

SKETCH & GUESS: PART 4

In Part 4, you will add answer-checking to the sketching app.

SEQUENCE OF EVENTS

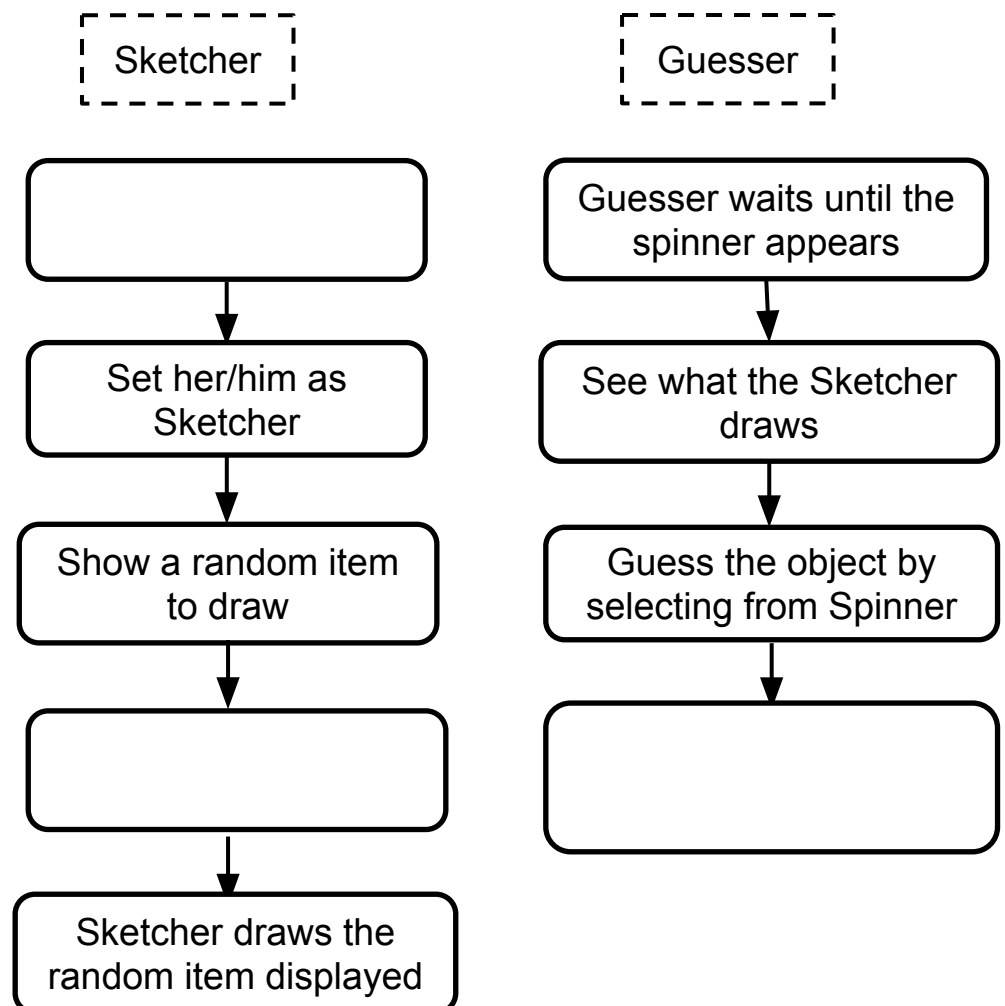
In previous lessons, you built a Sketch and Guess app.

Review with your partner the diagram below. Fill in the empty spaces with A, B, or C.

A. Check whether the selected answer is correct

B. Store the randomly selected drawing item in CloudDB




C. Sketcher presses Start Game button



CLOUDDB TAGS

The Sketcher needs to send the correct answer to the Guesser so the Guesser can check if their guess is correct. You'll do this by storing the correct answer in CloudDB using a new tag, "CurrentDrawing".

See the table below for the tags that are used in this app.

Tags	Meaning	Sketcher	Guesser
	The start point and end point for drawing	Store the coordinates of drawing	Get the coordinates of drawing
	Who is the Sketcher	Store their userID	Get the Sketcher's userID
	What is being drawn	Store the randomly generated item to draw	Get the item being drawn for answer checking

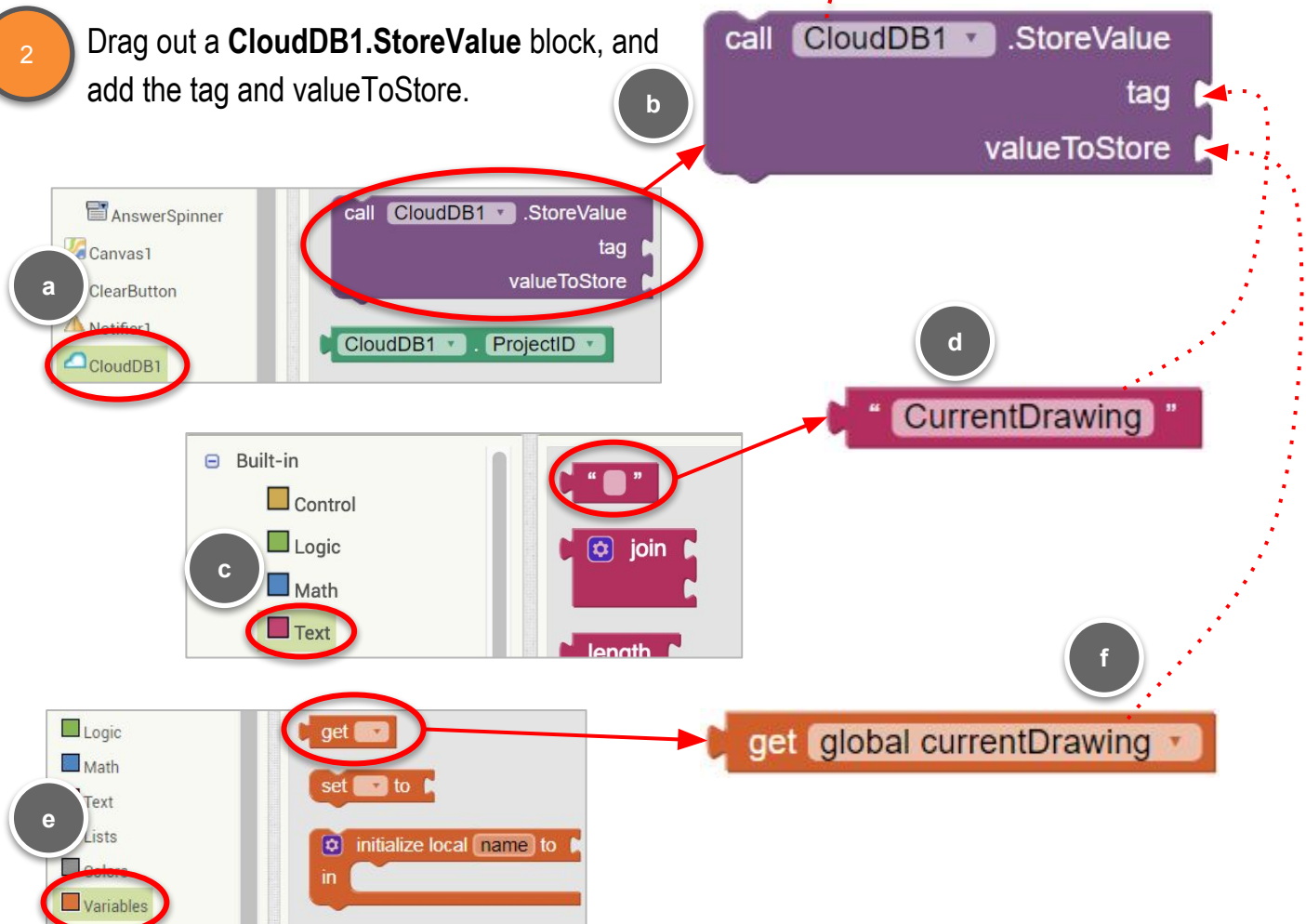
STORE CURRENT DRAWING

When the Sketcher clicks the Start button, you need to store the randomly generated drawing item to CloudDB. You'll use the tag, "CurrentDrawing".



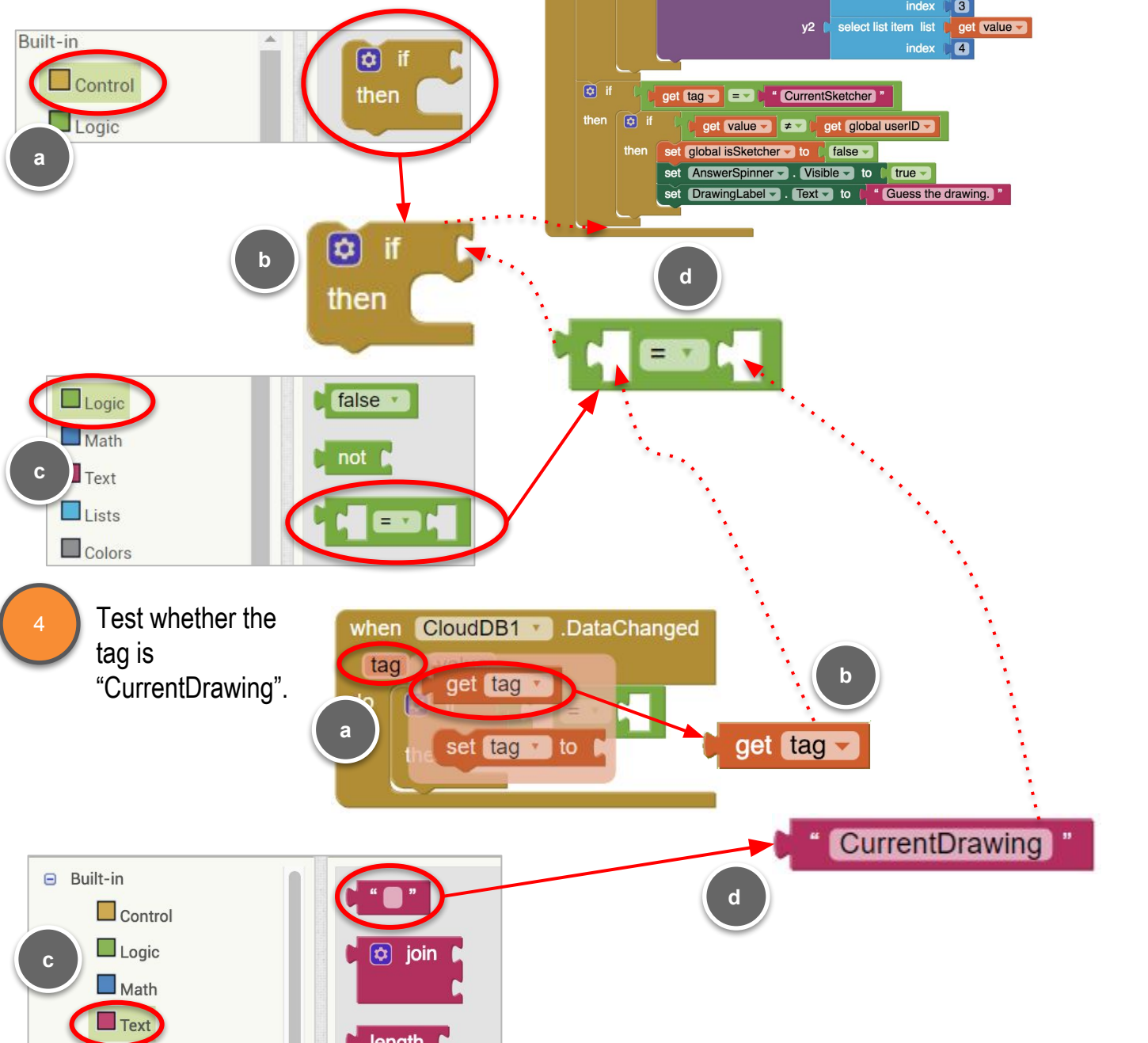
1 Open your project from Part 3.

2 Drag out a **CloudDB1.StoreValue** block, and add the tag and valueToStore.

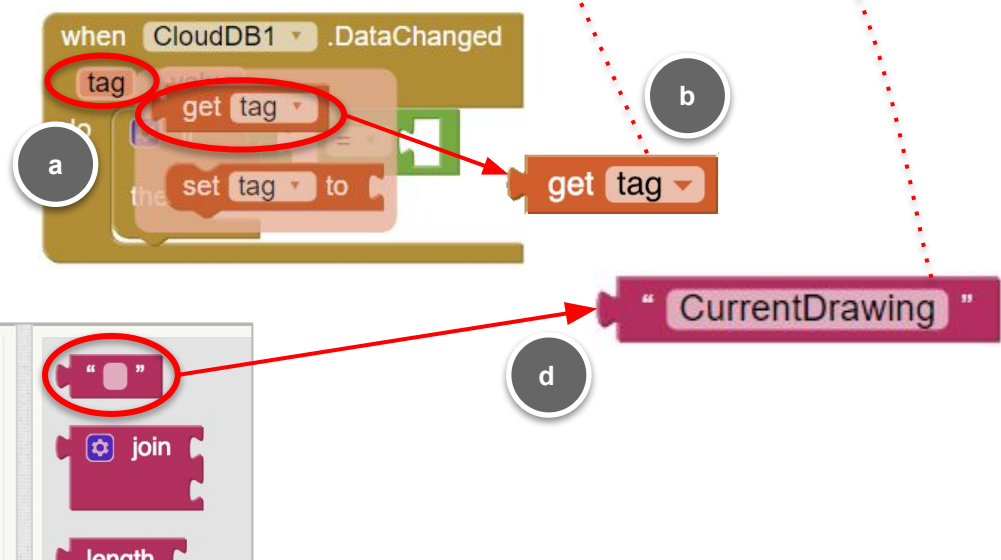


GET CURRENTDRAWING FOR THE GUESSER

- 3 After the Sketcher has saved the **CurrentDrawing** to CloudDB, the Guesser needs to get the **CurrentDrawing** to check for a correct guess.

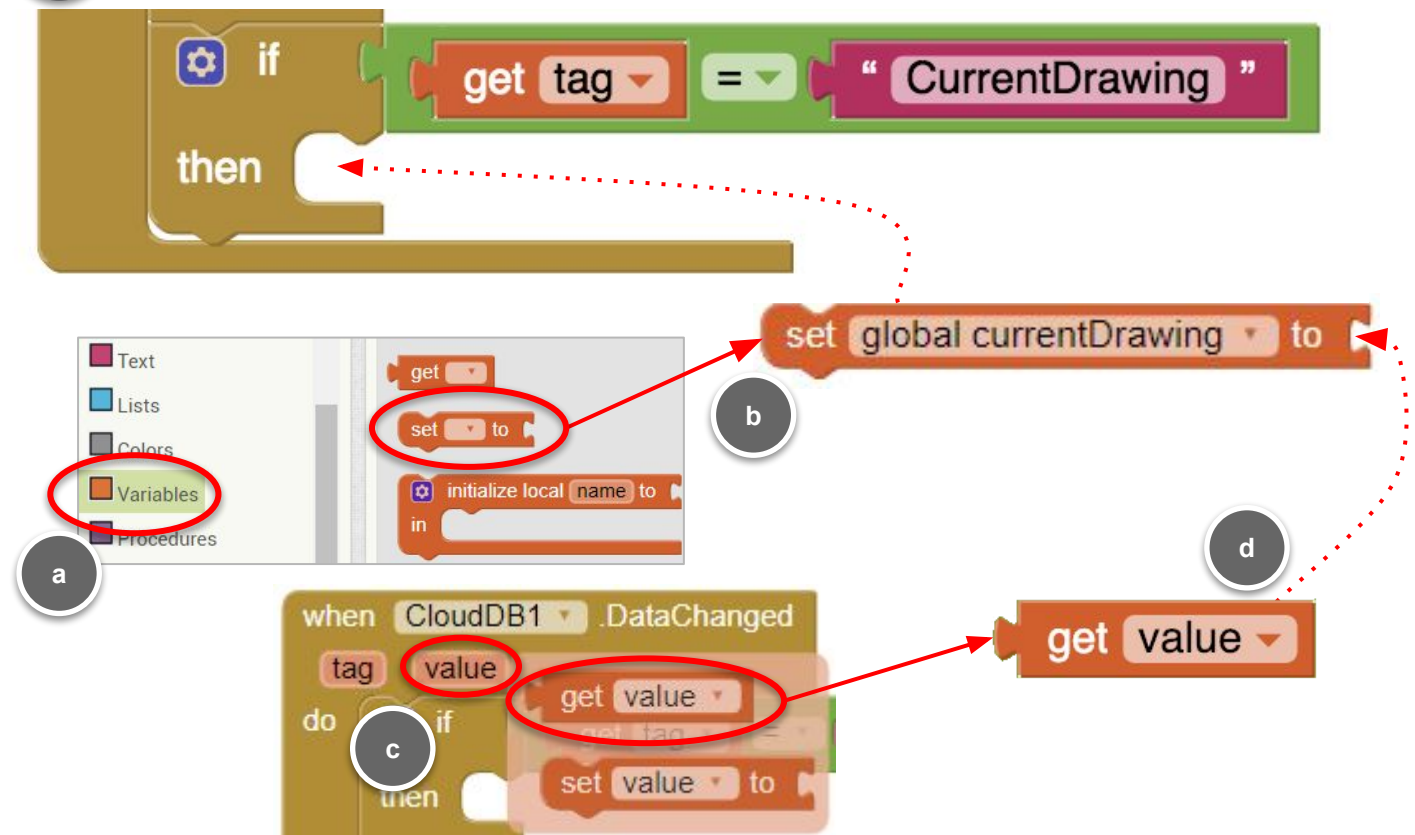


- 4 Test whether the tag is "CurrentDrawing".



SET THE ANSWER FOR CHECKING

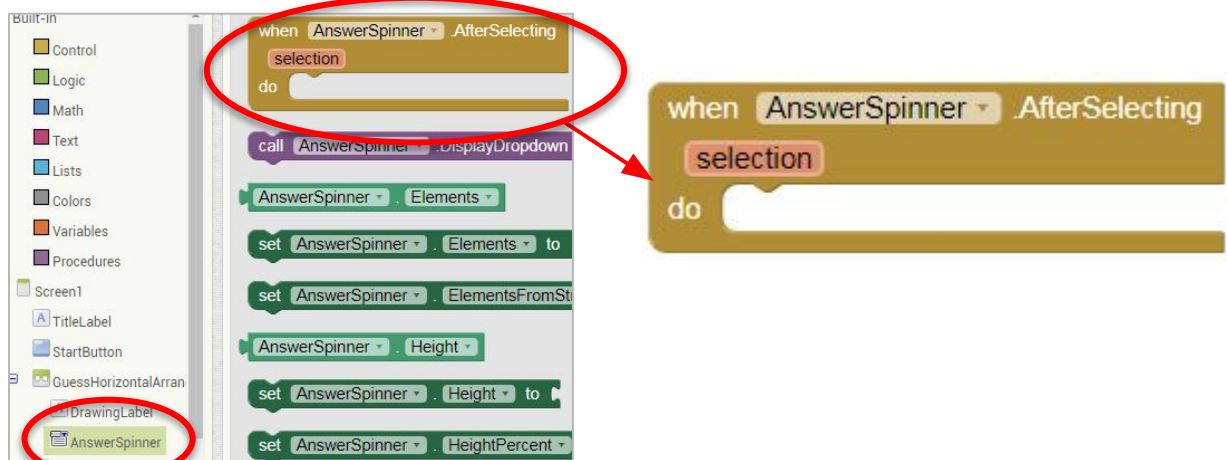
- 5 Set the **currentDrawing** variable to the value received from CloudDB.



CHECK ANSWER

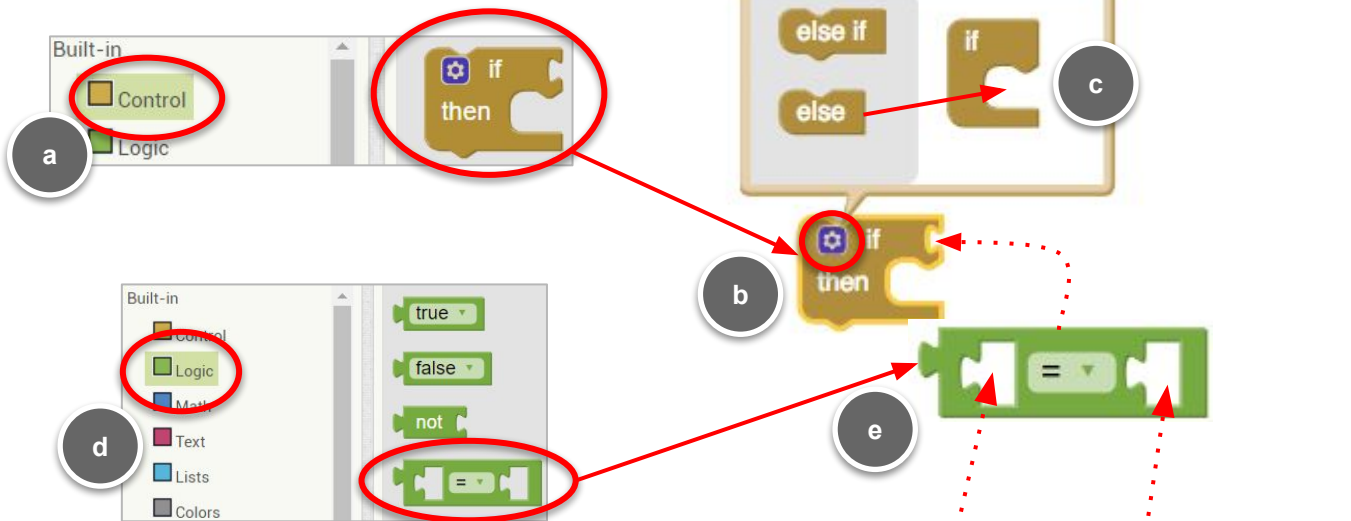
Check if the answer that the Guesser selects from the **AnswerSpinner** is correct, and notify the user.

- 6 Check the answer in the **AnswerSpinner.AfterSelecting** block.



CHECK ANSWER (continued)

- 7 Test if the user's selection matches the **currentDrawing**.



- 8 Snap a **get selection** and a **get global current Drawing** block into the **equals** block.



CHECK ANSWER (continued)

- 9 Drag out a **Notifier1.ShowAlert** block and set the messages. If the user's selection in the **AnswerSpinner** matches **currentDrawing**, notify the user that they are correct: *"That's right! Good job!"*; otherwise, notify user *"Oh no! Try again!"*.

The screenshot shows the MIT App Inventor workspace. On the left, the Components palette has 'Notifier1' circled in red (a). In the center, a 'call Notifier1.ShowAlert' block is circled in red (b). On the bottom left, the Built-in palette has 'Text' circled in red (c). On the right, a 'That's right! Good job!' text block is circled in red (d). Red arrows indicate the flow: from (a) to (b), from (b) to (d), and from (c) to (d). A 'when AnswerSpinner.AfterSelecting' event listener is also visible, containing an 'if' block with 'get selection' and 'get global currentDrawing' blocks.

- 10 Duplicate the **Notifier1.ShowAlert** block, change the text block to *"Oh no! Try again!"*, and add it as the else clause of the **if-then-else** block.

The screenshot shows a 'call Notifier1.ShowAlert' block with a text block containing 'Oh no! Try again!' attached to its 'notice' input. A red arrow points from the 'That's right! Good job!' text block in the previous screenshot to this one.

- 11 Test with your partner. Build the apk using the QR code option, scan the QR code and download and install the apk on your individual devices.

The screenshot shows the MIT App Inventor 'Build' menu. The 'Build' button is circled in red. A dropdown menu is open, showing two options: 'App (provide QR code for .apk)' and 'App (save .apk to my computer)'. A red arrow points to the 'App (provide QR code for .apk)' option.

Choose Ways to Extend Your App

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



Add
TextToSpeech to
speak what is to
be drawn

Add
notification to all
users if someone
guesses
correctly

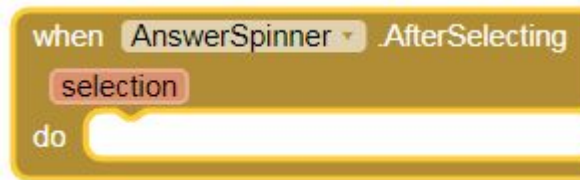
Keep score!
Each player can
keep track of their
correct guesses!

What other ideas
do you have?

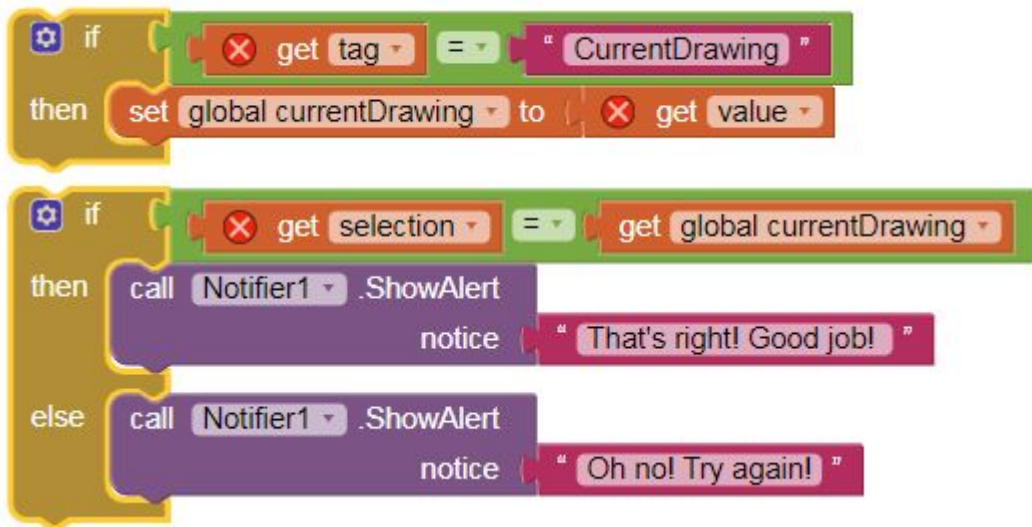
COMPUTATIONAL THINKING CONCEPTS

Sketch And Guess Part 4

1. Events



2. Conditionals



3. Naming / variables



4. Manipulation of data and elementary data structures

