Sandbox | CMU CS Academy

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