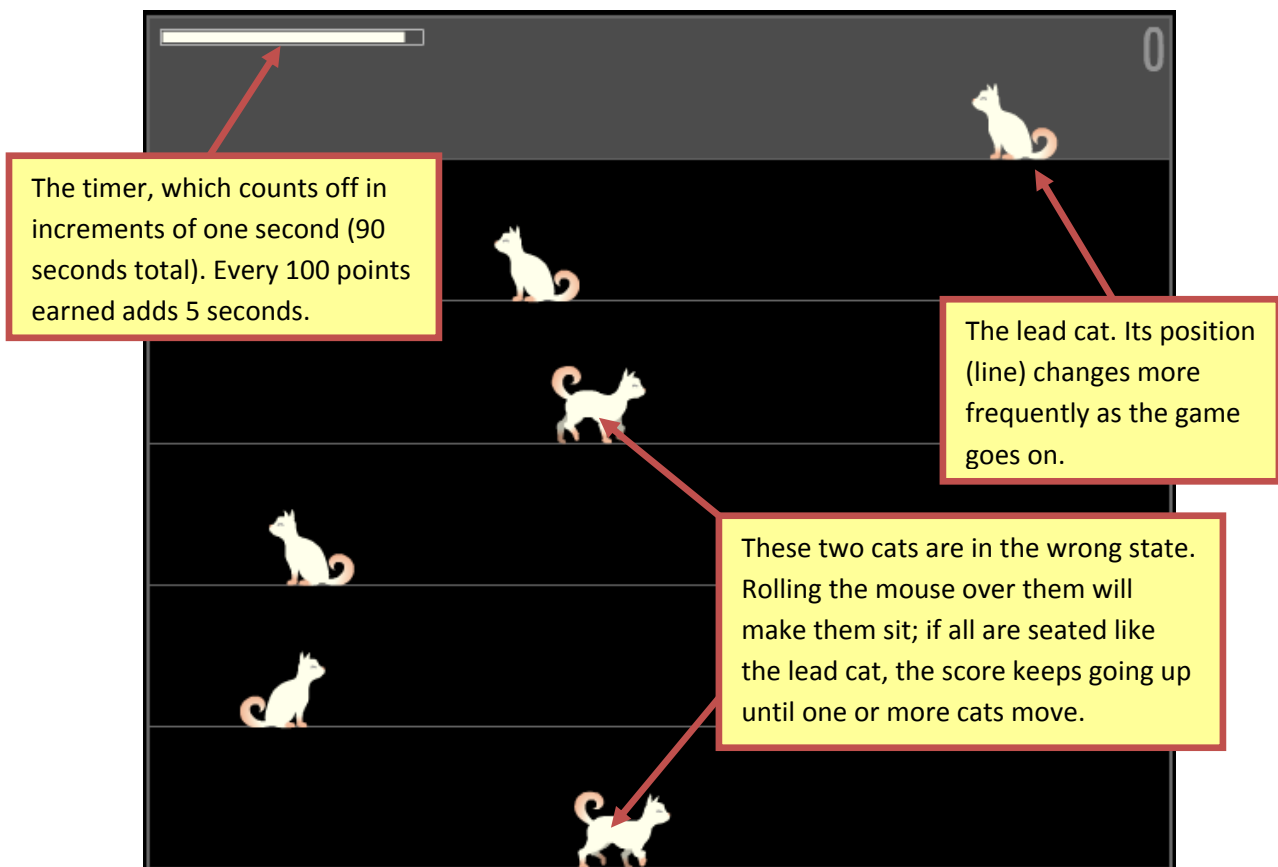
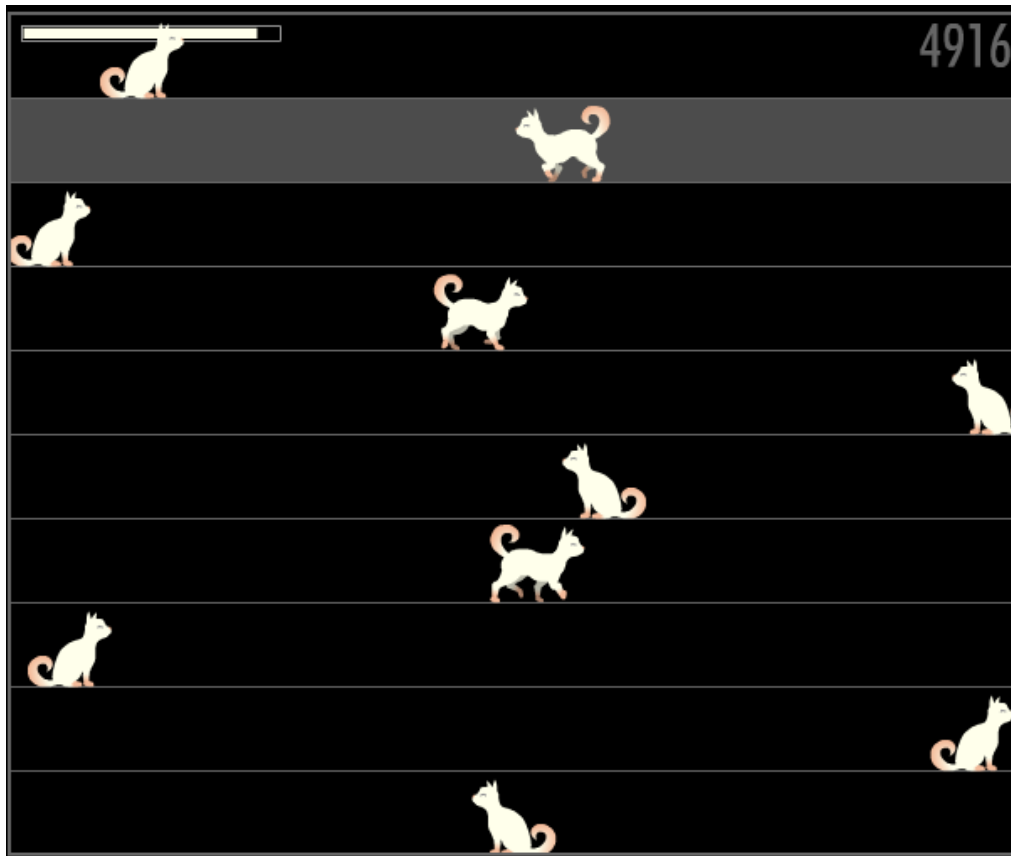


Figure 1: Screenshot of Round 1

The leader is chosen at random, though the algorithm (`Math.random`) is set so that the next leader row number cannot be the same as the current one. The leader cat's state cannot be changed by the player: the highlighted cat is "frozen" for a random interval of 15-30 seconds. The other cats move at a leisurely pace, and each one has a timer to alter states between sitting and walking. It appears each cat's timer is slightly different, varying by a second or two. It was hard to find the exact time, but best guess is that the timer varies from 10-20 seconds, and the assigned value may be randomized based on when a cat leaves the screen, as in the falling apples game (e.g., "if the 10-second cat leaves the stage, send in a new 10-second cat in the next available row").

Each cat also has a dominant state, and it is the opposite of the leader's (e.g., "if the leader is *sitting*, make the other cats' dominant state *walking*.") The player can disrupt the timer by mousing over the cat, which causes it to change states immediately, though for less time than if left undisturbed (best guess: the time in mouseover state is 25-50% shorter than the undisturbed state, which helps explain why the game gets more difficult in later rounds). If left alone, the cats will eventually sync up for a brief time, but that costs the player a lot of time.

With each new round, a row is added (I thought it was initially determined by points earned, but playing consecutive games leads me to believe this is time-driven), and the time between states gets shortened by a second or two. This means getting more cats into the same state in less time:



**Figure 2: Screenshot of Round 4**

Scoring seems to depend on which cat is changed last: the score counter keeps rolling as long as the cats are in the same state as the leader, but the length of that shared state seems to be tied to the last cat: if the one with the longest time in-state is moused over last, the score counter runs longer than if the cat with the shortest time in-state is moused over last.

Gameplay seems to go on indefinitely, until the clock runs out; however, given the constraints of the stage, there may be a limit on how many rounds there are, since each added row makes the cats smaller and faster. The game has a jazzy theme that loops seamlessly until time runs out, at which point the music fades out.