

# FOOD CHASE GAME: PART 1

In this unit, you will create an animated game where you chase food and grow bigger!

## DESIGNER

1

Login to the MIT App Inventor website (<http://ai2.appinventor.mit.edu>) and open the FoodChase\_template project provided by your teacher.

2

Add the following components, and update their properties as shown in the table below.

Drawer	Component	Name	Property	Setting
Drawing and Animation	Canvas	Canvas1	Width Height	"Fill Parent" "Fill Parent"
Drawing and Animation	Ball	RedBall	Radius PaintColor	2 Red
Drawing and Animation	Ball	GreenBall	Radius PaintColor	2 Green
Drawing and Animation	ImageSprite (4)		Width (all) Height (all)	30 pixels 30 pixels
		Food1	Picture	"bananas.png"
		Food2	Picture	"bread.png"
		Food3	Picture	"Cheese-310.png"
		Food4	Picture	"Corn-1000.png"
User Interface	Notifier	Notifier1		

## GAME SPRITES

For this game, you have six sprites - 2 **Ball** sprites, and 4 **ImageSprites**. They all work the same way. **Ball** sprites are automatically round. **ImageSprites** let you change shape and appearance by attaching images.

3

Look below at the Properties panel for an **ImageSprite** to become familiar with each property.

**Heading** is the direction of the ImageSprite (270 degrees is down).

**Width and Height** can be set to resize your sprite.

**Interval** is how often the ImageSprite moves. 100 means every 1/10th of a second. 1000 means every second!

**Rotates** here is checked, meaning the ImageSprite rotates according to its heading.

**Speed** is how fast the ImageSprite moves each Interval. Here it moves 10 pixels.

**Picture** can be set to an image file uploaded to your project.

**X and Y** are the positions of the ImageSprite (before it starts moving).

**Z** is not used in this app.

Note that the Properties for **Ball** components are very similar to **ImageSprites**, except for a few related to color and size.

**PaintColor** lets you change the Ball's color.

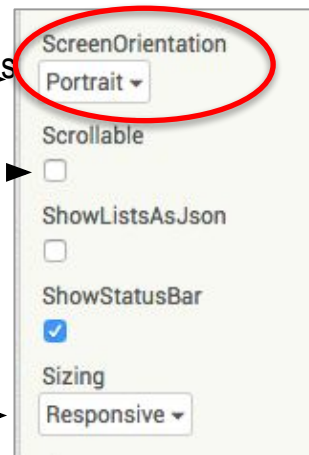
**Radius** lets you change the size of the Ball.

## SCREEN1

5

Set the properties for **Screen1** so the animations appear and work well. Click on **Screen1** in the Components panel, and set its

- *ScreenOrientation* to **Portrait**
- Uncheck the *Scrollable* property.
- *Sizing* to **Responsive**



*Scrollable* property allow the user to scroll on the screen if checked. No scrolling allowed if unchecked.



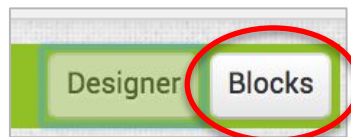
**Responsive**  
*Sizing* changes the size of components based on the resolution of the device.

## MOVING REDBALL

The **RedBall** will be controlled by the user, by a flinging action on the **Canvas**.

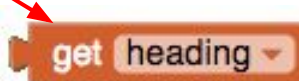
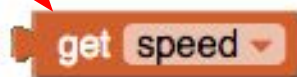
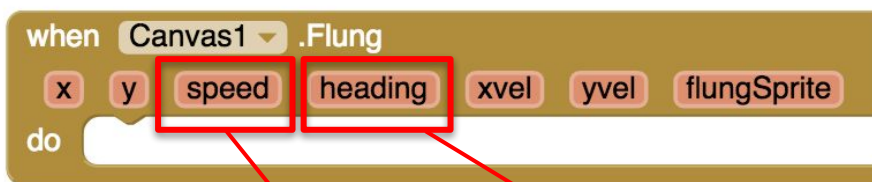
6

Switch to the Blocks Editor.



7

Using the following blocks, set the **RedBall's** *Heading* and *Speed* according to the **heading** and **speed** of the flinging event.

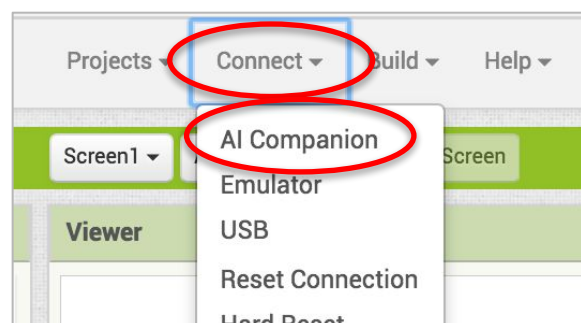


All the orange input parameters are information about the fling action captured by the app.



8

Try that out with the MIT AI Companion! Start MIT AI Companion on your device. Try flinging the red ball. It should respond to your fling actions.

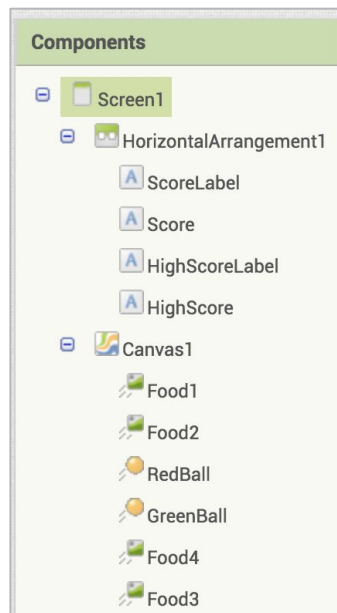


## COMPUTATIONAL THINKING CONCEPTS

The following are the Computational Thinking Concepts learned in Part 1.

### Food Chase Game

#### 1. Naming:



#### 2. Events:

