

## Exercise: Final Project | CMU CS Academy

```

1 # Splashscreen
2 Rect(0, 0, 400, 400, fill=gradient('indigo', 'darkMagenta', 'sandyBrown', start='top'))
3 splashScreen=Group()
4 splashScreen.add(Label('Weird Pong', 200, 80, size=24, fill='white'))
5 splashScreen.add(Label('5/25/2022', 200, 120, size=12, fill='white'))
6 splashScreen.add(Label('@ 2022 Felipe Correa', 60, 390, fill='white'))
7 splashScreen.add(Label('Use W/S for the player on the left, up/down for the right', 200
, 200, size=11, fill='white'))
8 splashScreen.add(Label('Press space to begin!', 200, 300, size=12, fill='white'))
9 splashScreen.toFront()
10
11 # Walls and Players
12 leftWall = Rect(-1, 0, 1, 400)
13 rightWall = Rect(400, 0, 1, 400)
14 top = Rect(0, -1, 400, 1)
15 bot = Rect(0, 400, 400, 1)
16 pL = Rect(20, 100, 15, 100, fill='white')
17 pR = Rect(365, 100, 15, 100, fill='white')
18 ball = Circle(200, 150, 15, fill='white')
19 app.move = 0
20 LName = app.getTextInput('Give left player a name')
21 RName = app.getTextInput('Give right player a name')
22 L = Label(LName, pL.centerX, pL.centerY-70, fill='white')
23 R = Label(RName, pR.centerX, pR.centerY-70, fill='white')
24 app.dy = 0
25
26 # Start Game
27 def onKeyPress(key):
28     if (key=='space'):
29         splashScreen.visible=False
30         app.move = 1
31     pass
32
33 def endGame(message):
34     app.stop()
35     Label(message, 200, 200, fill='white', size=20)
36
37 # Move Players
38 def onKeyHold(keys):
39     if splashScreen.visible==False:
40         if 'w' in keys:
41             pL.centerY-=4
42         if 's' in keys:
43             pL.centerY+=4
44         if 'up' in keys:
45             pR.centerY-=4
46         if 'down' in keys:
47             pR.centerY+=4
48
49 # Move Ball
50 def onStep():
51     L.centerY = pL.centerY-70
52     R.centerY = pR.centerY-70
53     if ball.bottom<=0:

```

```
54     ball.top = 400
55     if ball.top>400:
56         ball.bottom=0
57     if ball.hitsShape(pR) or ball.hitsShape(pL):
58         app.move *= -1
59         app.dy=randrange(-3, 4)
60     if app.move == 1:
61         ball.centerX-=4
62         ball.centerY+=app.dy
63     if app.move == -1:
64         ball.centerX+=4
65         ball.centerY+=app.dy
66     if ball.hitsShape(leftWall):
67         endGame(RName+' wins!')
68         pR.fill='green'
69         pL.fill='red'
70     if ball.hitsShape(rightWall):
71         endGame(LName+' wins!')
72         pL.fill='green'
73         pR.fill='red'
```