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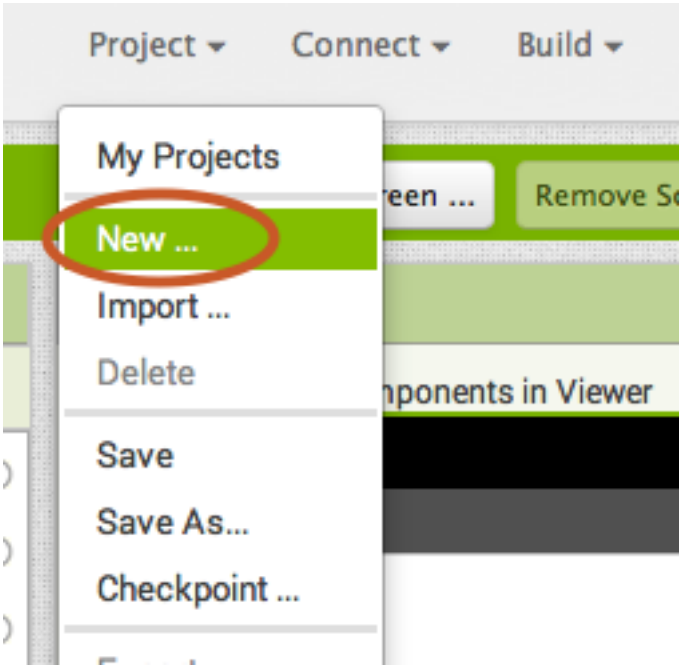
DigitalDoodle: Drawing App

This tutorial will show you how to draw a line on the screen as the user drags a finger around.

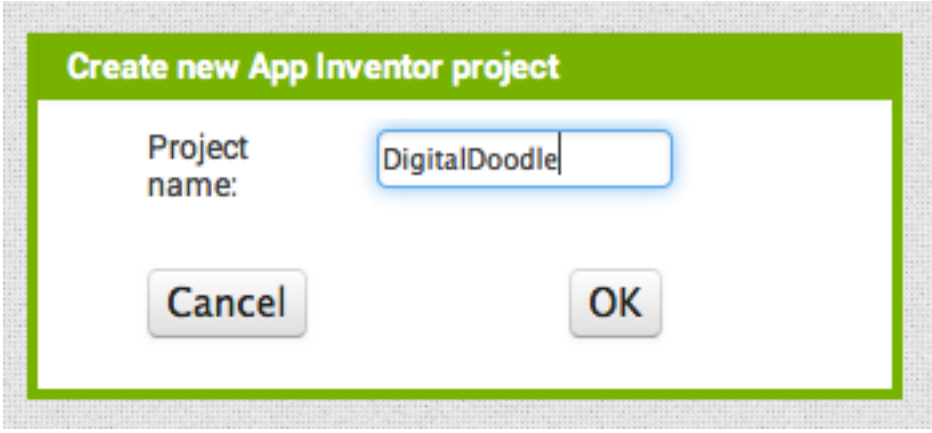
Start a New Project

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



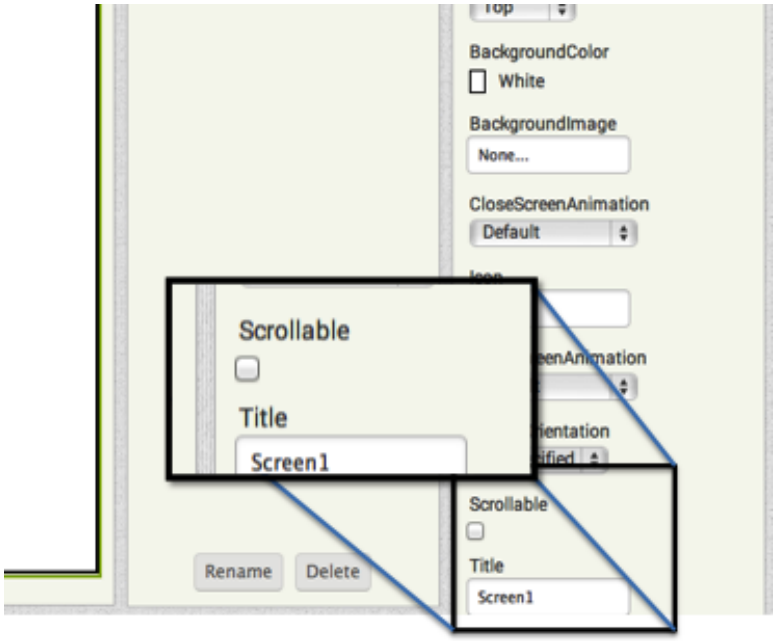
Name the Project

Call this project DigitalDoodle, or create your own name for this drawing app.



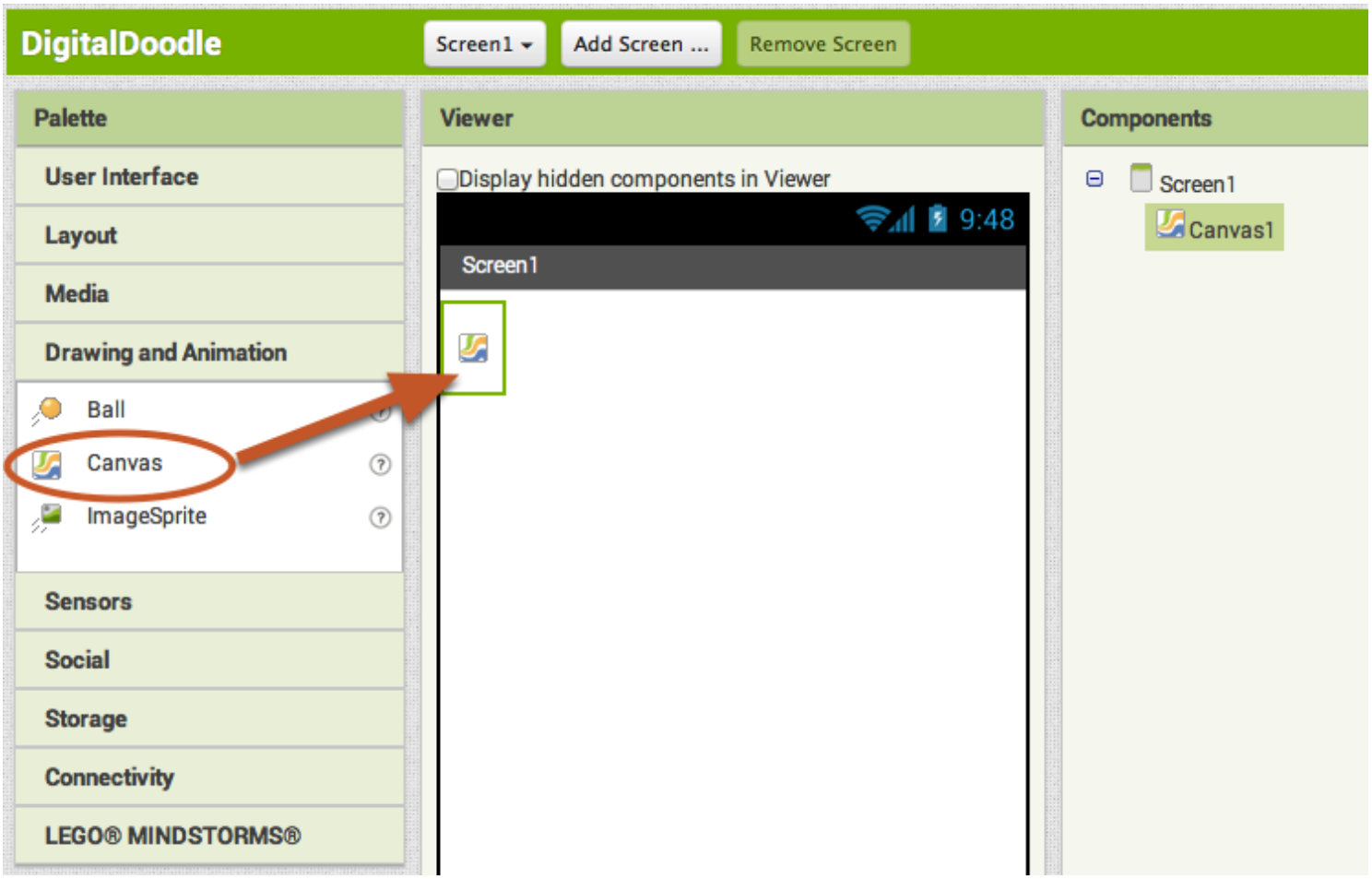
Set the Screen so that it does not scroll

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.



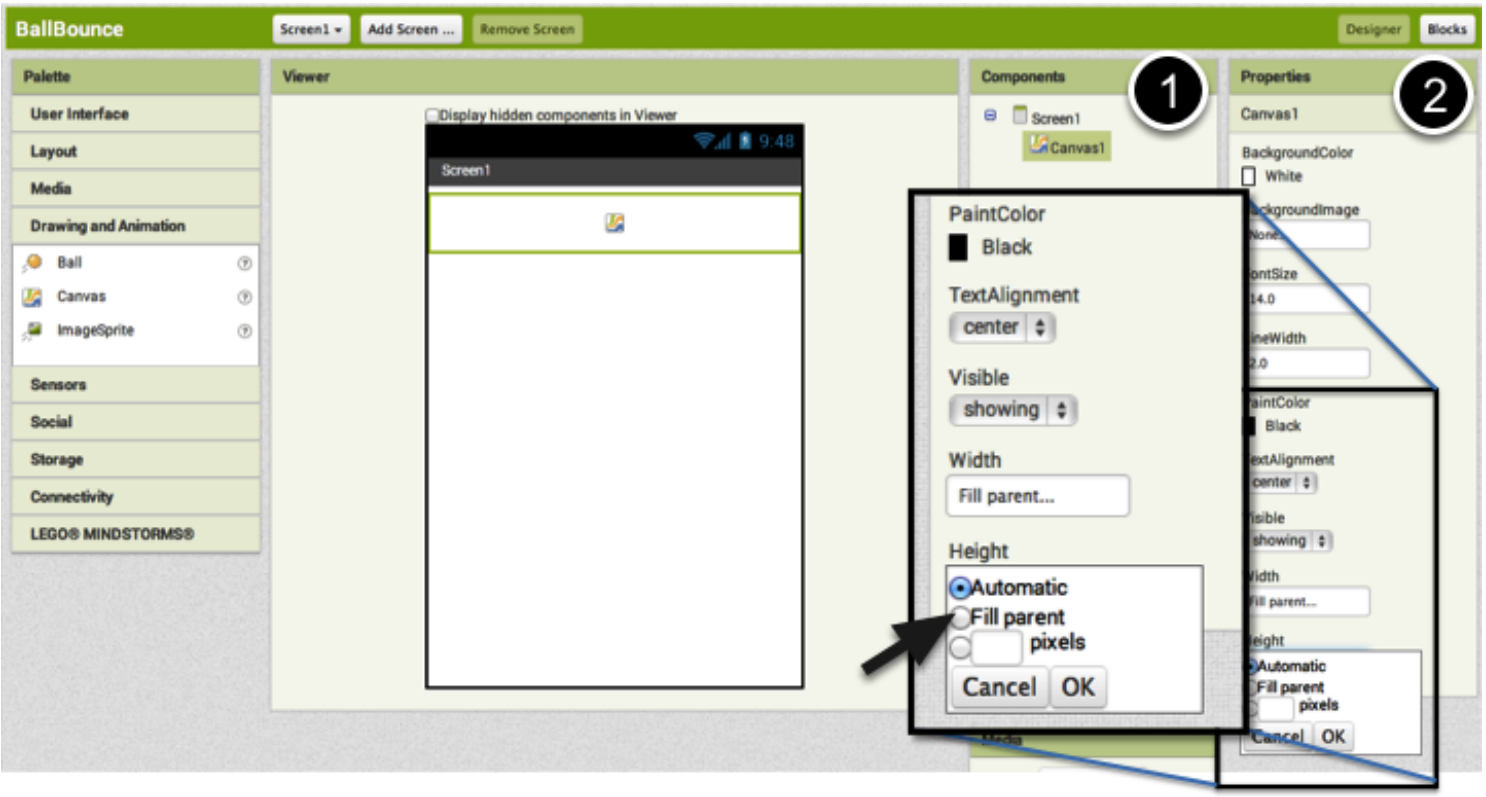
Add a Canvas

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



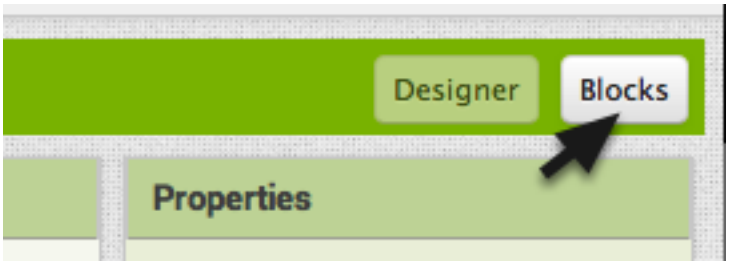
Change the Height and Width of the Canvas to Fill Parent

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.**



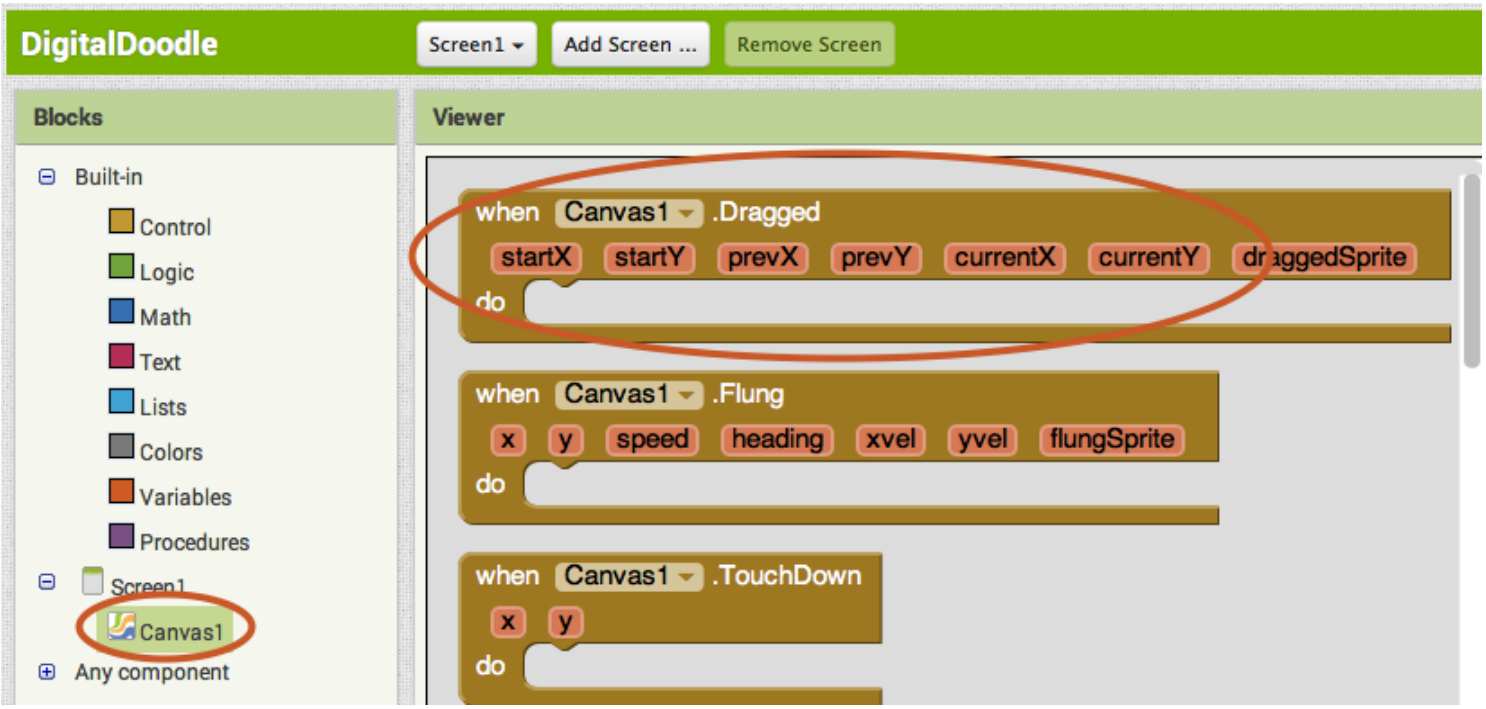
That's all for the Designer! Go over to the Blocks.

Believe it or not, for now this app only needs a Canvas. Go into the Blocks Editor to program the app.



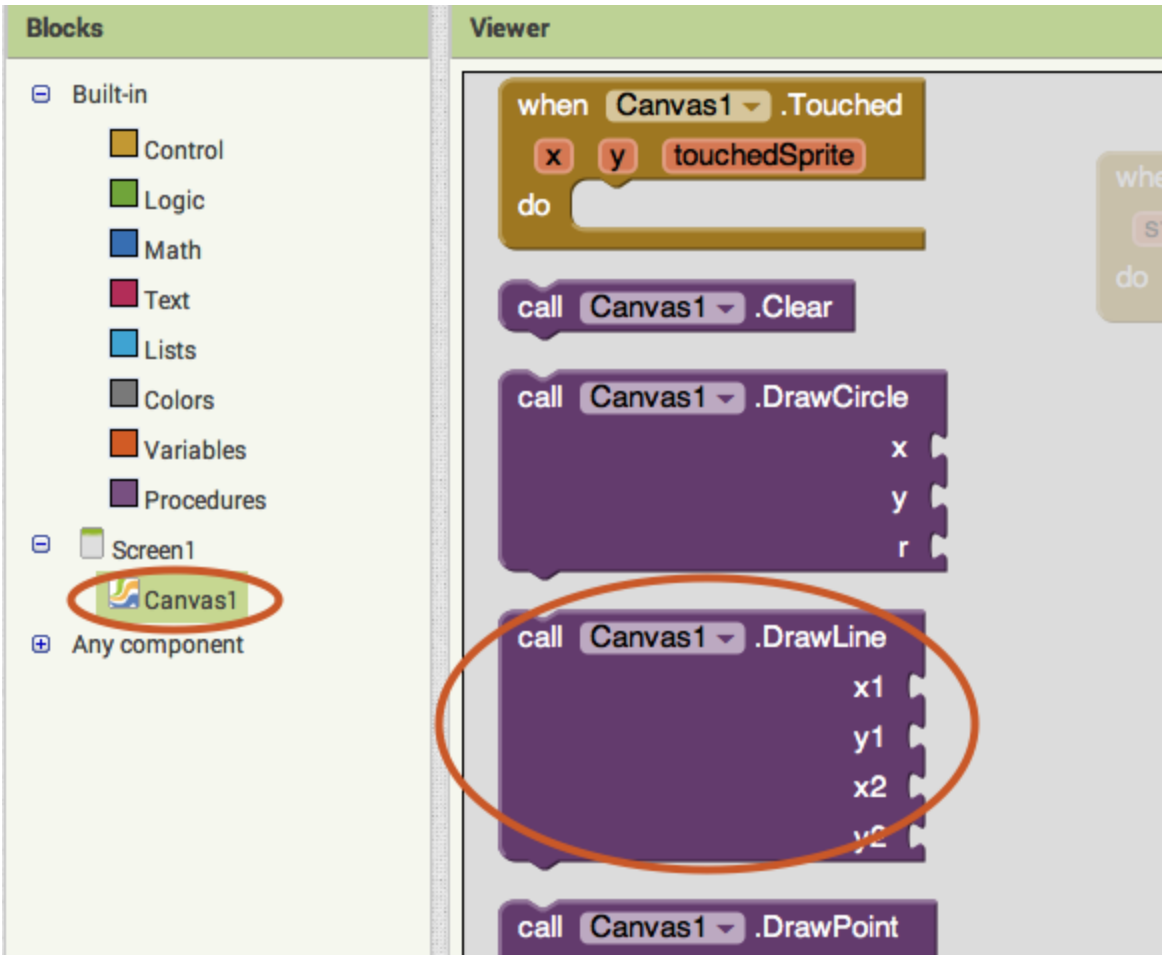
Get a Canvas.Dragged event block

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



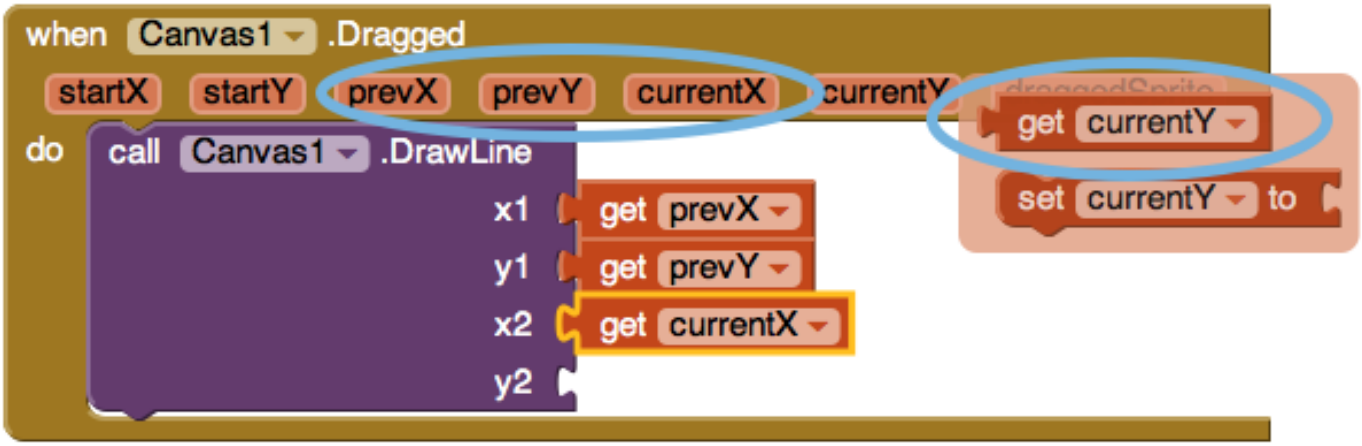
Get a Canvas.DrawLine call block

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



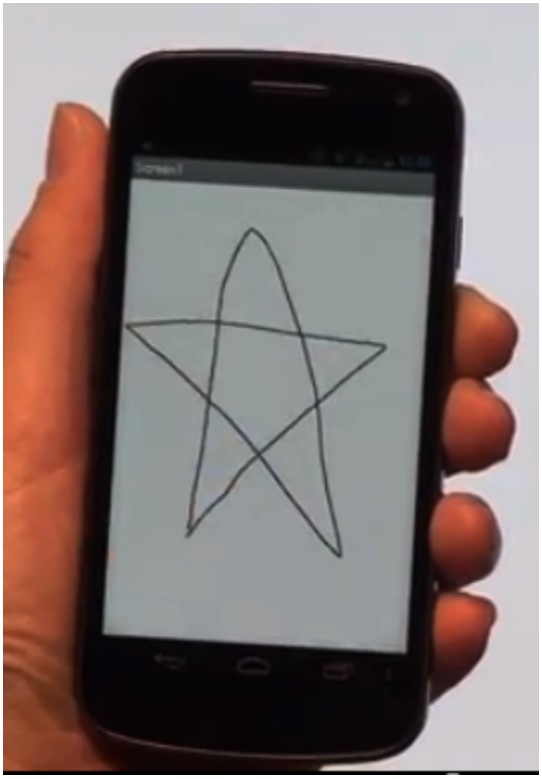
Use the get and set blocks from the Dragged block to fill in the values for the Draw Line block.

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.)



Test it out!

Go to your connected device and drag your finger around the screen. Do you see a line?



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). See Paint Pot tutorial.
- 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.