

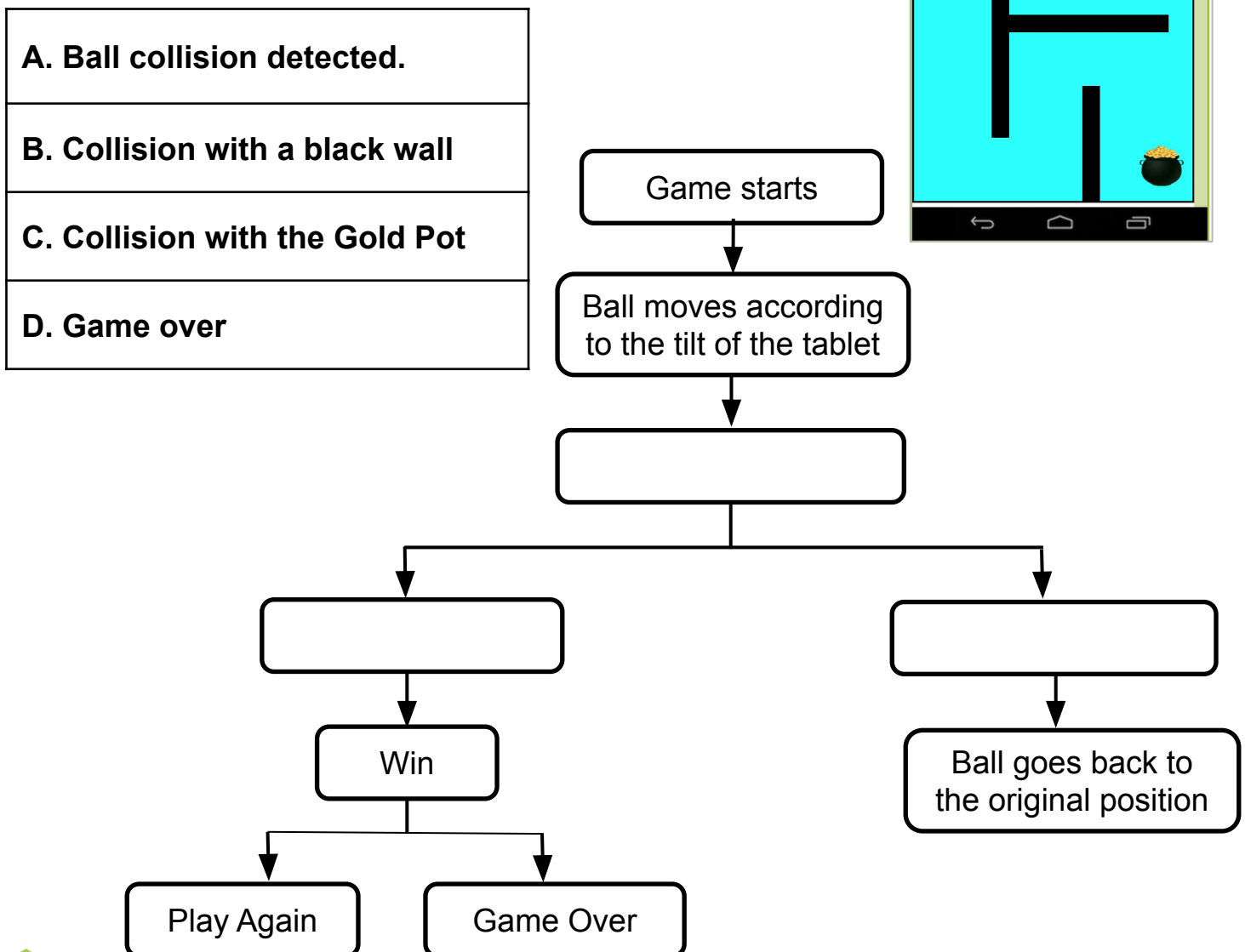
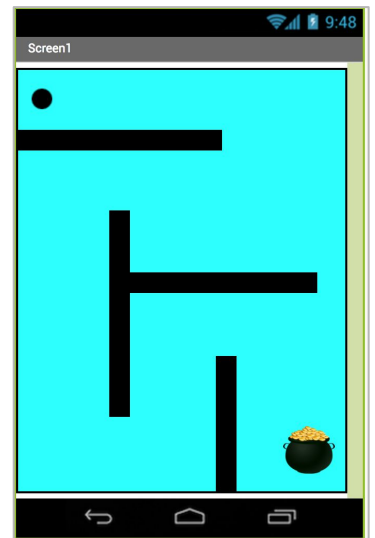
# FIND THE GOLD: PART 1

## START HERE

You will make a new game app that moves a ball through a maze when you tilt your smartphone or tablet.

1

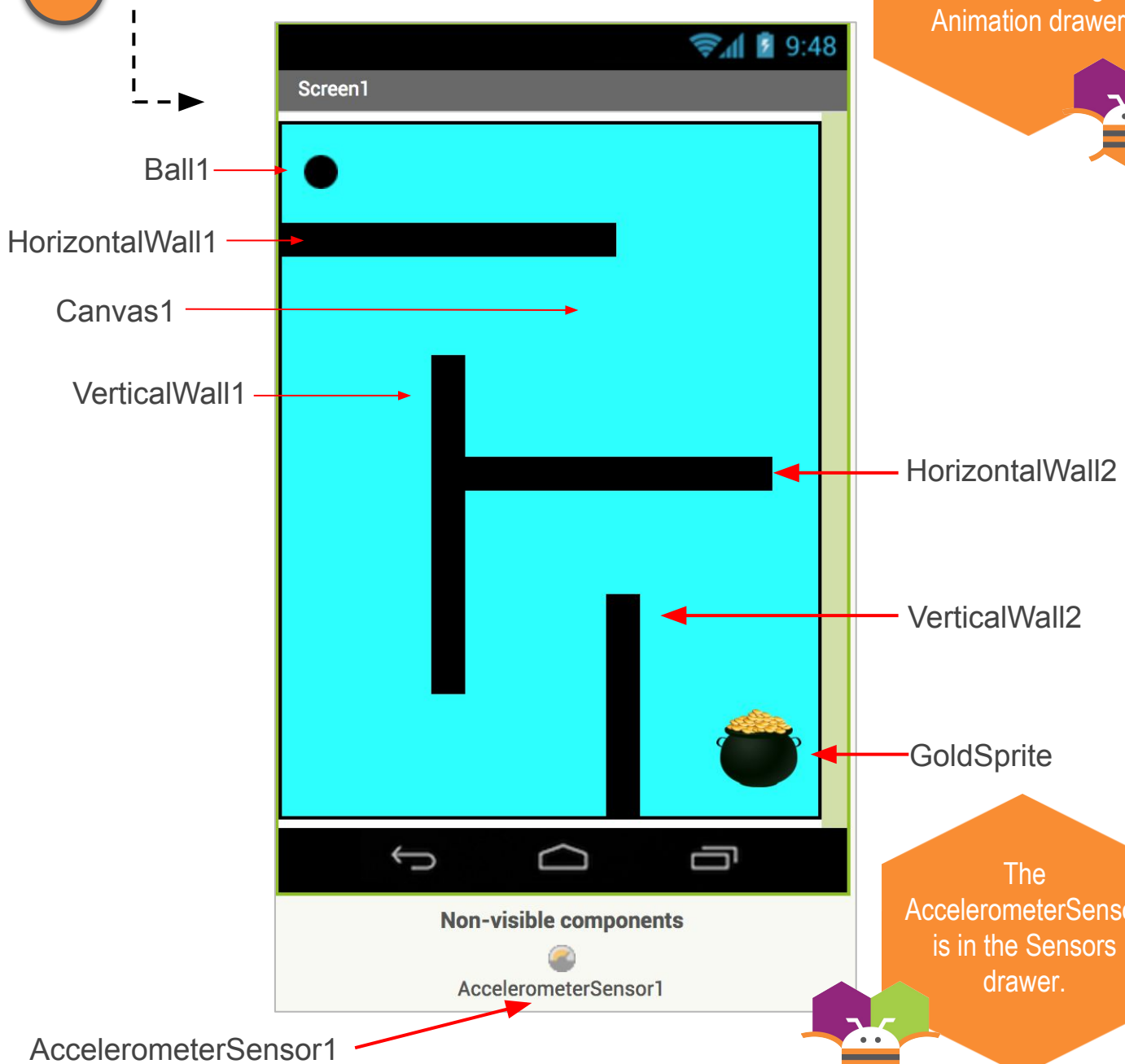
Look at and discuss the following diagram with your partner. Try to complete the missing steps for this app by selecting A, B, C or D below. Some have been filled in for you.



## THE DESIGNER

- 2 Open the **FindTheGold** template project, provided by your teacher, in MIT App Inventor.  
This is what it should look like in the Designer.

- 3 Discuss with your partner the function of each of the components.



## THE APP CHALLENGE

- ❑ Using the template provided, make a maze app where the user has to move the ball through the maze, avoid the walls, and reach the gold.
- ❑ Complete the SetUpMaze procedure that is supplied with the template, and call it when the app starts. All ImageSprites representing the walls and the GoldSprite should be placed on the Canvas so they show fully on the screen and fit well for a maze game.
- ❑ Ball movement must be controlled by the Accelerometer sensor. When the user tilts their mobile device, the ball rolls in that direction.
- ❑ When ball collides with a black wall, it returns to the starting point.
- ❑ When the ball touches the gold, ball movement stops. A message is displayed to the user that the game is over, using the Notifier component. Give the user two options - Play Again or Quit.
  - ❑ If user chooses Play Again, reset everything to start the game again.
  - ❑ If user chooses Quit, close the app.

## 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 Lesson 1.

### Find the Gold

#### 1. Events:



#### 2. Naming: ImageSprites



#### 4. Conditionals



#### 5. Operators

