

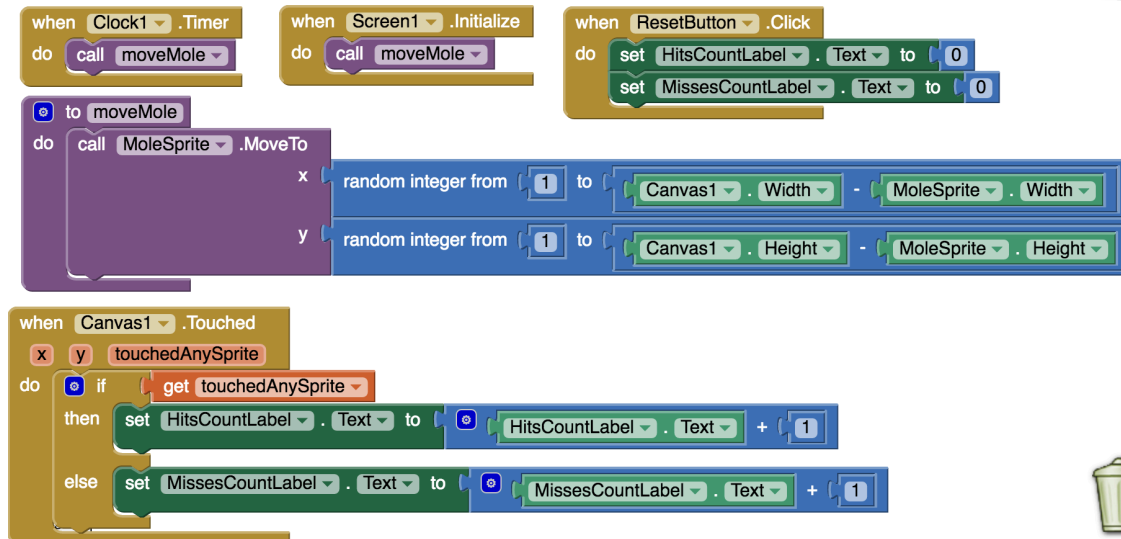
MoleMash App: Conceptualize and Customize

Topics

Canvases, ImageSprites, incrementing values, introduction to procedures

Discussion Questions

Here is a version of the MoleMash game app:



1. Name the events that are user-initiated, and those that are not. For those that are not, specify how the event is triggered.
2. What function call block is used to move an image sprite within the canvas? What are the function's parameters?
3. If you didn't have a MoveTo block, what blocks could you use to move the mole?
4. What is the unit of measurement for location on the canvas?
5. The version of MoleMash shown above defines a procedure. What is the procedure's name? Could you code MoleMash without defining the procedure? Why do you think the procedure was defined?
6. Why is the subtraction within the moveMole procedure performed?
7. When a row of blocks is performed, in what order are the blocks executed?

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Customization Exercises

1. Personalize the game. Add:

- your own custom canvas background
- your own images for the sprites
- your own sound effects

2. Make it so the game has a score (not hits/misses)

3. Modify the game so that it has a clock timer showing how many seconds left in the game.

When the timer gets to 0, end the game and let the user know the game is over and how many points they scored. Be sure there is a way to restart the game.

4. Add a second ImageSprite with a picture of something that the user should not hit. Touching it should reduce the score.

Optional:

1. Allow the user to select a picture for the "mole" using the ImagePicker component, or by selecting from a set of images you provide (possibly displayed on a separate screen).
2. Show the user's score using a colored bar that changes in size instead of a label.
3. Add "levels": when the user hits the "mole" x number of times, make the mole go faster automatically and show the user that the level has changed.
4. Keep a high-score for the user and display it in the app.