

Frogger : Analyse de code

```
1 from gamegrid import *
2
3 # ----- Constantes clavier -----
4 K_LEFT      = 37
5 K_UP        = 38
6 K_RIGHT     = 39
7 K_DOWN      = 40
8
9 # ----- classe Frog -----
10 class Frog(Actor):
11
12
13     def __init__(self):
14         Actor.__init__(self, "sprites/frog.gif")
15
16
17
18     def collide(self, actor1, actor2):
19         self.setLocation(Location(400, 560))
20         return 0
21
22 # ----- classe Car -----
23 class Car(Actor):
24
25
26     def __init__(self, path):
27         Actor.__init__(self, path)
28
29
30
31     def act(self):
32         self.move()
33         if self.getX() < -100:
34             self.setX(1650)
35         if self.getX() > 1650:
36             self.setX(-100)
37
38
39
40 def initCars():
41     for i in range(20):
42         car = Car("sprites/car" + str(i) + ".gif")
43         frog.addCollisionActor(car)
44         if i < 5:
45             addActor(car, Location(350 * i, 100), 0)
46         if i >= 5 and i < 10:
47             addActor(car, Location(350 * (i - 5), 220), 180)
48         if i >= 10 and i < 15:
49             addActor(car, Location(350 * (i - 10), 350), 0)
50         if i >= 15:
51             addActor(car, Location(350 * (i - 15), 470), 180)
52
53
```

```
54
55 def keyCallback(keyCode):
56     if keyCode == K_LEFT:
57         frog.setX(frog.getX() - 5)
58     elif keyCode == K_UP:
59         frog.setY(frog.getY() - 5)
60     elif keyCode == K_RIGHT:
61         frog.setX(frog.getX() + 5)
62     elif keyCode == K_DOWN:
63         frog.setY(frog.getY() + 5)
64
65
66 makeGameGrid(800, 600, 1, None, "sprites/lane.gif", False,
67             keyRepeated = keyCallback)
68
69 setSimulationPeriod(50);
70
71 frog = Frog()
72
73 addActor(frog, Location(400, 560), 90)
74
75 initCars()
76
77 show()
78
79 doRun()
```