ItemDAO.java

```
1 package model.dao;
3 import java.sql.ResultSet;
10
11 public class ItemDAO extends DAO<Item> {
12
      private static Map<String, String[]> COLUMNS;
13
      private static List<String[]> searchColumns;
14
15
      public ItemDAO() throws Exception {
16
           super("ITEM");
17
          COLUMNS = new HashMap<String, String[]>();
           searchColumns = new ArrayList<String[]>();
18
19
          COLUMNS.put("qty", new String[]{"QTY", "num"});
20
          COLUMNS.put("name", new String[]{"NAME", "str"});
21
          COLUMNS.put("price", new String[]{"PRICE", "num"});
22
          COLUMNS.put("id", new String[]{"NUMBER", "str"});
23
          COLUMNS.put("num", new String[]{"NUMBER", "str"});
24
          COLUMNS.put("cid", new String[]{"CATID", "num"});
25
          COLUMNS.put("unit", new String[]{"UNIT", "str"});
26
27
           searchColumns.add(COLUMNS.get("name"));
28
29
          searchColumns.add(COLUMNS.get("num"));
30
      }
31
32
      @Override
33
      public String convertToColumnName(String by) {
34
          String result = COLUMNS.get("cid")[0];
35
           if (COLUMNS.containsKey(by) ||
36
  COLUMNS.containsKey(by.toLowerCase()))
37
           {
38
               result = COLUMNS.get(by)[0];
39
40
           else if (by.equals(COLUMNS.get("name")[0]))
41
42
               result = COLUMNS.get("name")[0];
43
44
          else if (by.toLowerCase().equals("price") ||
  by.equals(COLUMNS.get("price")[0]))
45
           {
46
               result = COLUMNS.get("price")[0];
47
48
          else if (by.toLowerCase().equals("quantity") ||
```

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```
by equals (COLUMNS get("gty")[0]))
49
50
               result = COLUMNS.get("qty")[0];
51
           else if (by.toLowerCase().equals("number") ||
52
  by.toLowerCase().equals("num") || by.equals(COLUMNS.get("id")[0]))
53
               result = COLUMNS.get("id")[0];
54
55
56
           else if (by.toLowerCase().equals(COLUMNS.get("cid")[0]))
57
58
               result = COLUMNS.get("cid")[0];
59
           else if (by.toLowerCase().equals(COLUMNS.get("unit")[0]))
60
61
62
               result = COLUMNS.get("unit")[0];
63
           return result;
64
      }
65
66
67
      @Override
      public List<String[]> getSearchColumns() {
68
           return searchColumns;
69
70
      }
71
72
      @Override
73
      public Item createBean(ResultSet r) throws Exception {
74
           Item item = new Item():
75
           item.setName(getName(r));
           item.setQuantity(getQuantity(r));
76
77
           item.setPrice(getPrice(r));
78
           item.setNumber(getNumber(r));
           item.setCatID(getCatID(r));
79
80
           item.setUnit(getUnit(r));
81
           return item;
82
      }
83
84
      @Override
85
      public Map<String, String[]> getColumns() {
86
           return COLUMNS;
87
88
89
      public String getId(ResultSet r) throws Exception {
           return r.getString(COLUMNS.get("id")[0]);
90
```

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```
91
       }
 92
 93
       public String getName(ResultSet r) throws Exception {
 94
            return r.getString(COLUMNS.get("name")[0]);
 95
       }
 96
97
       public double getPrice(ResultSet r) throws Exception {
98
            return r.getDouble(COLUMNS.get("price")[0]);
99
       }
100
101
       public int getQuantity(ResultSet r) throws Exception {
102
            return r.getInt(COLUMNS.get("qty")[0]);
103
       }
104
105
       public String getNumber(ResultSet r) throws Exception {
            return r.getString(COLUMNS.get("num")[0]);
106
       }
107
108
109
       public int getCatID(ResultSet r) throws Exception {
            return r.getInt(COLUMNS.get("cid")[0]);
110
       }
111
112
113
       public String getUnit(ResultSet r) throws Exception {
114
            return r.getString(COLUMNS.get("unit")[0]);
115
       }
116
117
       public static void main(String[] args) throws Exception {
118
            ItemDAO itemDao = new ItemDAO():
119
            System.out.println(itemDao.getAll().toString());
120
       }
121 }
122
```