## Sandbox | CMU CS Academy

```
0.00
 1
 2
 3
   Author:
                    Muhammad Anees Khan
   Created:
                    05/07/2021
 5
                    Stickman moves according to mouse movement. When the stickman reaches the de
   Description:
 6
                     "Congrats, you have reached the destination" message and audio is played.
 7
   0.00
 8
 9
10
11 #background
12 app.background='firebrick'
13
   #imported image for background
   app.url = 'https://st.depositphotos.com/1909225/2729/i/600/depositphotos_27292737-stock-photos
14
15
   image= Image(app.url, 0,0, opacity=70)
16
17
   #arrow tracking down movements
   arrow = Line(200, -20, 200, 50, arrowStart=True, fill='yellow', opacity=80)
18
19
20
21
22 #buildings
23
   for i in range (-50, 10, 10):
24
        building=Rect(i, 0, 100, 340, fill='black', opacity=40)
25
26
   for i in range (400, 300, -10):
27
28
        building=Rect(i, 0, 100, 340, fill='black', opacity=40)
29
30
   #windows on the buildings
31
   for x in range(10,100, 50):
        for y in range (40, 310, 50):
32
            Rect(x,y, 10, 20, fill='yellow', opacity=80)
33
34
   for x in range(330,400, 50):
    for y in range (40, 310, 50):
35
36
37
            Rect(x,y, 10, 20, fill='yellow', opacity=80)
38
39
40
   #Person that goes through the city
41
   player=Group()
42
43 player.add(Line(130, 265, 130, 315, fill='red'),
            Circle(130, 265, 14, fill='black'),
44
45
            Line(130, 315, 150,340, fill='blue'),
            Line(130, 315, 118, 340, fill='blue'),
46
            Line(130, 293, 160, 281, fill='red'),
Line(130, 296, 163, 286, fill='red'))
47
48
49
50
   #Instructions
51
   Rect(0, 349, 400, 60, fill=gradient(rgb(47, 20, 20), 'black', start='bottom'), opacity=85)
   text = Label('Move mouse to cross the road', 200, 380, fill='white', size=14)
52
53
54
   #The black streak that follows the person and percentage of distance completed towards the
55 streak=Line(0, 344, 0, 344)
56
   distance=Label(0, 200, 360, fill='white', size =16)
57
58
   #sound played when player reaches the destination
59
   congratsSound= Sound('https://s3.amazonaws.com/cmu-cs-academy.lib.prod/sounds/tada.mp3')
60
61
   #The player and the streak is controlled by the movement of the mouse and the arrow follows
62 #The lineWidth of streak is controlled by randrange.
   def onMouseMove(mouseX, mouseY):
63
64
        player.centerX=mouseX
65
        arrow.rotateAngle = angleTo(arrow.centerX, arrow.centerY, mouseX, mouseY)
66
        streak.x2=mouseX+12
67
        streak.lineWidth=randrange(5,11)
68
        distance.value = mouseX // 3.98
69
70
        #The distance is displayed at the bottom and when it reaches 100 the text is changed and
71
        if distance.value==100:
72
            distance.value='Congrats! You have arrived at the destination.'
73
            text.visible=False
```

74 congratsSound.play()
75 else:
76 text.visible=True