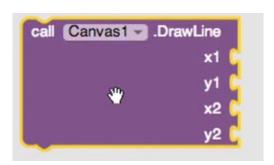
Digital Doodle

Part 1

- 1. Start a New Project called "MyDoogle".
- 2. on Screen1, uncheck the scrollable tick. It is in the Properties of the Screen1.
- 3. Go to Drawing and Animation section, and add a "Canvas". Simple drag and drop a Canvas component to the work area.
- 4. Select the Canvas and go to the Properties of the Canvas to change the width and height of the Canvas. change the "Automatic" to the "Fill Parent" on both width and height properties of the canvas. This will expand your canvas.
- 5. Get an AccelorometerSensor from the sensor drawer and drag and drop it to the work area
- 6. Now go to the Block view
- 7. click on the Canvas component and choose the block "When Canvas1.Dragged".



- 8. Now we want to program this to do the job we want to do, which means, we want to draw a line where the finger is touched as the starting point to the end point where finger is no longer touched.
- 9. Go back to Canvas1 and select the block "Call Canvas1.DrawLine" and drag and drop it to the work area.



10. Now connect those two blocks together.

```
when Canvas1 - Dragged

startX startY prevX prevY currentX currentY draggedSprite

do Call Canvas1 - DrawLine

x1

y1

x2

y2
```

- 11. you need to provide the x1, y1,x2,y2 coordinates to the block to draw a line.
- 12. click on the "prevX" and select "get prevX".

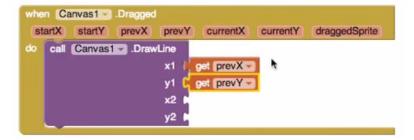
```
when Canvas1 .Dragged

startX startY prevX currentY draggedSprite

do call Canvas1 .Dray

set prevX to prevX to
```

- 13. Connect the "get prevX" to the "x1" scoket.
- 14. Do the same for the prevY (click on the "prevY" and select "get prevY" and connect the "get prevY" to the "y1" socket).



- 15. click on the "currentX" and select "get currentY" and connect the "get currentX" to the "x2" socket.
- 16. Do the same to the y2. (click on the "currentY" and select "get currentY" and connect the "get currentY" to the "y2" socket).

17. Blockset will look like this after you have followed the steps above.

```
when Canvas1 - Dragged

startX startY prevX prevY currentX currentY draggedSprite

do call Canvas1 - DrawLine

x1 { get prevX - get prevY - y1 { get currentX - get currentY - y2 { get currentY - get cu
```

18. Go to the AccelerometerSensor1 and select the "When AccelerometerSensor1.Shaking" block.

```
when AccelerometerSensor1 .Shaking do
```

19. Now go back to the Canvas1 component and select "Call Canvas1.Clear" block.

```
call Canvas1 .Clear
```

20. Connect the "Call Canvas1.Clear" block to the AccelerometerSensor1.Shaking block.

```
when AccelerometerSensor1 .Shaking
do call Canvas1 .Clear
```

21. final setup of the blocks will look like this

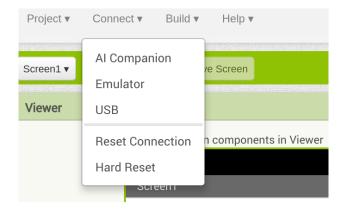
```
when Canvas1 .Dragged

startX startY prevX prevY currentX currentY draggedSprite

do call Canvas1 .DrawLine

x1 get prevX get prevX get currentX y2 get currentY get currentY get currentY get currentY y2.
```

22. Now click on the "Connect" your app to the emulator or to your phone via USB cable and test your app and draw some lines on the phone.



Part 2: In Class Assignment

Now Add a button to clear the phone screen after you have finished drawing.