# C1: Etch-a-sketch

This assignment re-creates an etch-a-sketch. These toys had knobs that allowed the user to move the line to the right-left and up-down. As the user moved the knob, they could (attempt to) draw a picture.
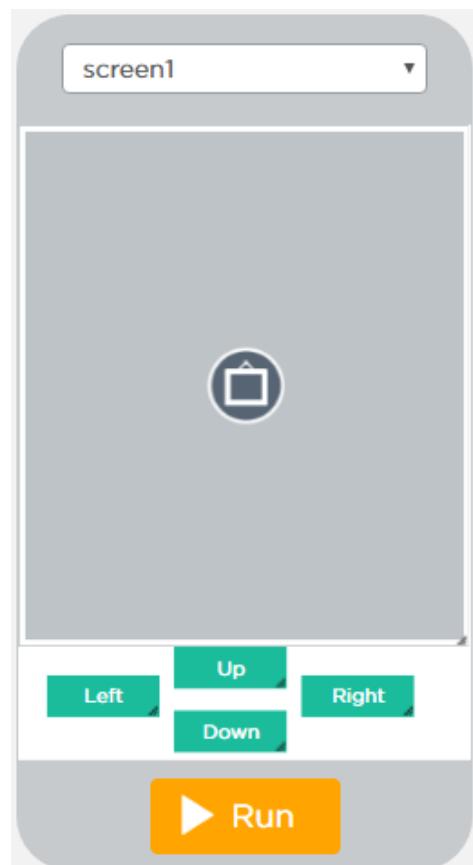

First, create the screen in design mode. It has a new widget on it: a canvas.
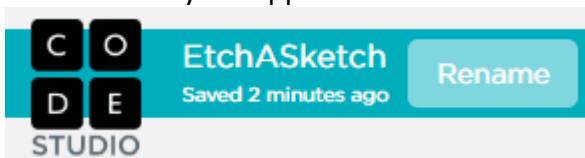

The big box that takes up most of the screen is the canvas. The user can draw in this space.
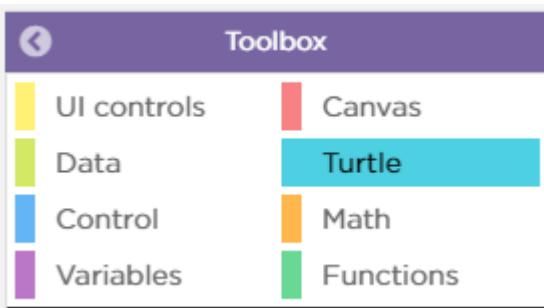
The four buttons at the bottom have the same id as the text on them. (For example, Left's id is Left).
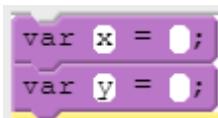
Remember to name your App and save it.
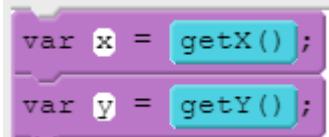
The code blocks will be manipulating something called a "Turtle". This object moves on a canvas, leaving a line behind it.

Start by declaring two variables, x and y.
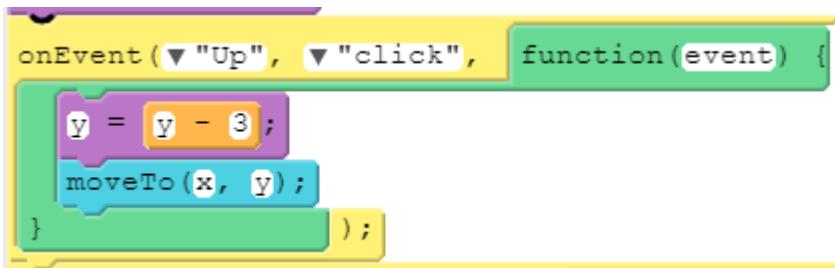
Go to the turtle tab in the toolbox and drag in the getX() block and the getY() block.

This will start the tracking variables in the same spot the Turtle happens to start.

The up block looks like this:
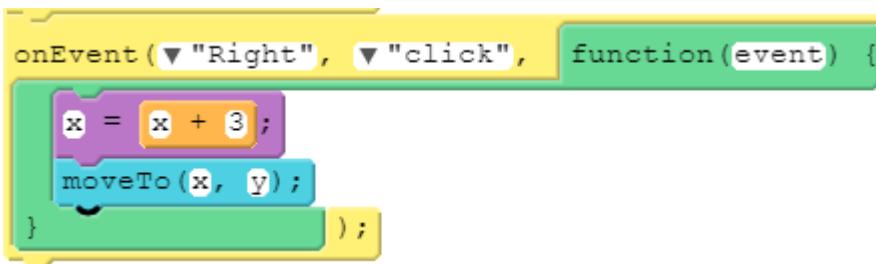
Remember that after the first time you make a variable, you shouldn't use the block with the var in front.

Don't use:	Don't use:	**Do Use:**

Run your program. See if the up button works.

The up-down axis is the y axis. That's why we made y = y-3. The left-right axis is the x axis. That means that the right button's code looks like this.

Now, create the down and left buttons' onEvent code.

Lastly, for a challenge, make a new button called "move". This button will ask the user for two number inputs. One for x and one for y. Then, it will move the Turtle to that location.

When you are finished, show Ms. Gorski.