

## Exercise: Final Project | CMU CS Academy

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1 app.background='whitesmoke'
2
3 splashScreen = Group()
4 splashScreen.add(Label('Clicker Heroes', 200, 80, size=34))
5 splashScreen.add(Label('5/25/22', 200,120, size=12))
6 splashScreen.add(Label('@ 2022 Miles Cannon', 59, 390))
7 splashScreen.add(Label('', 200,200, size=18))
8 splashScreen.add(Label('Click the Creatures, Collect Coins, Press Space to Start', 200,
9 300, size = 12))
9 splashScreen.toFront()
10
11 app.stepsPerSecond = 1
12 moneyCounter = Label(0,350,30,size=20,visible=False)
13 money = Label('Gold:',315,30,size=20,visible=False )
14 cursor = Circle(5,5, 5, fill='yellow')
15 menu = Group()
16 menu.add(Rect(10,10,150,200, fill='beige', border='brown', borderWidth=5))
17 menu.add(Rect(20,20,130,20, fill='peru'))
18 menu.add(Label('UPGRADES', 85,30, size=15, fill='beige', border='brown'))
19 upgrade1 = Rect(20,60,130,20, fill='peru',)
20 upgrade1Label = Label('x2 Click', 85, 69, size = 15, fill='beige')
21 menu.add(upgrade1)
22 menu.add(upgrade1Label)
23 menu.visible=False
24 upgrade2 = Rect(20,100,130,20, fill='peru')
25 upgrade2Label = Label('Passive Income', 85,109, fill='beige', size= 15)
26 menu.add(upgrade2)
27 menu.add(upgrade2Label)
28
29 app.url1 = 'http://cdn0.vox-cdn.com/assets/4704994/proteus.jpg'
30 image = Image(app.url1, 0, 0)
31 image.toBack()
32 app.url2 = 'https://assetstorev1-prd-cdn.unity3d.com/key-image/bddca716-cffb-44d4-ae59-
33 2ed06989d6e5.png'
34 image2 = Image(app.url2, 0, 0)
35 image2.visible=False
36 app.url3 = 'https://cdna.artstation.com/p/assets/images/images/025/250/834/large/ruben-
37 roldan-domestikaprj1.jpg?1585166288'
38 image3 = Image(app.url3, 0, 0)
39 image3.visible=False
40
41 stickFigure = Group ()
42 stickFigure.add(Circle(200, 200, 30, fill=rgb(70, 75, 75)))
43 stickFigure.add(Line(200, 200, 200, 300, fill=rgb(70, 75, 75), lineWidth=6))
44 stickFigure.add(Line(200, 300, 150, 350, fill=rgb(70, 75, 75), lineWidth=5))
45 stickFigure.add(Line(200, 300, 250, 350, fill=rgb(70, 75, 75), lineWidth=5))
46 stickFigure.add(Line(200, 250, 150, 300, fill=rgb(70, 75, 75), lineWidth=5))
47 stickFigure.add(Line(200, 250, 250, 300, fill=rgb(70, 75, 75), lineWidth=5))
48 stickFigure.visible=False
49
50 def onMouseMove(mouseX,mouseY):
51     cursor.centerY = mouseY
52     cursor.centerX = mouseX
53     cursor.toFront()

```

```
52     money.toFront()
53     moneyCounter.toFront()
54 def onKeyPress(keys):
55     if ('space' in keys):
56         splashScreen.visible=False
57         moneyCounter.visible=True
58         money.visible=True
59         stickFigure.visible=True
60         menu.visible=True
61
62
63 def onStep():
64     moneyCounter.value += 2
65
66
67 def onMousePress(mouseX,mouseY):
68     stickFigure.rotateAngle += 10
69     stickFigure.fill='red'
70     if (stickFigure.contains(mouseX,mouseY)==True):
71         moneyCounter.value += 1
72
73         if (upgrade1.fill=='beige'):
74             moneyCounter.value += 1
75         if (upgrade2.fill=='beige'):
76             onStep()
77
78
79
80     if (upgrade1.contains(mouseX,mouseY)==True):
81         upgrade1.fill='beige'
82         moneyCounter.value = 0
83
84     if (upgrade2.contains(mouseX,mouseY)==True):
85         upgrade2.fill='beige'
86         moneyCounter.value = 0
87
88
89
90     if (moneyCounter.value > 50):
91         image2.visible = True
92         image2.toFront()
93         cursor.toFront()
94         money.toFront()
95         moneyCounter.toFront()
96         image.visible=False
97         stickFigure.toFront()
98         menu.toFront()
99         moneyCounter.fill='white'
100        money.fill='white'
101
102
103     if (moneyCounter.value > 100):
104         image3.visible = True
105         image3.toFront()
106         cursor.toFront()
107         money.toFront()
108         moneyCounter.toFront()
```

```
109     image.visible=False
110     stickFigure.toFront()
111     menu.toFront()
112     moneyCounter.fill='white'
113     money.fill='white'
114     moneyCounter.value = 0
115
116
117
118
119
120
121
122 def onMouseRelease(mouseX,mouseY):
123     stickFigure.rotateAngle = 0
124     stickFigure.fill=rgb(70, 75, 75)
```