

Chapter 9 Exercises

1. TouchedDown and TouchedUp

The sprite's **TouchedDown** event executes when a user first touches the sprite. The sprite's **TouchUp** event executes when a sprite's touch has stopped (finger or mouse is lifted).

Program a Ball sprite on a Canvas. Use the **TouchedUp** and **TouchedDown** events to make the ball yellow while it is being touched or dragged and then green when it is let go.

2. Which Edge?

Program a Canvas with a Ball sprite that Bounces off any edge that it reaches. Put a Label under the Canvas that populates with a message each time an edge is reached. For example, when the Ball sprite reaches edge 1, set the Label's Text property to hit the top edge. Program for all four outer edges of the Canvas.

3. Flashing Ghosts

Download ghost.png. Program a Canvas with five **ImageSprites**, using the ghost image for each of them. Set their size to 35 × 50. Use a Clock component to toggle the sprites visibility property every half-second.

4. Flashing Ghosts 2

Complete Exercise 3 and then use the Clock component to randomly move each of the ghosts when they are not visible.

5. Change Color

Program a Canvas with a Ball sprite. As the user drags the ball, change the color based on which area of the Canvas it is on. If it is on the left half, make the ball green. If it is dragged over to the right half of the Canvas, make the ball blue. Use the Clock component, the Dragged event, and the **MoveTo** method. (Use Crack the Egg as a guide)

6. Change Color 2

Expand Exercise 5 by changing the color of the ball based on which quadrant it is in. For example, if the ball is dragged to the top left quadrant, change it to red. Change the colors as follows:

- Top Left - Red
- Top Right - Blue
- Bottom Left - Yellow
- Bottom Right - Green