



# TEACHING GAME DEV TO SCHOOL KIDS

## What We Did, How You Can Too

Jeremiah Blanchard, Cofounder  
Cacti Council Inc.



WHO ARE THESE PEOPLE?



[www.cacticouncil.org](http://www.cacticouncil.org)



Jeremiah Blanchard

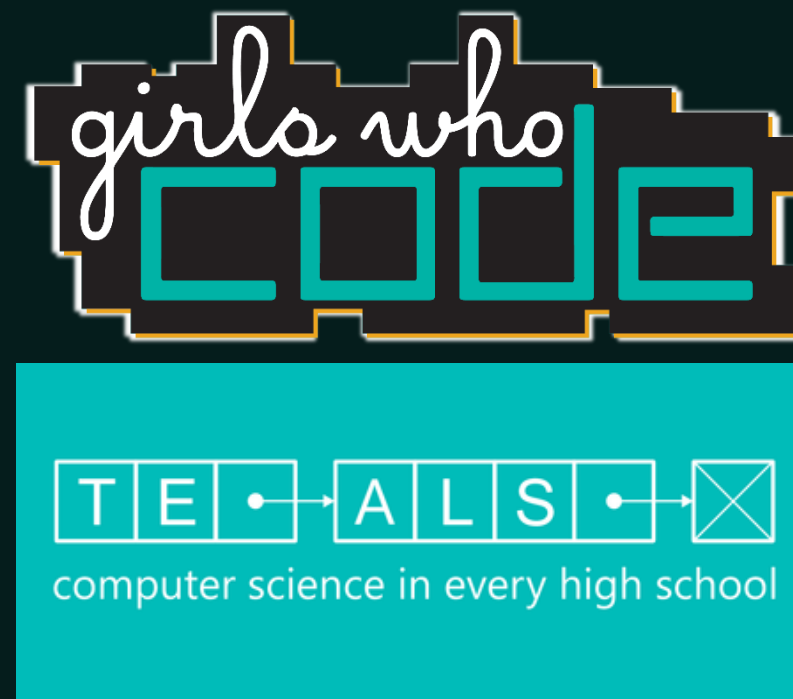
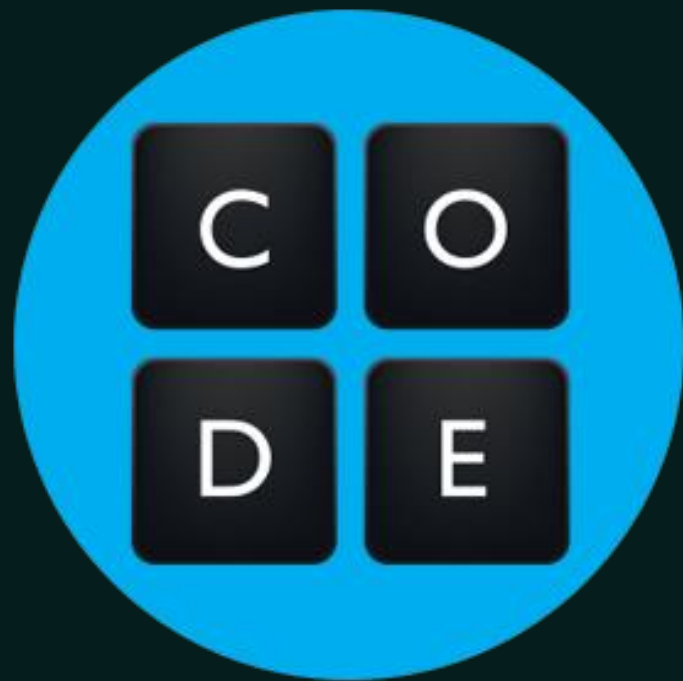


Haifa Maamar



Joseph Del Rocco

# SHOULDERS OF GIANTS



...but there's lots of work to be done.

# SCHOOL PROGRAMS



# DEVELOPING TOOLS

The screenshot displays the Pencil Code development environment. On the left is a 'Blocks' palette with categories: Move, Art, Text, Sound, Control, Operators, Sprites, and Snippets. The 'Move' category is selected, showing blocks like fd, rt, lt, bk, speed, home, turnto, moveto, movexy, jumpto, jumpxy, and pause. The main workspace is divided into two panes: 'code' (Python) and 'output' (drawing canvas). The 'code' pane shows a Python script that imports from 'pencilcode' and uses 'pen', 'fd', and 'rt' functions. The 'output' pane shows a drawing of a red circle on a green grid. Below the drawing is a 'test panel' with a command prompt showing the coordinates '-305, 83'.

```
from pencilcode import *
1 pen("red")
2
3 for x in range(1,25):
4     fd(100)
5     rt(88)
6
```

output

test panel (type help for help)

> -305, 83



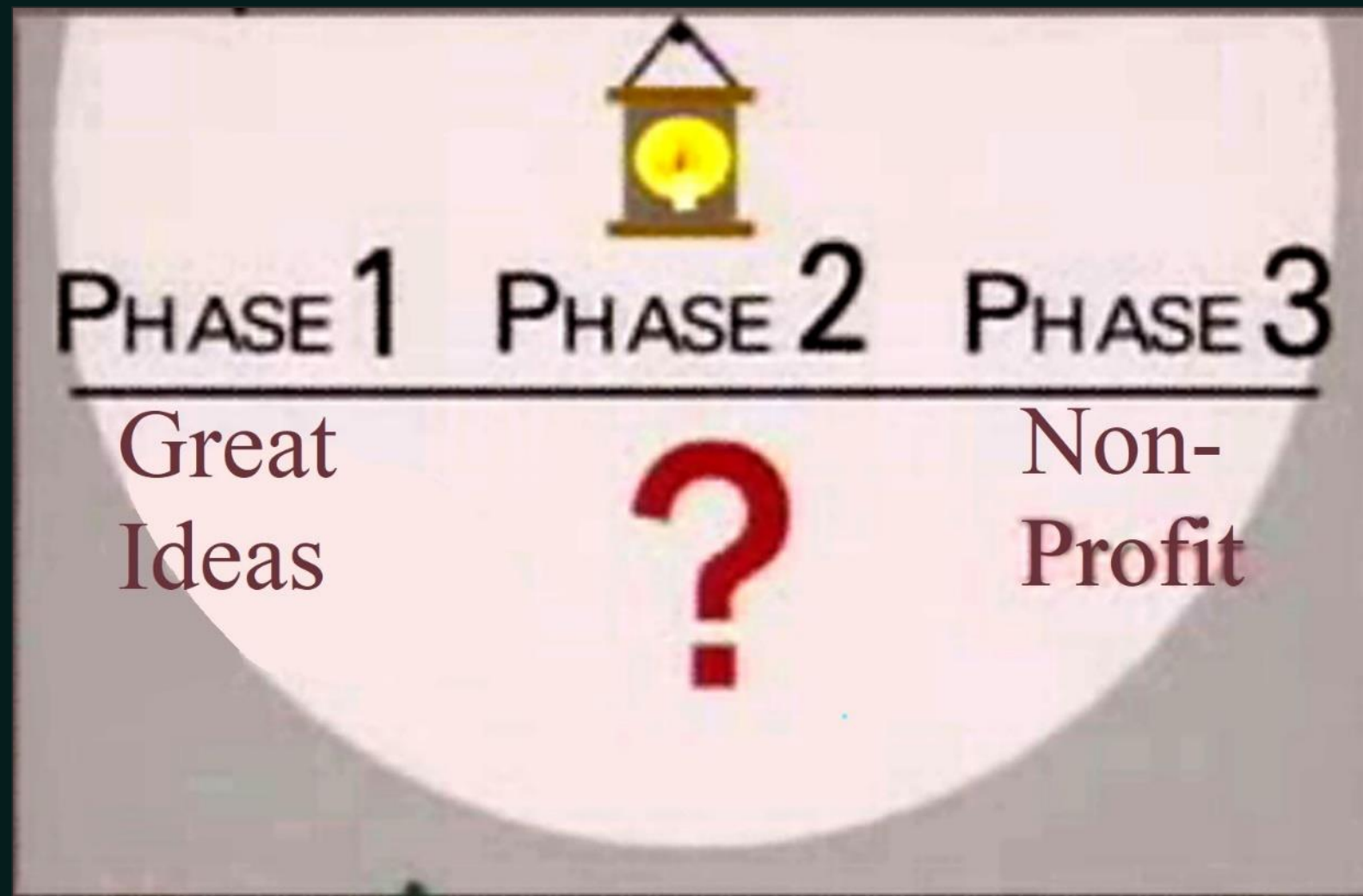
# STUDENT NON-PROFIT PROJECTS



# WHY IS THIS A THING?

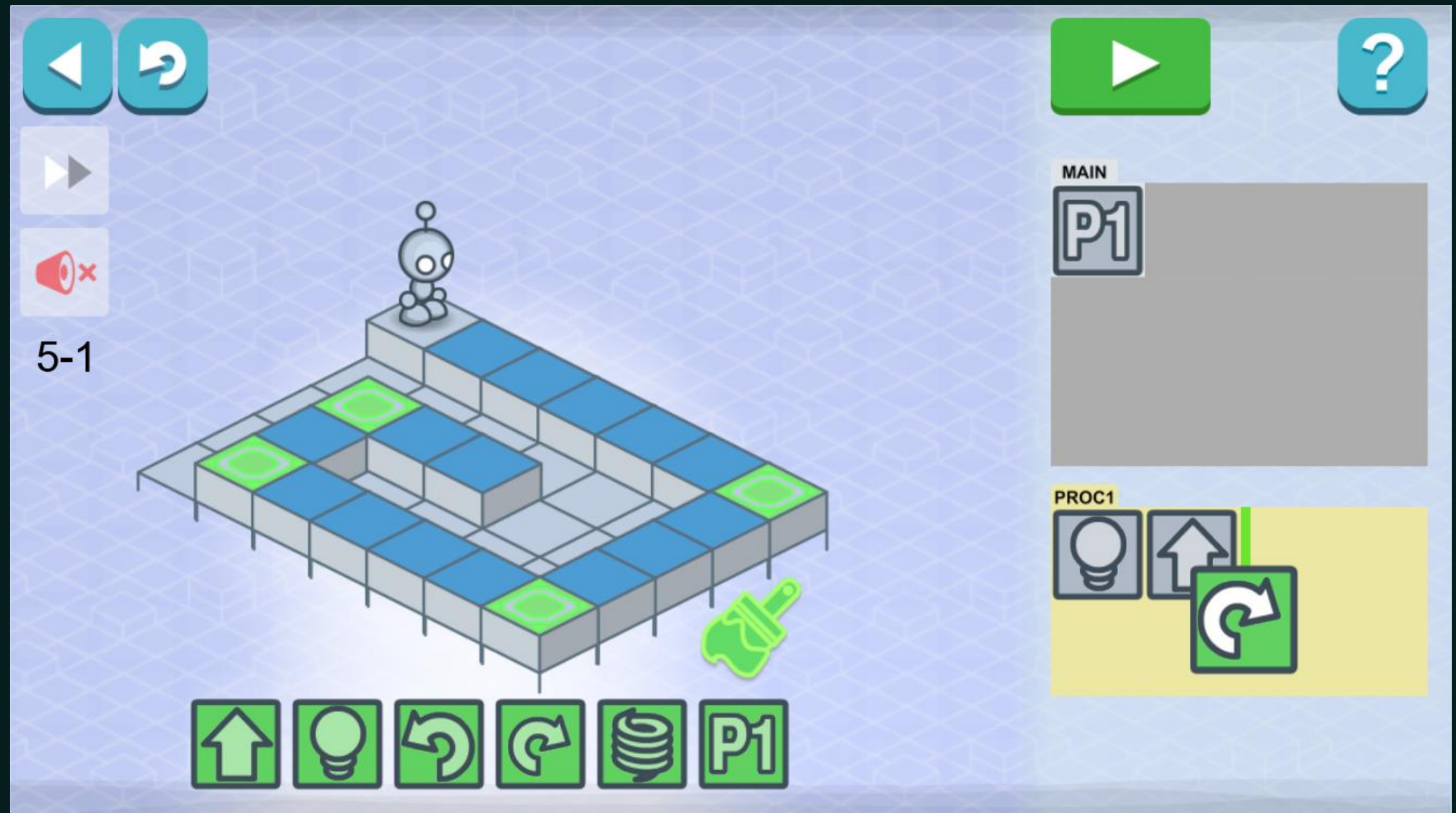


# HOW DID WE DO IT?



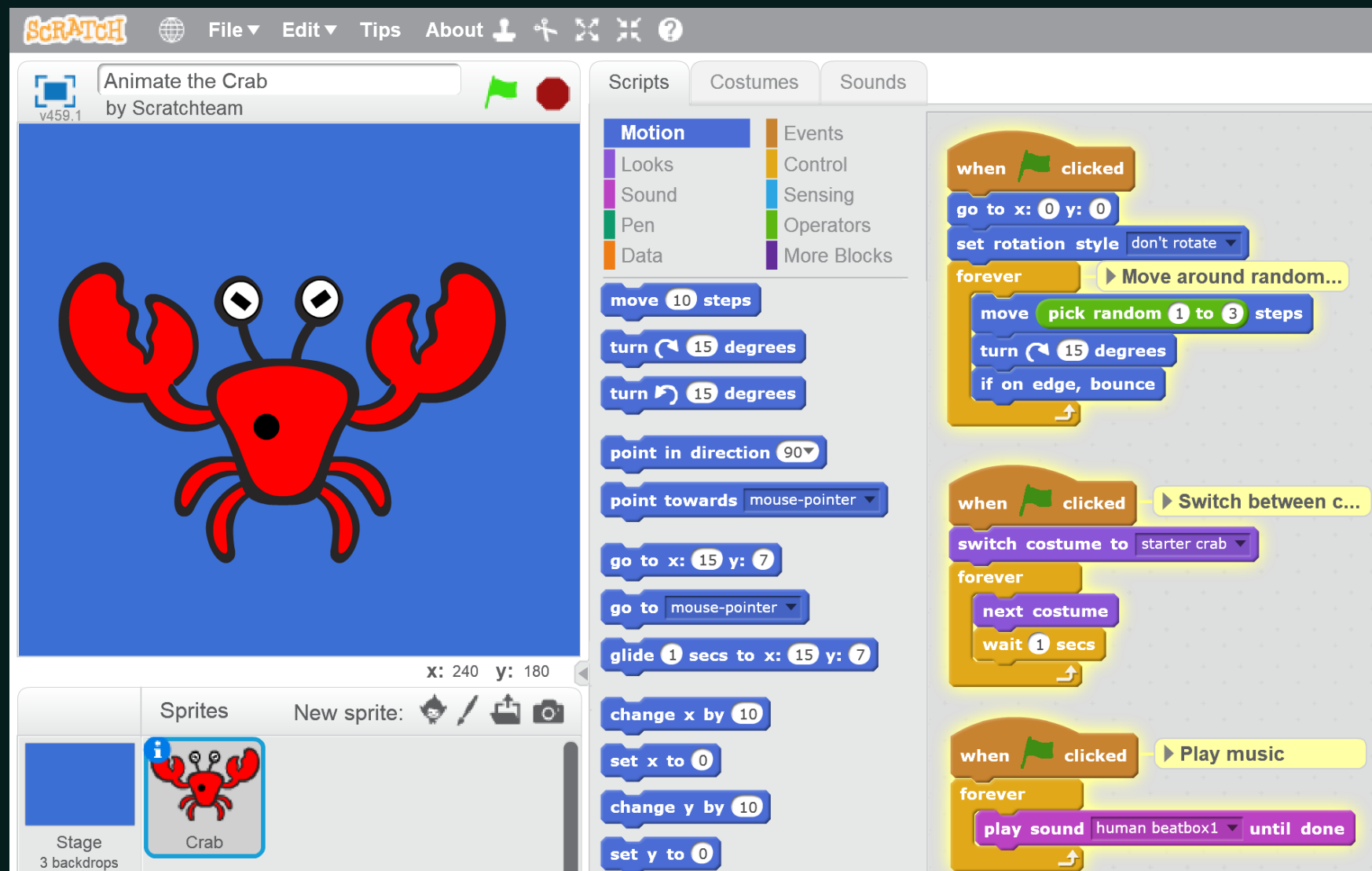


# LIGHTBOT (DANNY YAROSLAVSKI)



[lightbot.com](http://lightbot.com)

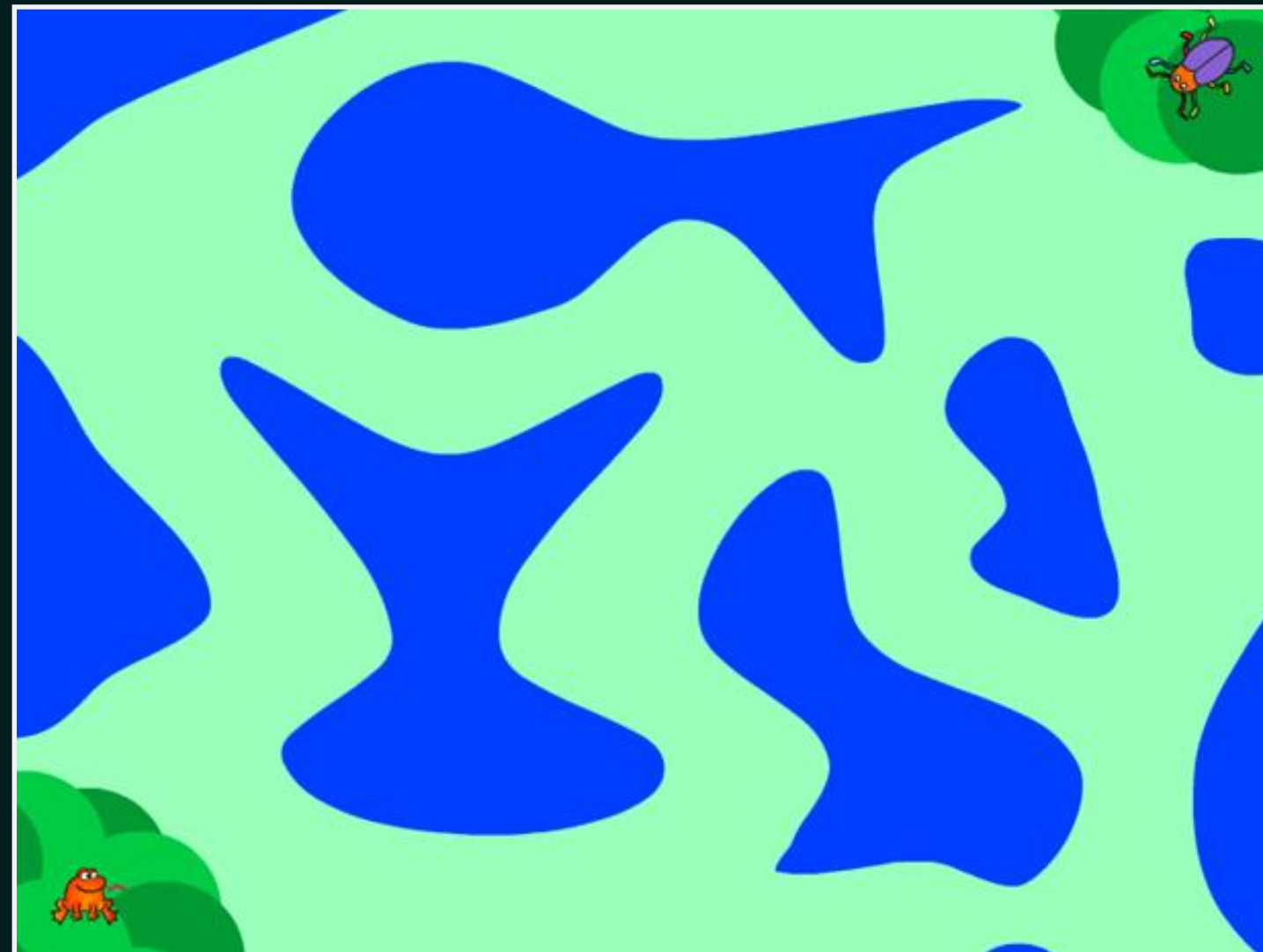
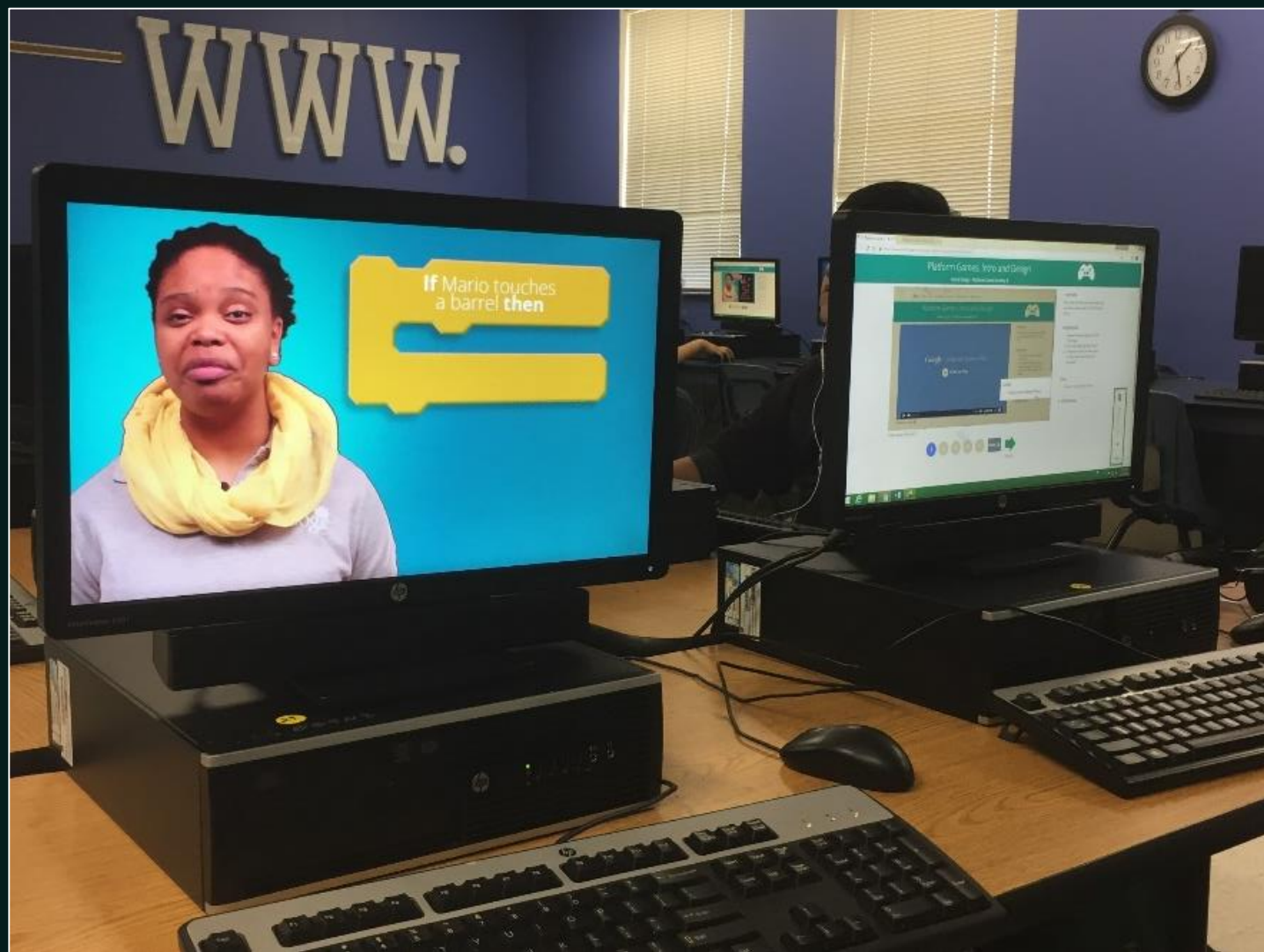
# SCRATCH (MIT)



[scratch.mit.edu](https://scratch.mit.edu)



# CS-FIRST (GOOGLE)

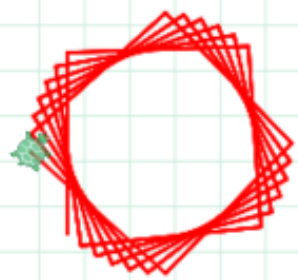


[csfirst.withgoogle.com](http://csfirst.withgoogle.com)

# PENCIL CODE (PENCIL CODE FOUNDATION)

```
{ } code
from pencilcode import *
pen(▼ "red")
for x in range(1,25):
    fd(▼100)
    rt(▼88)

output
```



test panel (type help for help)

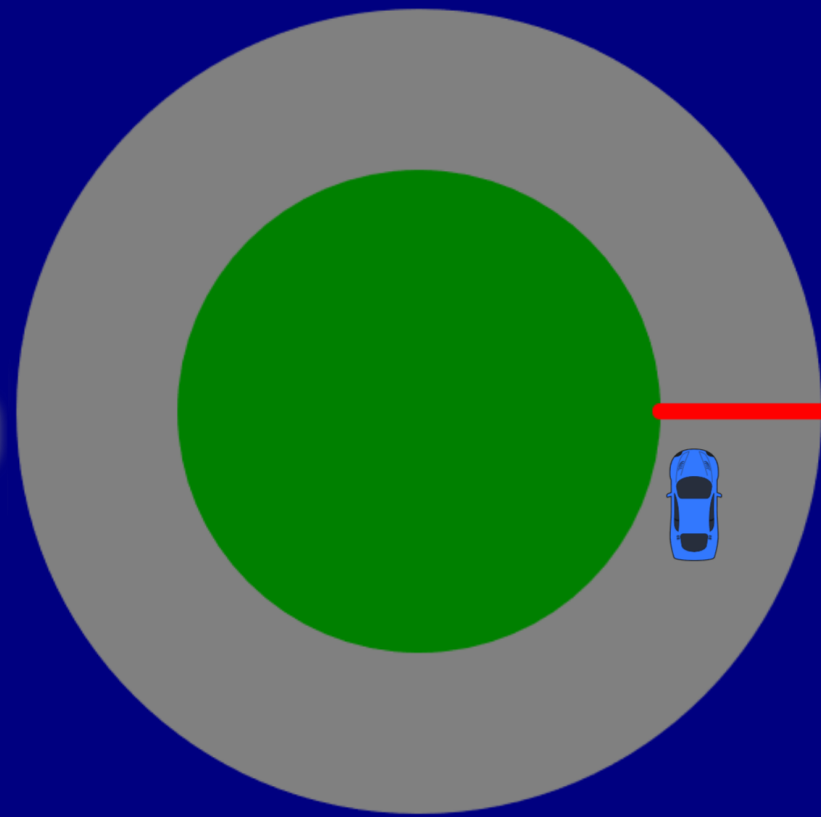
-305, 83

pencilcode.net first

Save Share Log in ? Guide

```
{ } code
1 speed(0)
2 speed_max = 20
3 grass_max = 5
4 pl_speed = 0
5 drawTrack = () ->
6     hide()
7     home()
8     dot navy, 2000
9     dot gray, 500
10    dot green, 300
11    rt 90
12    fd 150
13    pen red, 10
14    fd 100
15 main = () ->
16    drawTrack()
17    player1 = (img 'SimpleDarkBlueCarTopView')
18    player1.hide()
19    player1.grow(.125)
20    player1.lt(90)
21    player1.jumpto(175, -60)
22    player1.show()
23    main()
24
```

output



test panel (type help for help)

-218, 221

pencilcode.net



## GETTING HELP

Google IgniteCS

Humble Bundle

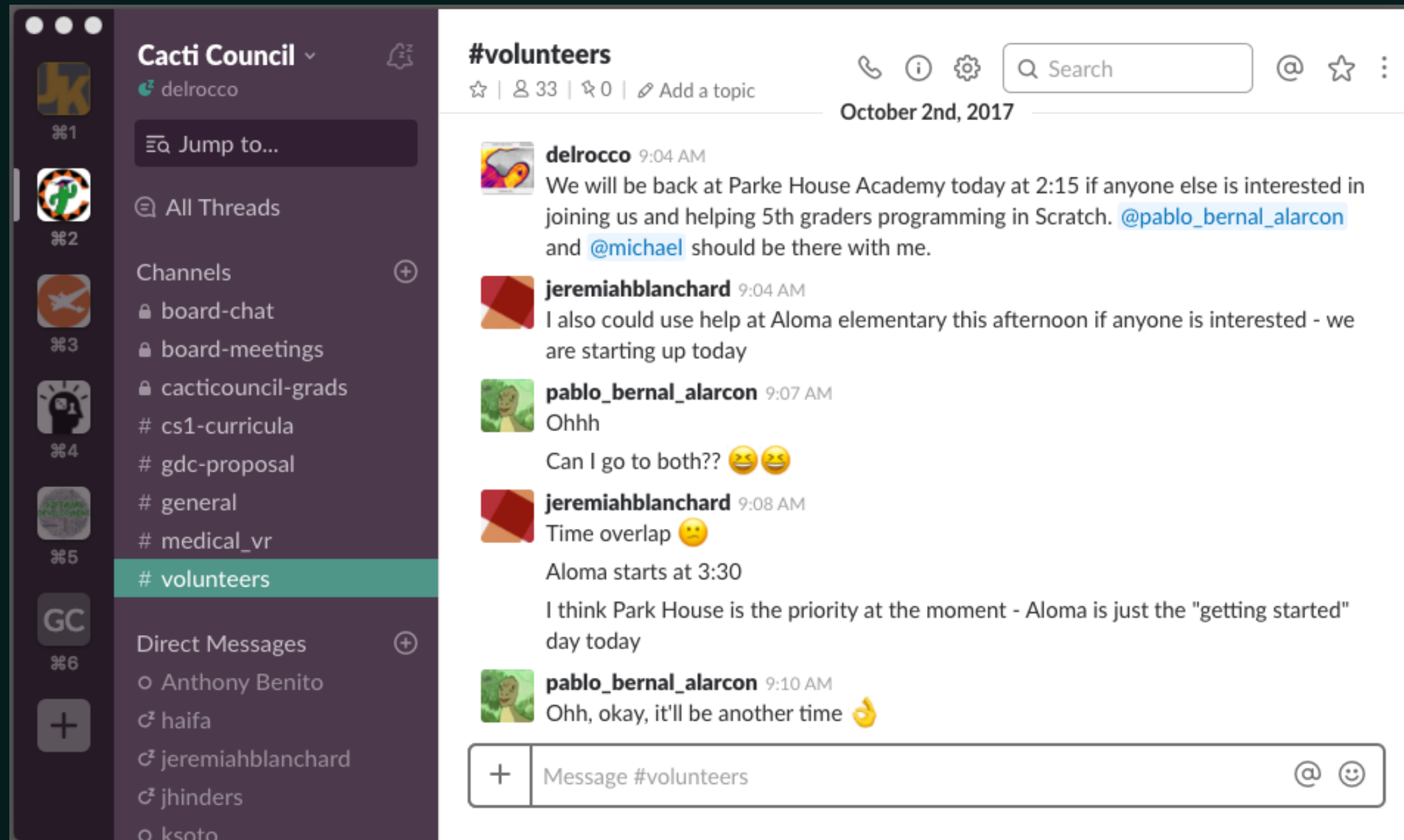


# PEOPLE ARE EVERYTHING

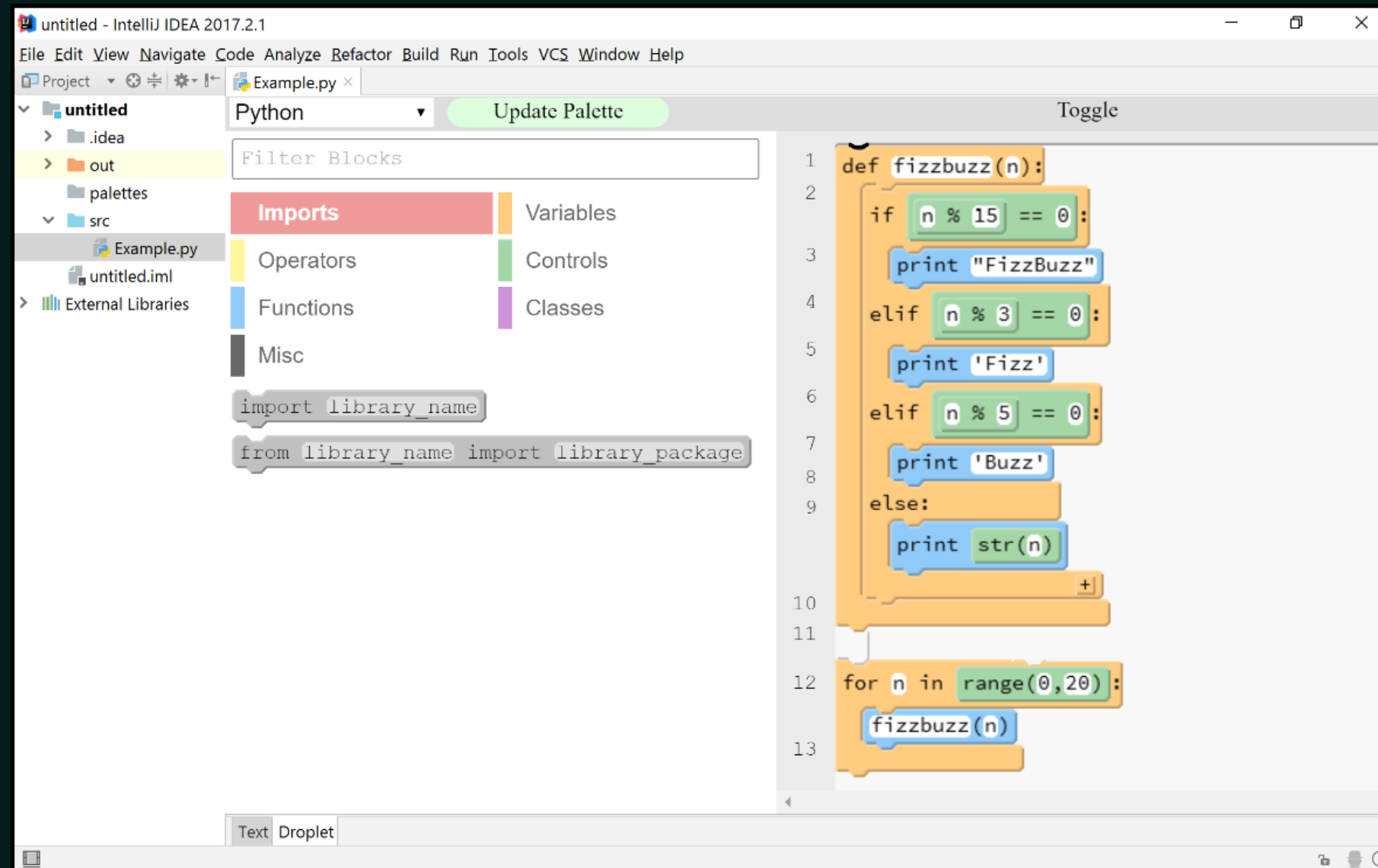




# CULTURE IS KEY



# WHERE ARE WE GOING AND WHY ARE WE IN THIS HANDBASKET?







We want to help!  
Just ask.

[jblanch@cise.ufl.edu](mailto:jblanch@cise.ufl.edu)  
[cacticouncil.org](http://cacticouncil.org)

Thanks! ☺

