

Model.java

```
1 package model;
2
3 import java.io.PrintWriter;
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19
20
21 public class Model {
22     private static Model instance = null;
23     private static ItemDAO itemDao;
24     private static CategoryDAO catDao;
25
26     private Model() {
27         try {
28             itemDao = new ItemDAO();
29             catDao = new CategoryDAO();
30         } catch (Exception e) {
31             System.out.println("DB ERROR: " + e.getMessage());
32             e.printStackTrace();
33         }
34     }
35
36     public static Model getInstance() {
37         if (instance == null) {
38             instance = new Model();
39         }
40         return instance;
41     }
42
43     public List<Item> getFoods() throws Exception {
44         return getFoods("0");
45     }
46
47     public List<Item> getFoods(String limit) throws Exception {
48         int l = Integer.parseInt(limit);
49         return itemDao.getAll(l);
50     }
51
52     public Item getFood(String val) throws Exception {
53         return this.getFoodBy("id", val);
54     }
55
56     public Item getFoodBy(String by, String val) throws Exception
57     {
58         return this.getFoodBy(by, val, false);
59     }
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60     public Item getFoodBy(String by, String val,
61         Boolean like) throws Exception {
62         return itemDao.findOneBy(by, val, like);
63     }
64
65     public List<Item> getFoodsByMultiple(String val) throws
Exception {
66         return itemDao.getAllByMultiple(val, true, null);
67     }
68
69     public List<Item> getFoodsBy(String by,
70         String val) throws Exception {
71         return itemDao.getAllBy(by, val, true);
72     }
73
74     public List<Item> getFoodsBy(String by,
75         String val, Boolean like) throws Exception {
76         return getFoodsBy(by, val, like, "0");
77     }
78
79     public List<Item> getFoodsBy(String by, String val,
80         Boolean like, String limit) throws Exception {
81         int l = Integer.parseInt(limit);
82         return itemDao.getAllBy(by, val, like, l);
83     }
84
85     public List<Category> getCategories() throws Exception {
86         return catDao.getAll();
87     }
88
89     public Category getCategory(String cat) throws Exception {
90         return catDao.findOne(cat);
91     }
92
93     public Map<String, List<Item>> getCatNameWithFoods() throws
Exception {
94         Map<String, List<Item>> result = new HashMap<String,
List<Item>>();
95
96         for (Category cat: this.getCategories()) {
97             List<Item> items = new ArrayList<Item>();
98             for (Item item: this.getFoods()) {
99                 if (cat.getId() == item.getCatID()) {
100                     items.add(item);
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101         result.put(cat.getName(), items);
102     }
103 }
104 }
105
106     return result;
107 }
108
109     public Map<Category, List<Item>> getCatsWithFoods() throws
Exception {
110         Map<Category, List<Item>> result = new HashMap<Category,
List<Item>>();
111
112         for (Category cat: this.getCategories()) {
113             List<Item> items = new ArrayList<Item>();
114             for (Item item: this.getFoods()) {
115                 if (cat.getId() == item.getCatID()) {
116                     items.add(item);
117                     result.put(cat, items);
118                 }
119             }
120         }
121
122         return result;
123     }
124
125     public synchronized StringWriter createP0(String filePath,
126         int orderNum, String xslFilename,
127         Order order, Account user) throws Exception
128     {
129         OrderDAO orderDao = new OrderDAO(filePath);
130         String fileName =
orderDao.getOrderFileName(user.getUsername(), orderNum);
131
132         JAXBContext jaxbContext =
JAXBContext.newInstance(order.getClass());
133         Marshaller marshaller = jaxbContext.createMarshaller();
134         marshaller.setProperty(Marshaller.JAXB_FORMATTED_OUTPUT,
Boolean.TRUE);
135         marshaller.setProperty(Marshaller.JAXB_FRAGMENT,
Boolean.TRUE);
136
137         StringWriter sw = new StringWriter();
138         sw.write("<?xml version=\"1.0\" encoding=\"UTF-8\"")
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standalone=\"yes\"?>");
139     sw.write("<?xml-stylesheet type=\"text/xsl\" href=\"\" +
xslFilename + "\"?>\n");
140
141     marshaller.marshal(order, new StreamResult(sw));
142     FileWriter orderFileWrite =
orderDao.getFileWriter(fileName);
143     orderFileWrite.write(sw.toString());
144     orderFileWrite.close();
145
146     return sw;
147 }
148
149
150 public static void main(String[] args) {
151     Model model = Model.getInstance();
152     try {
153         System.out.println(model.getCategories().toString());
154         System.out.println(model.getFoods().toString());
155     } catch (Exception e) {
156         System.out.println("ERROR: " + e.getMessage());
157     }
158 }
159 }
160
```