Sandbox | CMU CS Academy

```
app.background='fireBrick'
 3
    #arrow tracking down movements
   arrow = Line(200, -20, 200, 50, arrowStart=True)
 5
 6
 7
    #windows on the buildings
8
   for x in range(10,100, 50):
9
        for y in range (40, 310, 50):
10
             Rect(x,y, 10, 20, fill='yellow', opacity=80)
11
12 for x in range(330,400, 50):
13
        for y in range (40, 310, 50):
14
             Rect(x,y, 10, 20, fill='yellow', opacity=80)
15
16 #buildings
   for i in range (-50, 10, 10):
17
        building=Rect(i, 0, 100, 340, fill='black', opacity=20)
18
19
        building.toBack()
20
21
   for i in range (400, 300, -10):
22
        building=Rect(i, 0, 100, 340, fill='black', opacity=20)
23
        building.toBack()
24
25
   #Person that goes through the city
26 player=Group()
27
28 player.add(Line(130, 265, 130, 315, fill='black'),
29 Circle(130, 265, 14),
            Line(130, 315, 150,340),
Line(130, 315, 118, 340),
30
31
            Line(130, 293, 160, 281),
32
            Line(130, 296, 163, 286))
33
34
35
   #Instructions
Rect(0, 349, 400, 60, fill=gradient(rgb(47, 20, 20), 'black', start='bottom'), opacity=85)
text = Label('Move mouse to control the Player', 200, 380, fill='white', size=14)
37
38
39
   #The black streak that follows the person and percentage of distance completed towards the
   streak=Line(0, 344, 0, 344)
distance=Label(0, 200, 360, fill='white', size =16)
40
41
42
    #The player and the streak is controlled by the movement of the mouse and the arrow follows
43
44 #The distance is displayed at the bottom and when it reaches 100 the app stops and the text
45
   #The lineWidth of streak is controlled by randrange.
46 def onMouseMove(mouseX, mouseY):
47
        player.centerX=mouseX
        arrow.rotateAngle = angleTo(arrow.centerX, arrow.centerY, mouseX, mouseY)
48
49
        streak.x2=mouseX+12
50
        streak.lineWidth=randrange(5,11)
51
        distance.value = mouseX // 3.98
52
        if distance.value==100:
53
             distance.value='Congrats! You have arrived at the destination.'
54
             text.visible=False
55
             app.stop()
```