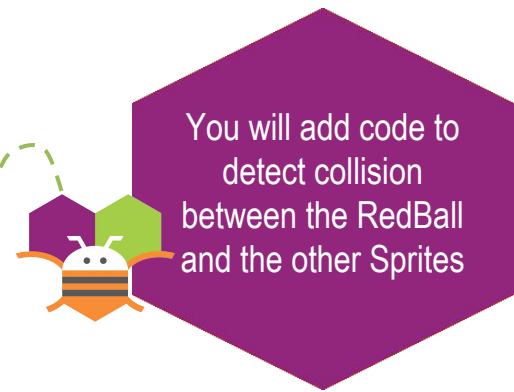


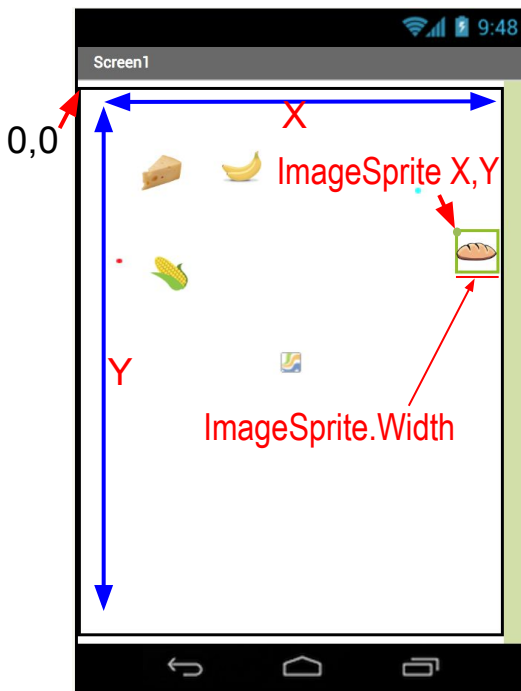
FOOD CHASE GAME: PART 2

COLLISION



The main logic for the game is:

- If the RedBall collides with the GreenBall:
 - notify the user the game is over.
 - give the user the option to Play Again or Quit.
- If the RedBall collides with any Food:
 - the RedBall grows.
 - the Food moves to another random place on the screen.
 - the GreenBall grows (but not as fast as the RedBall).



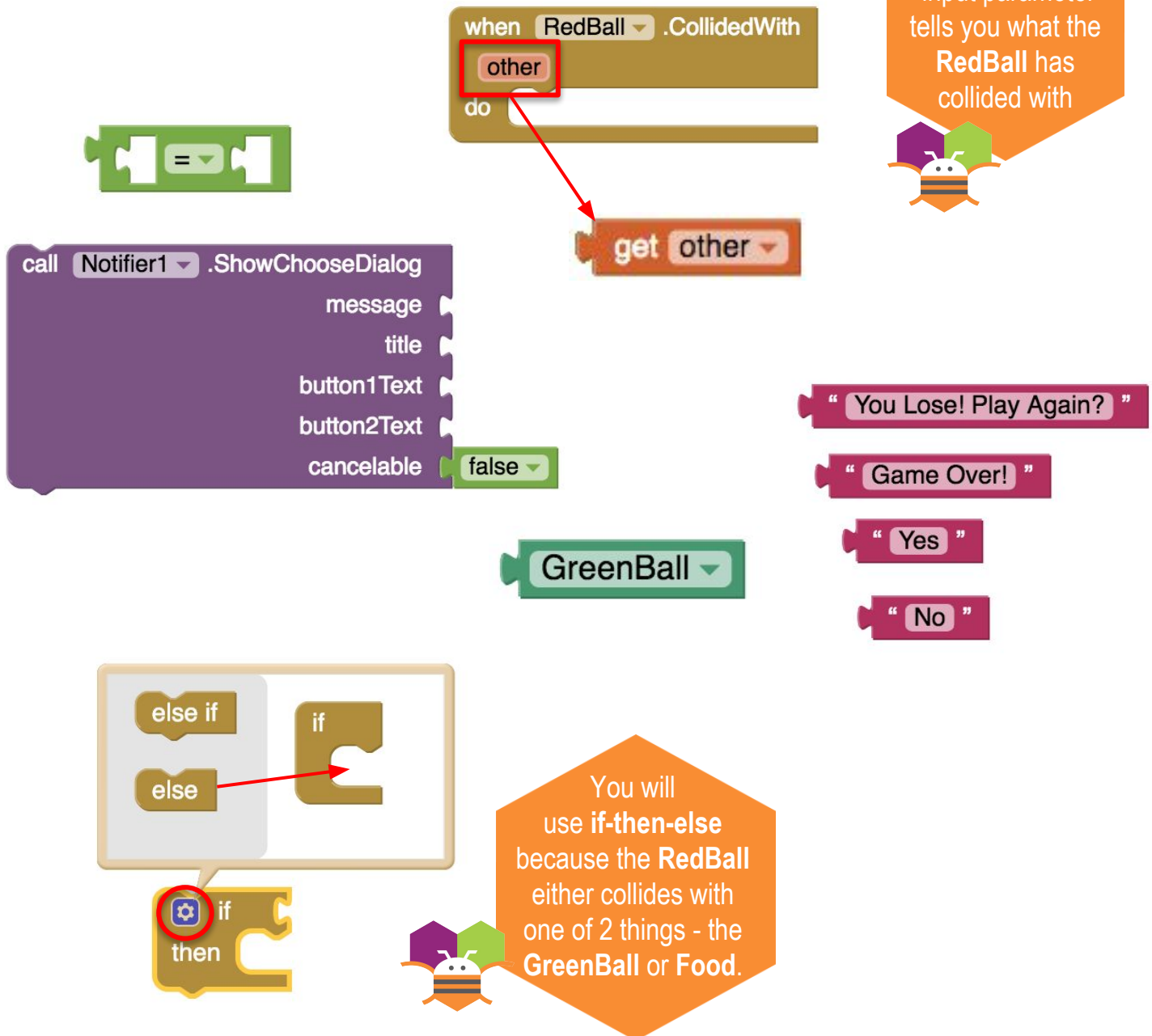
The layout of the app's screen is based on the Cartesian coordinate system, but with the origin the upper left corner. The upper left corner of the **ImageSprite's** Picture is its X,Y.

The value range for a random X will be from 1 to the *Canvas.Width*. However, if it is placed just at *Canvas.Width*, the **ImageSprite** would appear to the right of the **Canvas**, which is off the screen. So you need to set the range for possible X values from 1 to the *Canvas.Width* minus the **ImageSprite's Width**.

REDBALL COLLISION

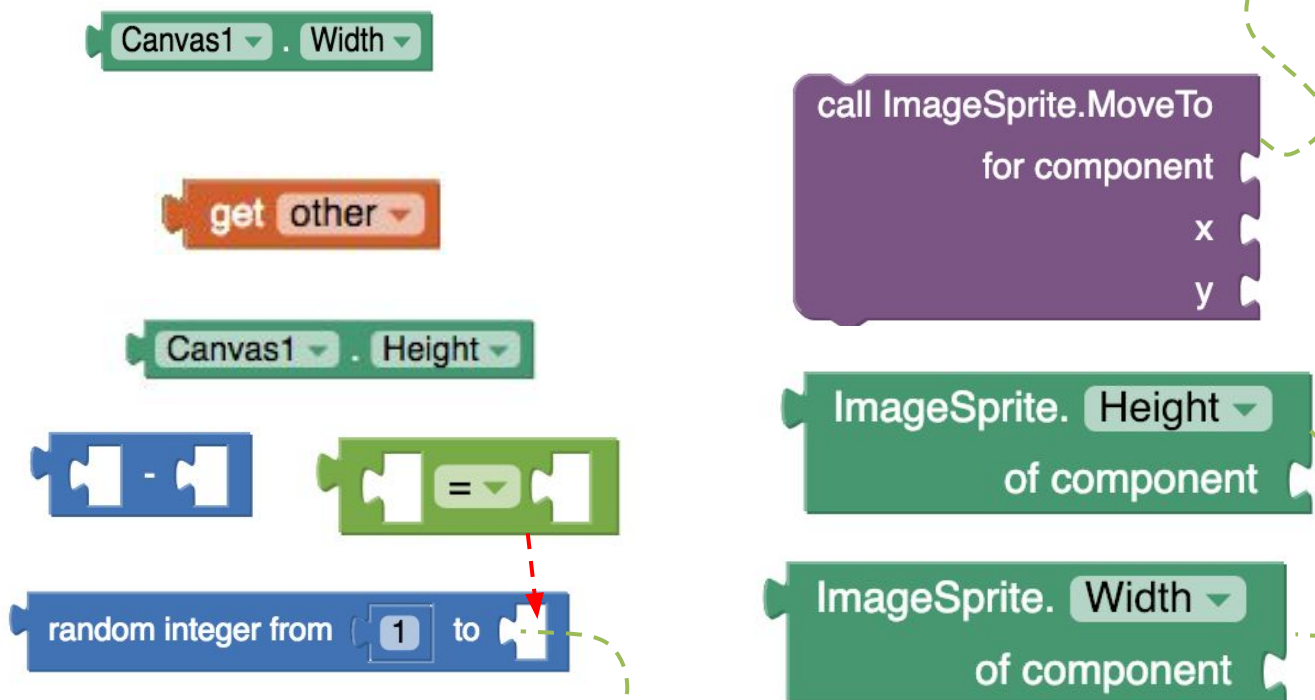
1

Test if the **RedBall** collides with the **GreenBall**.
If so, tell the user the game is over. Use the following blocks.



COLLISION WITH FOOD

- 1 If the **other** thing that **RedBall** collides with is *not* the **GreenBall**, then it must be **Food**. In this case, move the **Food ImageSprite** to a random position on **Canvas1**. Add the following blocks to the **RedBall.CollidedWith** event block.



To find these blocks, scroll to the bottom of the Blocks palette, click on **Any Component**, then **Any ImageSprite**.

To fit all of **Food1** on the **Canvas**, the upper limit should be based on the **Canvas' Width** minus the **ImageSprite's Width**

GROW REDBALL

5

Last thing you'll do is “grow” the **RedBall** when it eats Food, by increasing its *Radius* by 2. Also, increase **GreenBall's** *Radius* by 1. Use these blocks.

set RedBall . Radius to

2

set GreenBall . Radius to

2

1

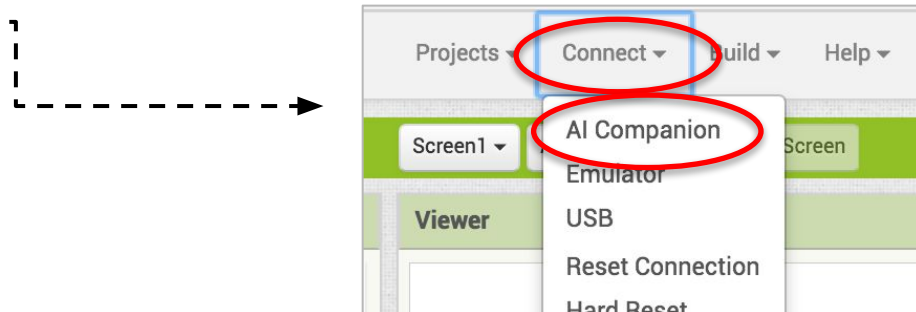
RedBall . Radius

GreenBall . Radius



Test your game now! The **RedBall** should grow each time it touches Food, and a message should appear if it touches **GreenBall**.

6



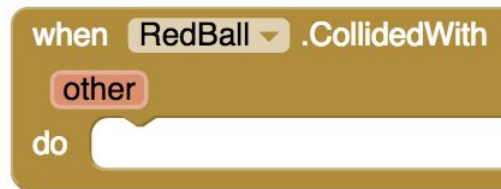
Did you notice there are a few parts of the game still missing? You will complete it in Part 3.

COMPUTATIONAL THINKING CONCEPTS

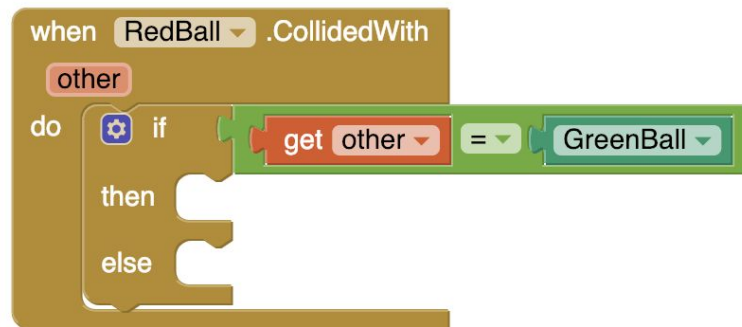
The following are the Computational Thinking Concepts learned in Part 2.

Food Chase Game

1. Events



2. Conditionals



3. Operators



COMPUTATIONAL THINKING PRACTICES

The following are the Computational Thinking Practices learned in Part 2.

Food Chase Game

1. Abstraction and Modularization

