MIT App Inventor
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# “DigitalDoodle” – Drawing App

Draw a line on the screen as the user drags a finger around.

1 Open ***Google Chrome*** browser and type the URL https://code.appinventor.mit.edu in the ***address bar*** of the browser

***Following Screen appears in response of the step 1***

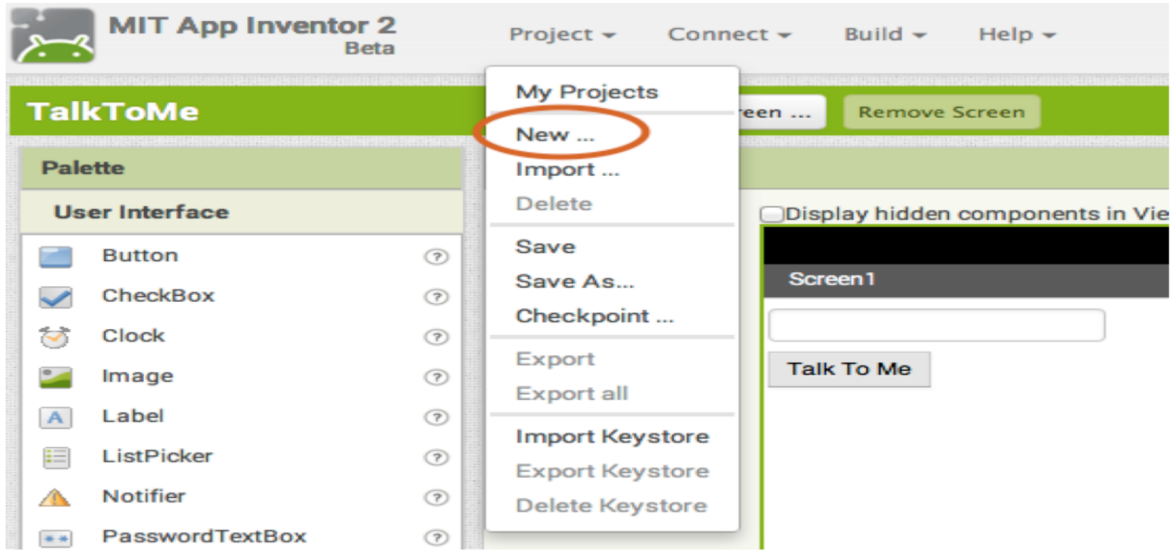

2 Click “*Enter with Revisit Code*” after entering your code.

1st Nov 2023

# 3 Start a New Project

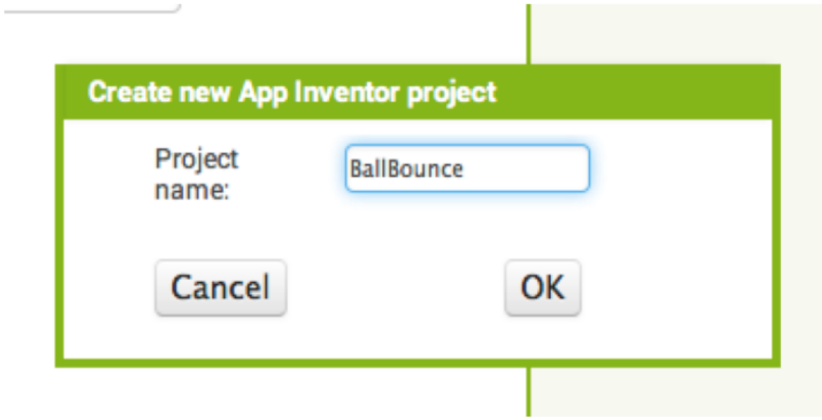
**Start a New Project**

If you have another project open, go to My Projects menu and choose New Project.



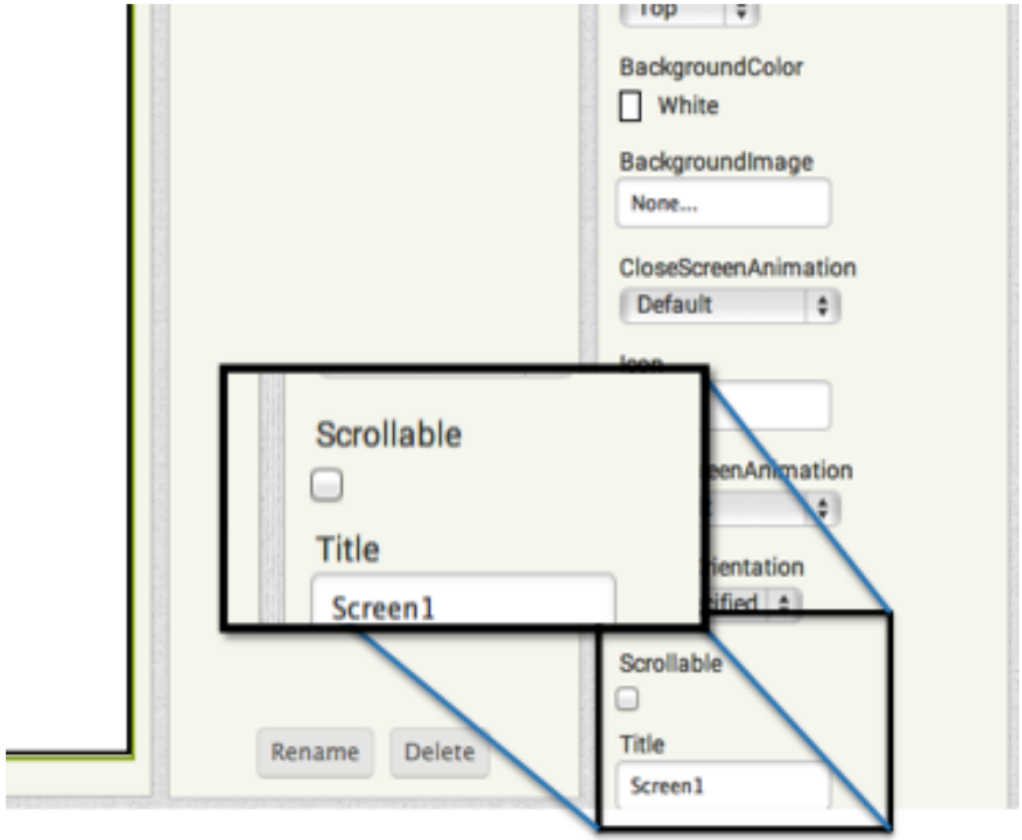

# 4 Name the Project

Call it something like "BallBounce". Remember, no spaces. But underscores are OK.



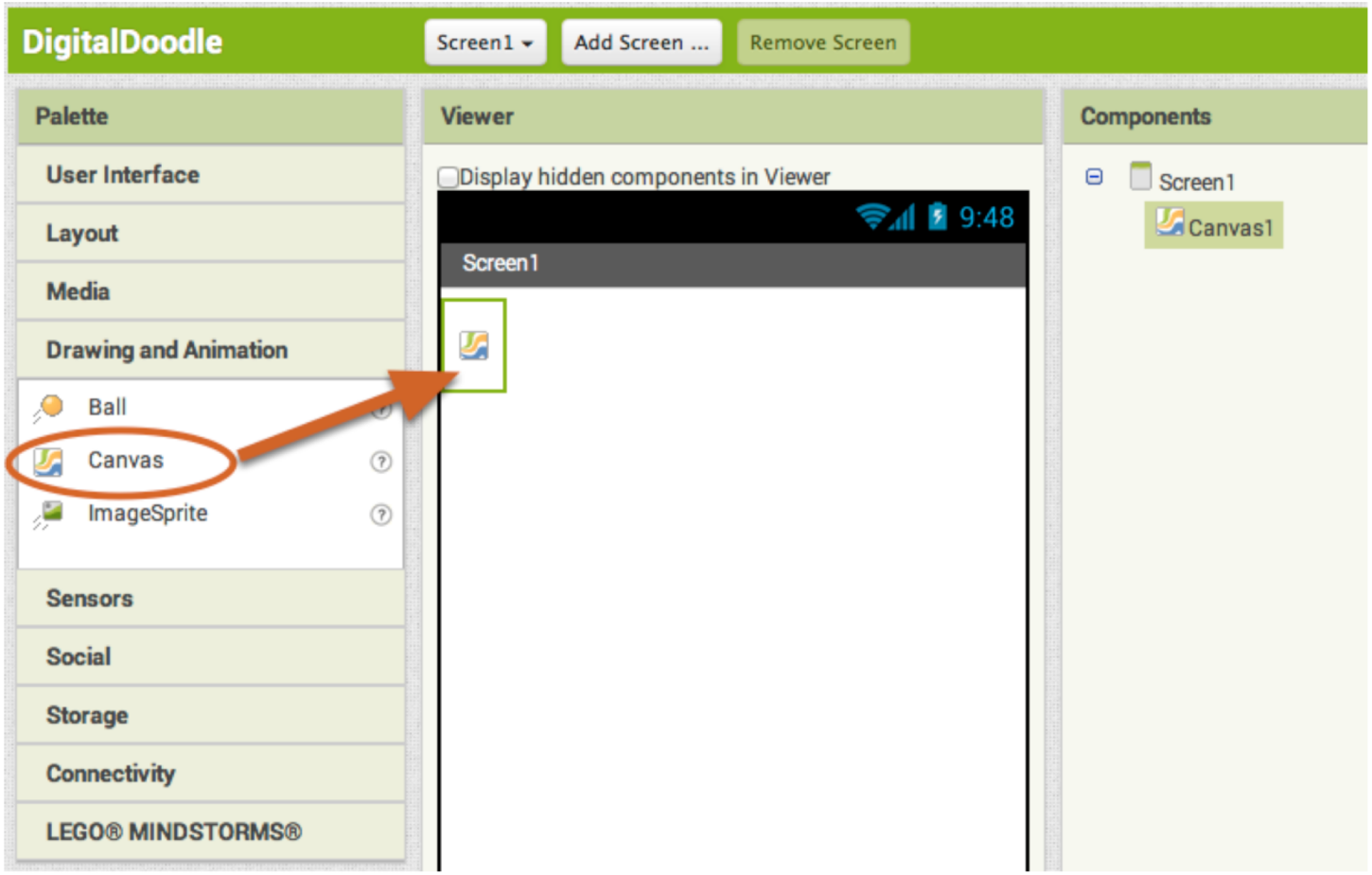
## 5 Set the Screen so that it does not scroll

The default setting for App Inventor is that the screen of your app will be "scrollable", which means that the user interface can go beyond the limit of the screen and the user can scroll down by swiping their finger (like scrolling on a web page). When you are using a Canvas, you have to **turn off the "Scrollable" setting** (UNCHECK THE BOX) so that the screen does not scroll. This will allow you to make the Canvas to fill up the whole screen.



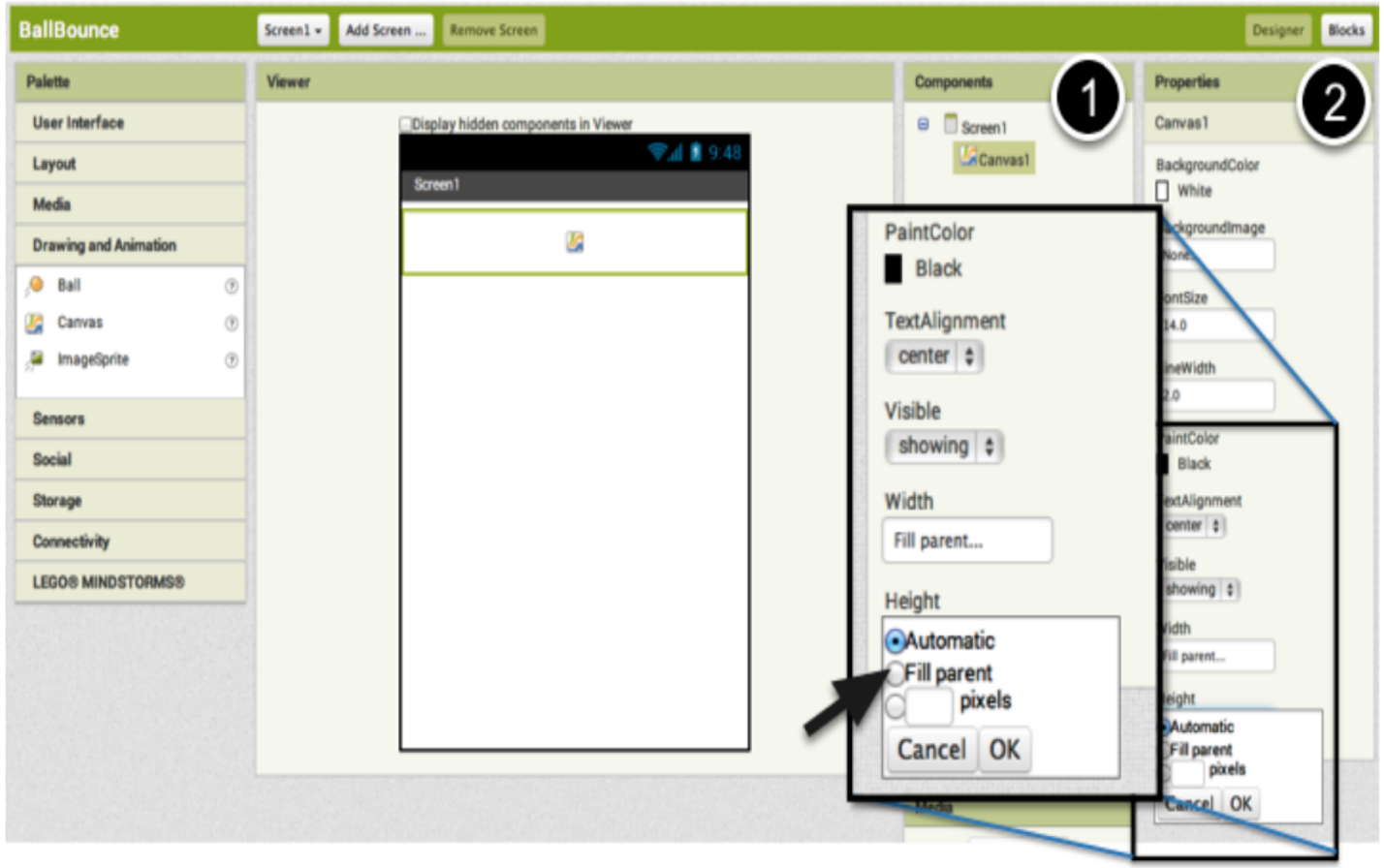
## 6 Add a Canvas

From the Drawing and Animation drawer, drag out a Canvas component.



## 7 Change the Height and Width of the Canvas to "*Fill Parent*"

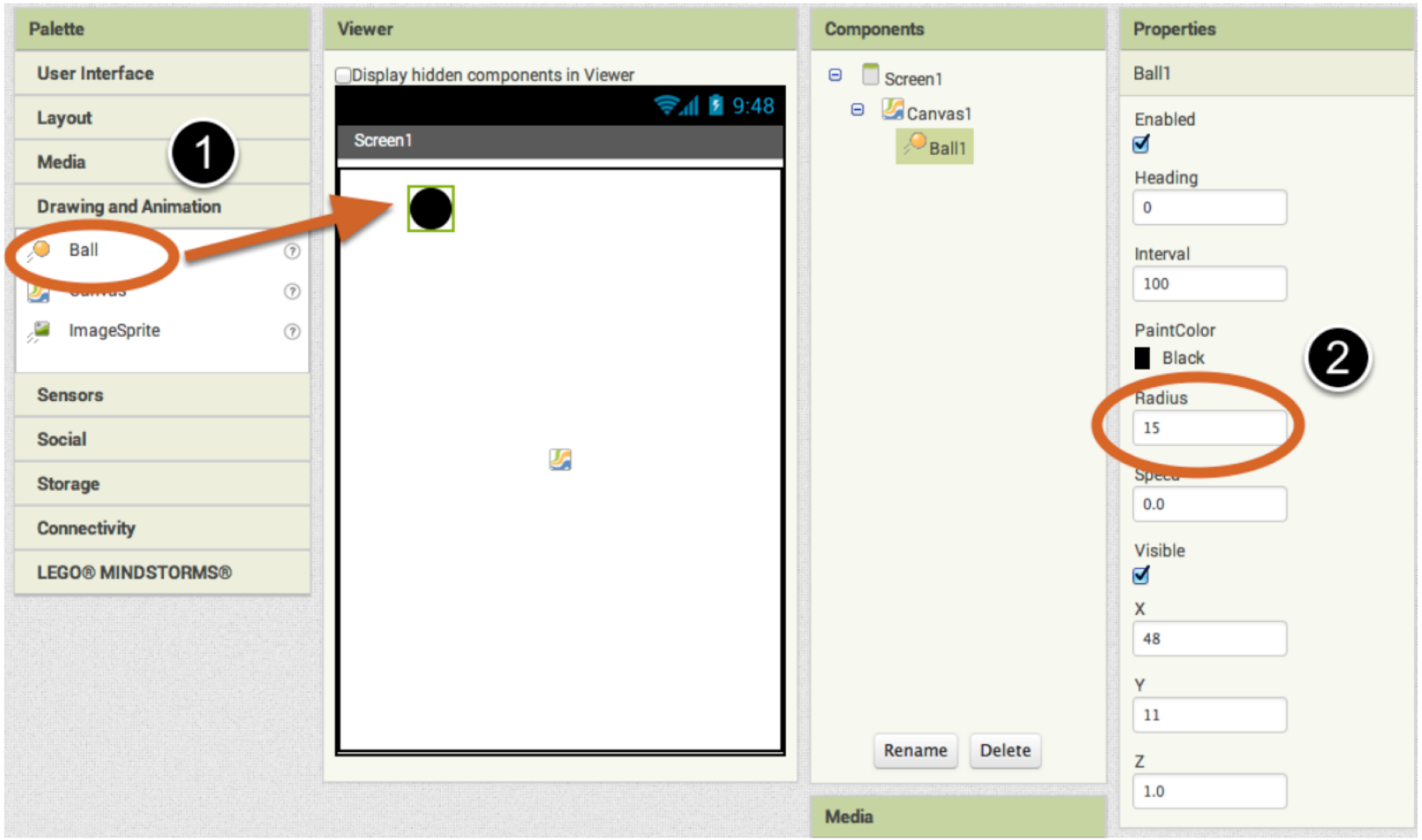
Make sure the Canvas component is selected (#1) so that its properties show up in the Properties Pane(#2). Down at the bottom, ***set the Height property to "Fill Parent"***. Do the same with the ***Width property***.




## 8 Switch to Blocks Editor

## 8 Add a Ball

Now that we have a Canvas in place, we can add a Ball Sprite. This can also be found in the **Drawing and Animation drawer**. Drag out a **Ball component** and drop it onto the Canvas (#1). If you'd like the ball to show up better, you can change its **Radius property** in the Properties pane (#2).



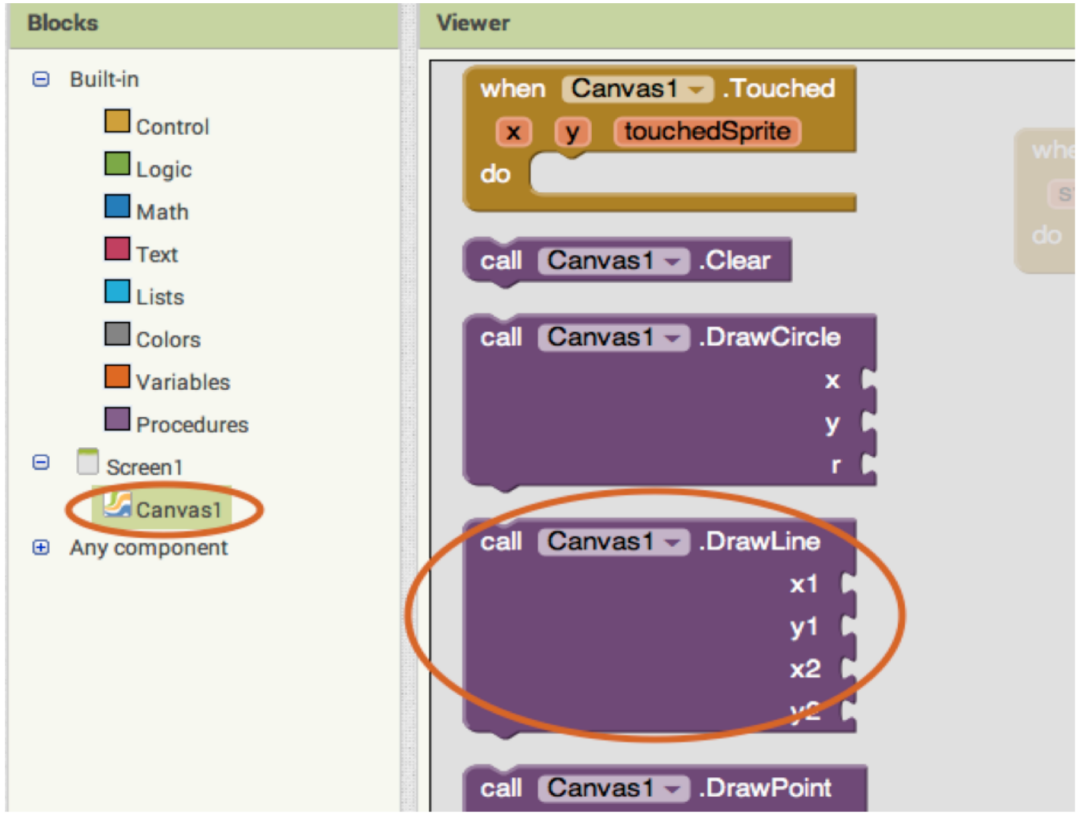

## 9 Switch to Blocks Editor

## 10 Get a Canvas.Dragged event block

In the Canvas1 drawer, pull out the **when Canvas1.Dragged** event.

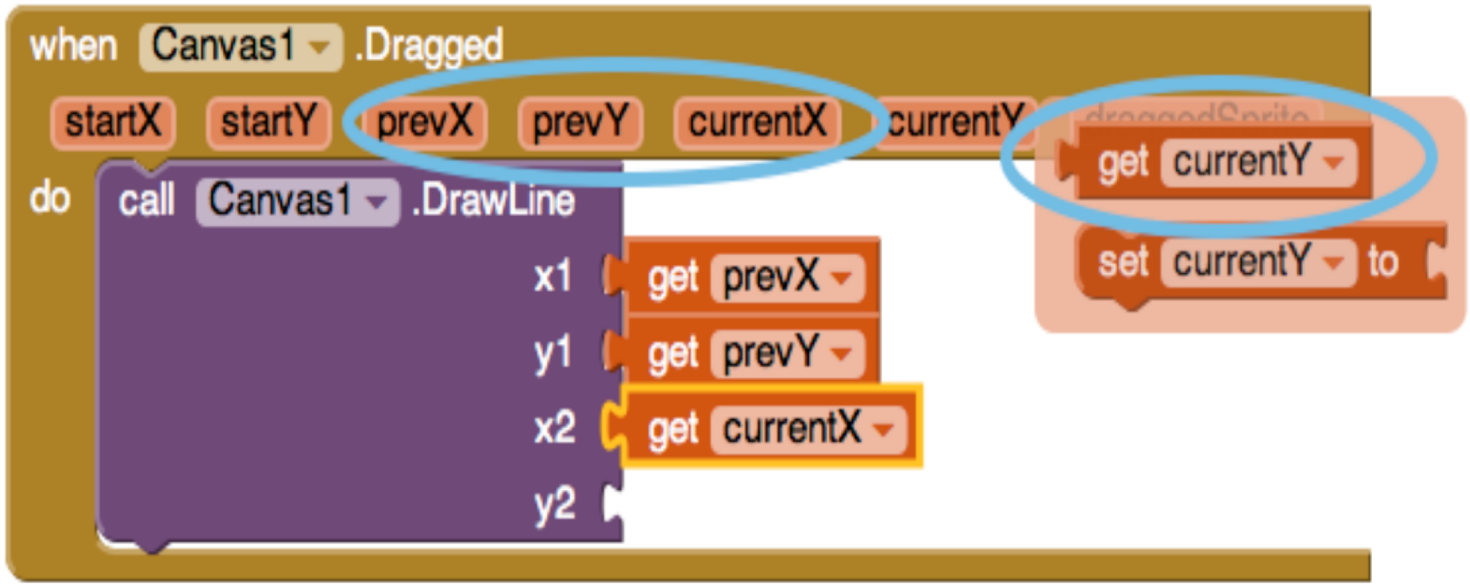

## 11 Get a Canvas.DrawLine call block

In the Canvas1 drawer, pull out the **when Canvas1.DrawLine** method block..

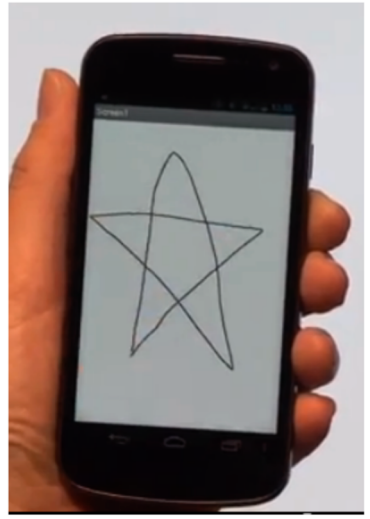


## 12 Use the get and set blocks from the Dragged block to fill in the values for the Draw Line block.

The Canvas Dragged event will happen over and over again very rapidly while the user drags a finger on the screen. Each time that Dragged event block is called, it will draw a small line between the previous location (prevX, prevY) of the finger to the new location (currentX, currentY). Mouse over the parameters of the Canvas1.Dragged block to pull out the get blocks that you need. (Mouse over them, don't click on them.)




## 13 Now test your app




# Great work! Now extend this app

Here are some ideas for extending this app. You can probably think of many more!

- Change the color of the ink (and let the user pick from a selection of colors).
- Change the background to a photograph or picture.
- Let the user draw dots as well as lines (hint: Use DrawCircle block).
- Add a button that turns on the camera and lets the user take a picture and then doodle on it.