

```

1 package ticTacToe.gui;
2
3 import java.awt.Dimension;
13
14 public class TableView extends AbstractComponent {
15
16     private ImageIcon icon = null;
17     private ImageIcon iconX, iconO;
18     private ImageButton[][] table = new ImageButton[3][3];
19     private ReadOnlyTableModel tableModel;
20
21     public TableView() {
22         super();
23         super.dimension = new Dimension(100,100);
24         fillTable();
25     }
26
27     public TableView(ImageIcon icon) {
28         super();
29         this.icon = icon;
30     }
31
32     public TableView(int x, int y, int width, int height, ImageIcon icon) {
33         super(x, y, width, height);
34         this.icon = icon;
35         fillTable();
36     }
37
38     private void fillTable() {
39
40         int cellWidth = (width()-20)/3;
41         int cellheight = (height()-20)/3;
42
43         for(int lin = 0; lin<table.length; lin++) {
44             for(int col = 0; col<table[lin].length; col++) {
45
46                 int x = 5 + (lin * (cellheight + 5));
47                 int y = 5 + (col * (cellWidth + 5));
48
49                 table[lin][col] = new ImageButton(x,y,cellWidth,cellheight,null);
50             }
51         }
52     }
53
54     public void setIconX(ImageIcon icon) {
55         this.iconX = icon;
56     }
57
58     public void setIconO(ImageIcon icon) {
59         this.iconO = icon;
60     }
61
62     public ImageIcon iconOf(Mark mark) {
63         return ((mark == Mark.O) ? iconO :
64             ((mark == Mark.X) ? iconX : null));
65     }
66
67     public void setTableModel(ReadOnlyTableModel tableModel) {
68         this.tableModel = tableModel;
69     }
70
71     //--interface Paintable-----

```

```
72     private void paintChildren(Graphics g) {
73
74         if(tableModel == null)
75             throw new RuntimeException("Erro: TableModel is null at TableView!");
76
77         for(int lin = 0; lin<table.length; lin++) {
78             for(int col = 0; col<table[lin].length; col++) {
79                 Mark mark = tableModel.getMark(lin, col);
80                 table[lin][col].setImage(iconOf(mark));
81                 table[lin][col].paint(g);
82             }
83         }
84     }
85
86     @Override
87     public void paint(Graphics g) {
88
89         if(icon == null)
90             throw new RuntimeException("Erro: TableModel is null at TableView!");
91
92         int xLeft = position.x;
93         int yTop = position.y;
94
95         g.drawImage(icon.getImage(), xLeft, yTop, width(), height(), null);
96
97         paintChildren(g);
98     }
99 }
100 }
101
```