

FOOD CHASE GAME: PART 3

You need to fix a few things to make your app work completely and to make it more exciting for users.

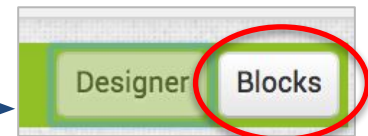
- Make the **GreenBall** move around the screen so the **RedBall** must avoid it.
- Respond to user selection in the dialog box when the **RedBall** and the **GreenBall** collide.



START HERE



Open the FoodChase project you made in Part 1 and 2 of this unit and make sure you are using the Blocks Editor. -- -->



Make a procedure, named **Restart**, that you can use in two places: when the app starts and when the user says Yes to Play Again? in the dialog box.



The procedure should:

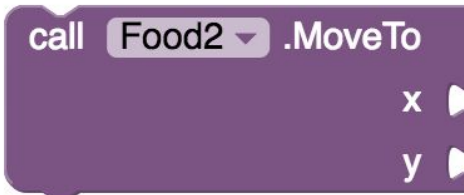
- Move all Food **ImageSprites** to random positions on the **Canvas**.
- Move **RedBall** and **GreenBall** to random positions on the **Canvas**.
- Set **RedBall** and **GreenBall's Radius** to 2.
- Set **GreenBall's Speed** to 5.
- Set **GreenBall's Heading** to a random number from 1 to 360.

Use the blocks on the following page.

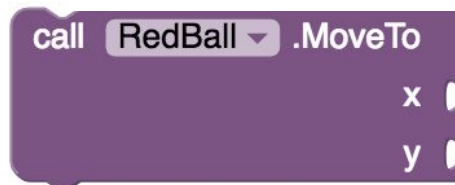
RESTART PROCEDURE

2

Use these blocks to make the Restart procedure.



TIP: You can Duplicate blocks already in your project for most of this procedure.

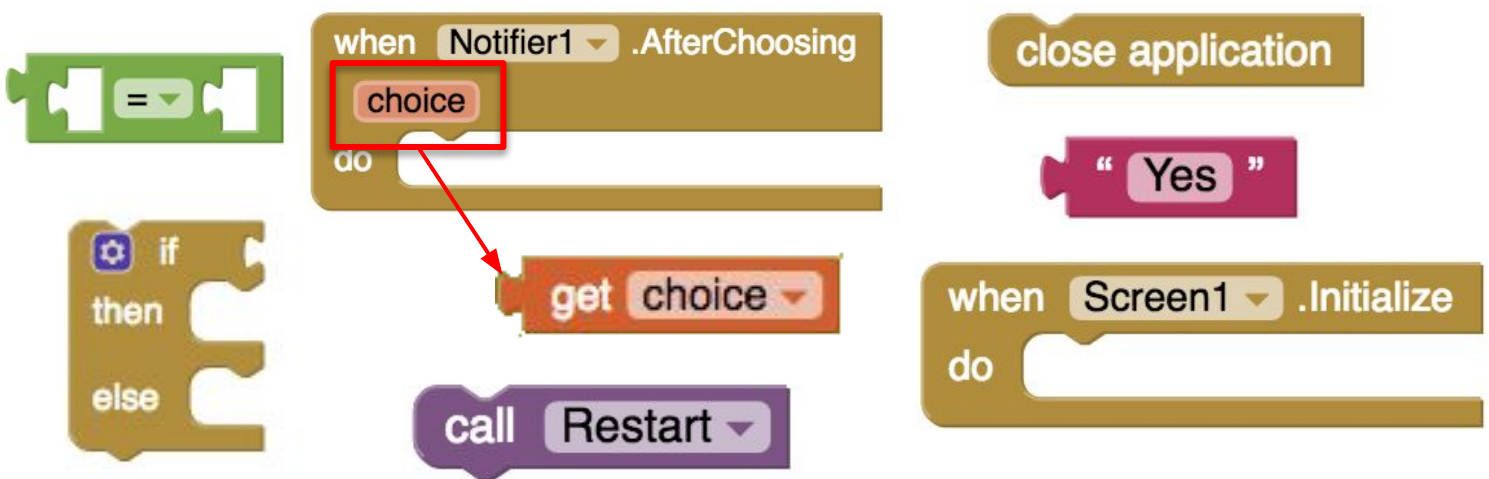


CALLING RESTART

3 You'll call the **Restart** procedure in two places:

- when the app starts
- if the user decides to "Play Again".

4 If the user decides not to "Play Again", close the app.
Use the blocks below.

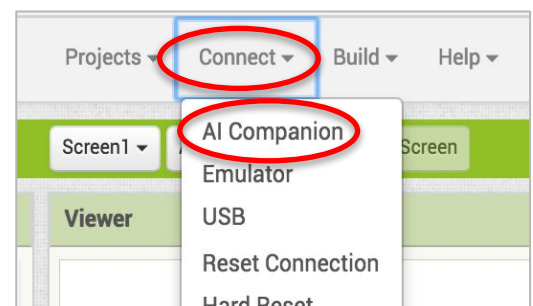


5 Because **GreenBall** is now automatically moving around the screen, you want it to bounce off the edges, not get stuck, so add a **when GreenBall.EdgeReached** block. Use these blocks.



6 Now test the app with the MIT AI2 Companion.

- Does the **GreenBall** move around the screen?
- Does the **GreenBall** bounce off edges?
- When the game is over, can you restart by choosing "Yes"?
- Does choosing "No" close the app? (note you cannot fully test this with the AI2 Companion)



COMPUTATIONAL THINKING CONCEPTS and PRACTICES

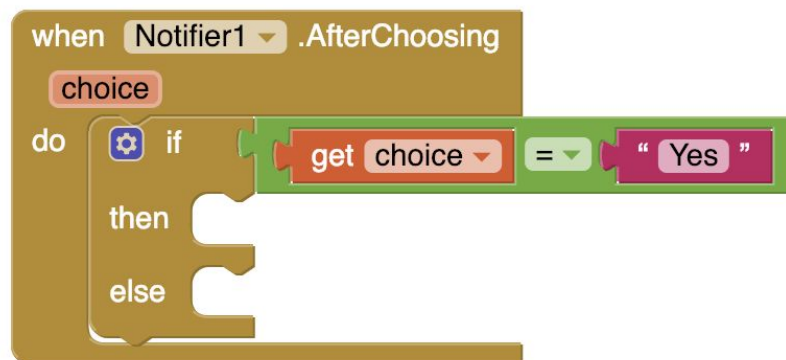
The following are the Computational Thinking Concepts and Practices used in Part 3.

Food Chase Game

1. Events



2. Conditionals



3. Abstraction and Modularization (procedures)

