# C3: Mole Mash Game

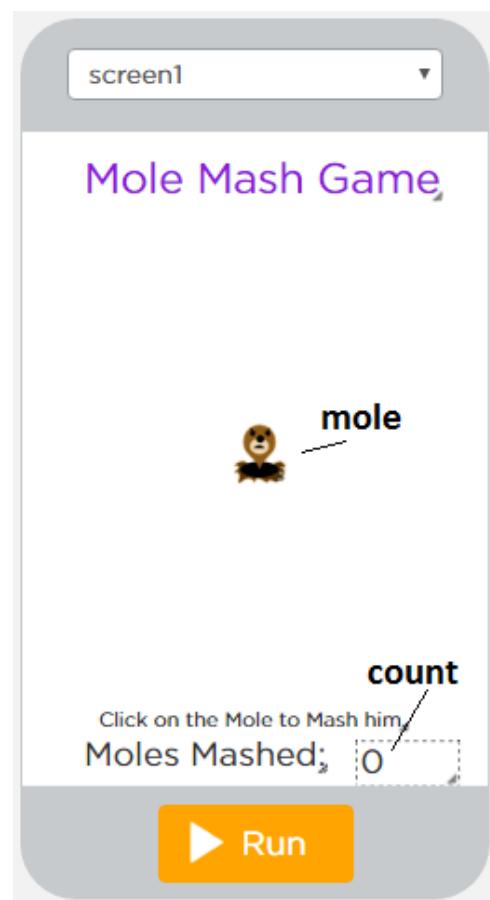## Media Required:

You need mole.png.



## Design Mode:

Create the adjacent app.

The two widgets that are important, the mole (an image) and the count (a label) are noted. The ids I used were mole and count.

Everything else is a label.
There are no buttons.

## Code Editor:

**Mole Jump**

Create two variables to track the mole's position on the screen.

```
var x = getXPosition( ▼ "mole") ;
var y = getYPosition( ▼ "mole") ;
```

Then, create a time event to move the mole to a new random location on the screen. You will pick a random number for x and a random number for y.

```
setInterval( function() {
    x = randomNumber(10, 300);
    y = randomNumber(10, 400);
    setPosition( ▼ "mole", x, y, 36, 42); ⏎
}
, 900 );
```

Because the screen is roughly 300 x 400 pixels, the random numbers for each dimension are slightly different.

Run the code. See if the mole hops around the screen randomly.

**Score**

Now we need to code the "mashing" part. (We've finished the "mole" part).

Start by adding a variable to track our score. Add it underneath the x and y variables.

```
var caught = 0;
```

Then, add an onEvent. This time, we aren't going to have a button that is clicked, we are going to have an image be clicked.

```
onEvent( ▼ "mole", ▼ "click", function(event) {
    caught = caught +1 ;
    setText( ▼ "count", caught);
}
);
```

When the mole is clicked, you increase the score by 1 and show it out on the screen.

Run the code. See if the score increases when you click on the mole.

**Move the Mole**

There is one problem: when you click on the mole, he doesn't jump to a new locations, so the user can cheat and click a lot of times.

Edit the onEvent block:

```
onEvent( ▼ "mole", ▼ "click", function(event) {
    caught = caught +1 ;
    setText( ▼ "count", caught);
    x = randomNumber(10, 300);
    y = randomNumber(10, 400);
    setPosition( ▼ "mole", x, y, 36, 42); ←
}
);
```

Add the code from the setInterval block that moves the mole around. Now, when the mole is clicked, he will move right away.

A good way to add this code it to pop over to the text editor and cut and paste the lines of code. </> Show Text

```
x = randomNumber(10, 300);
y = randomNumber(10, 400);
setPosition("mole", x, y, 36, 42);
```

Test it. Have Ms. Gorski check it.