

FIND THE GOLD: PART 3

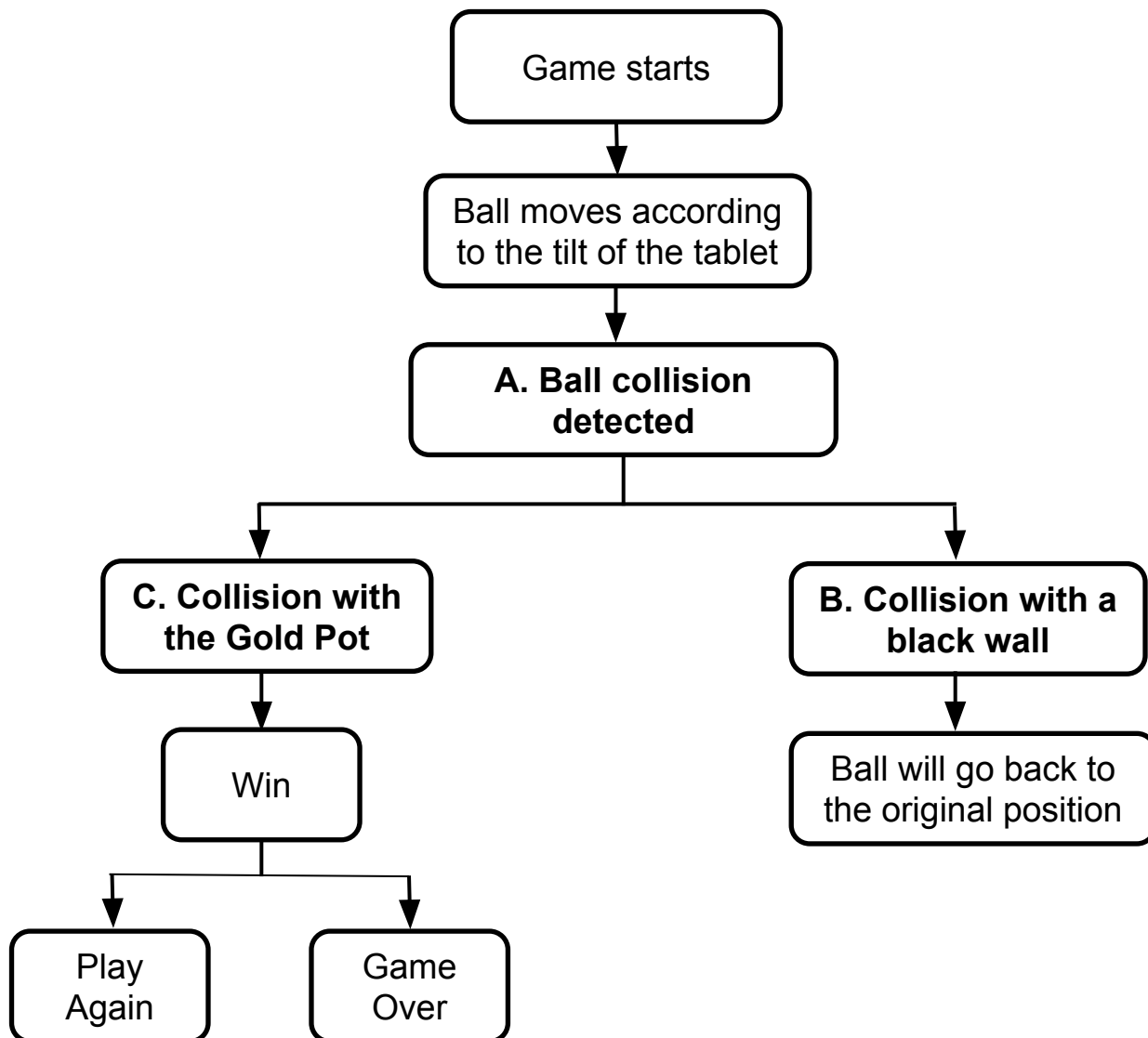


You will now improve the Find the Gold app to check for collision with walls and notify the user when they reach the gold!

REVIEW

1

Review the diagrams below with your partner. Check that you understand the sequence of steps for the Find the Gold app below.



WHEN BALL COLLIDES WITH...

2

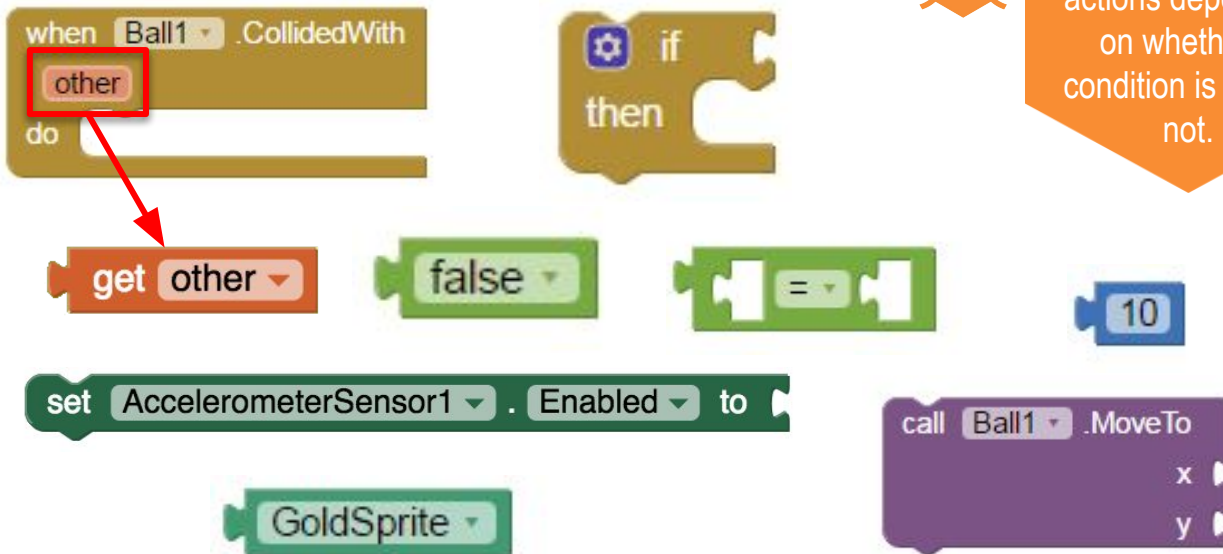
Check when the ball collides with the walls or the gold sprite using the **Ball1.CollidedWith** block.

- If **Ball1** collides with **GoldSprite**:
 - Disable the **AccelerometerSensor** so **Ball1** stops moving.
- In all cases, move **Ball1** back to the position 10,10.

Use the blocks below.



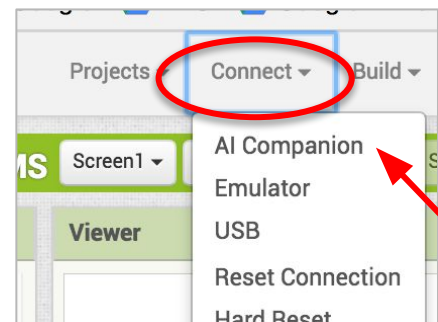
if blocks
let you code different
actions depending
on whether a
condition is true or
not.



3

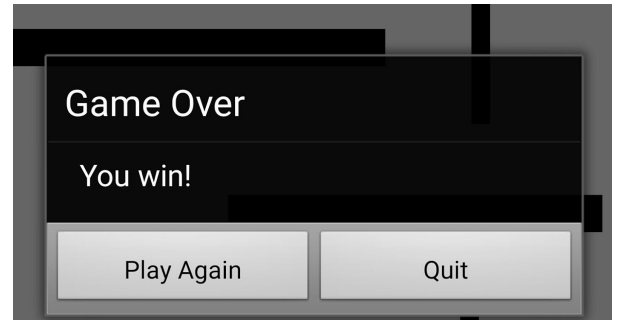
Test with MIT AI Companion.

- Does the Ball reset when it touches a wall?
- Does the Ball stop when it reaches the Gold?



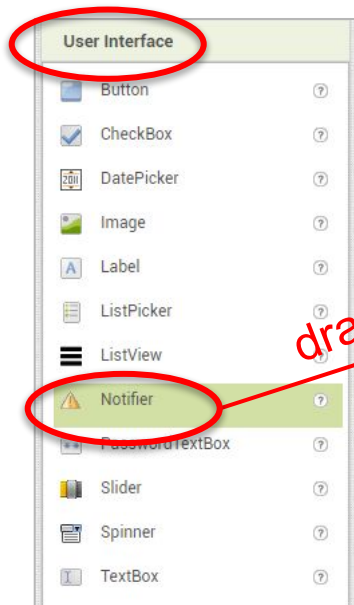
NOTIFIER

When the ball touches the gold sprite, notify the user the game is over and they can either play again or quit.



4

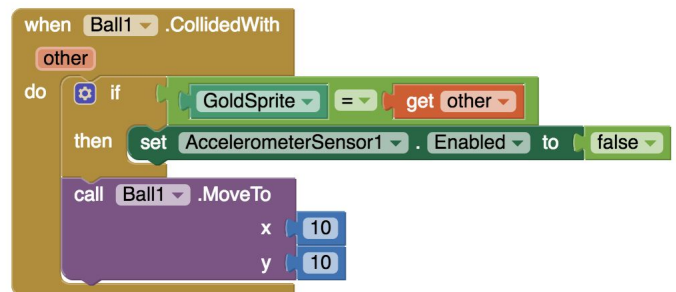
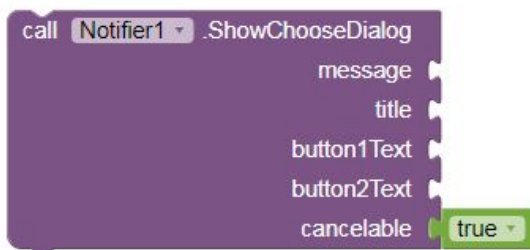
In the Designer, add the **Notifier** component from the User Interface drawer, then switch back to the Blocks Editor.



The Notifier is a non-visible component so it drops below the Viewer.

5

Add a **ShowChooseDialog** block to **Ball1.CollidedWith** to notify the user they have won. Give them the option to Play Again or Quit.

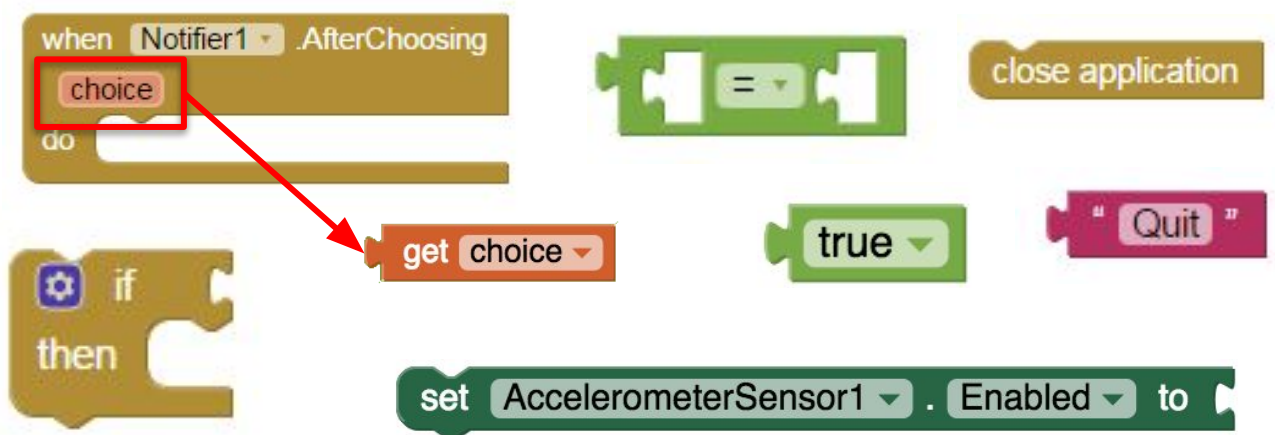


AFTER CHOOSING

6

Use the **Notifier1.AfterChoosing** block to determine what to do when the user chooses a button. Use the following blocks to code:

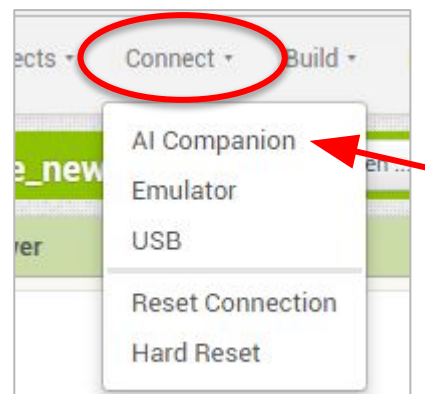
- If the user chooses “Quit”
 - Close the app.
- Otherwise
 - Enable the **AccelerometerSensor** again to start **Ball1** moving again.



7

Finally, test and debug using MIT AI Companion.

- Check the Notifier displays the correct message.
- Press “Quit” and make sure it ends the game.
- Press “Play Again” and make sure it starts the game again.



Choose Ways to
Extend Your App

Here are a
few features you
could add if you
want to expand
your app



Add scoring - give
points when the
user reaches the
Gold


Add a
countdown
timer

Add user
lives for a limited
number of
chances to reach
Gold

What other ideas
do you have?

COMPUTATIONAL THINKING CONCEPTS

The following are the Computational Thinking Concepts learned in Part 3.

Find The Gold	
1. Conditionals:	
2. Operators:	