

Player.java

```
1 import java.util.ArrayList;
2
3 /* This class encapsulates player position and direction
4 */
5 public class Player extends Moveable {
6     private boolean readyToStart = false;
7     private int presses = 0, energy = 200;
8     private int roadblockPut = 0;
9     private ArrayList<Trap> traps = new ArrayList<Trap>();
10    private ArrayList<Roadblock> roadblocks = new
        ArrayList<Roadblock>();
11    private boolean canPutTrap = true, canPutBlock = true;
12
13    public Player(Grid g, int row, int col) throws Exception {
14        super(g);
15        currentCell = grid.getCell(row, col);
16        currentDirection = ' ';
17    }
18
19    public Cell move(int presses) {
20        boolean canMove = false;
21        if ((presses == 1 && energy >= 2) || (presses == 2 &&
22            energy >= 6) || (presses == 3 && energy >= 14)) {
23            canMove = true;
24        }
25        if (getTrap().size() > 0)
26            for (int i = 0; i < getTrap().size(); ++i) {
27                getTrap().get(i).decTime();
28                if (getTrap().get(i).getTime() == 0) {
29                    getTrap().remove(i);
30                }
31            }
32        if (canMove) {
33            currentCell = grid.getCell(currentCell,
34                currentDirection, presses);
35            if (currentCell.gotGold) {
36                energy += 6;
37                currentCell.gotGold = false;
38            }
39            if (presses == 1) {
40                energy -= 2;
41            } else if (presses == 2) {
```

Player.java

```
40         energy -= 6;
41     } else if (presses == 3) {
42         energy -= 14;
43     }
44 }
45 if (presses != 0) {
46     allowPut();
47 }
48
49 clearPress();
50 return currentCell;
51 }
52
53 // keypress count for moving multiple cells
54 public int getPresses() {
55     return presses;
56 }
57
58 public void setEnergy(int energy) {
59     this.energy = energy;
60 }
61
62 public int getEnergy() {
63     return energy;
64 }
65
66 public ArrayList<Roadblock> getBlock() {
67     return roadblocks;
68 }
69
70 public ArrayList<Trap> getTrap() {
71     return traps;
72 }
73
74 // eating nougats
75 public void eat() {
76     energy += 6;
77 }
78
79 public void addPress() {
80     if (presses < 3) {
81         presses += 1;
```

Player.java

```
82     }
83 }
84
85 public void clearPress() {
86     presses = 0;
87 }
88
89 public void putTrap() {
90     if (canPutTrap && energy >= 50) {
91         traps.add(new Trap(grid, currentCell));
92         energy -= 50;
93         canPutTrap = false;
94     }
95 }
96
97 public void putBlock() {
98     if (canPutBlock && roadblockPut < 3) {
99         roadblocks.add(new Roadblock(grid, currentCell));
100         roadblockPut += 1;
101         canPutBlock = false;
102     }
103 }
104
105 public void allowPut() {
106     canPutTrap = true;
107     canPutBlock = true;
108 }
109
110 public void setReady(boolean val) {
111     readyToStart = val;
112 }
113
114 public boolean isReady() {
115     return readyToStart;
116 }
117 }
118
```