Json转换利器Gson之实例五-实际开发中的特殊需求处理

标签: Gson json JSON Json 实例

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₩ 分类:

■ Json (5) **■**

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前面四篇博客基本上可以满足我们处理的绝大多数需求,但有时项目中对json有特殊的格式规定.比如下面的json串解析:

```
[{"tableName":"students","tableData":[{"id":1,"name":"李坤","birthDay":"Jun 22, 2012 9:54:49 PM"},{"id":2,"name":"曹贵生","birthDay":"Jun 22, 2012 9:54:49 PM"},
{"id":3,"name":"柳波","birthDay":"Jun 22, 2012 9:54:49 PM"}]},
{"tableName":"teachers","tableData":[{"id":1,"name":"米老师","title":"教授"},
{"id":2,"name":"丁老师","title":"讲师"}]}
```

分析之后我们发现使用前面博客中用到的都不好处理上面的json串.请看本文是如何处理的吧:

实体类:

```
[java]
01.
      import java.util.Date;
02.
03.
      public class Student {
94.
           private int id;
05.
           private String name;
06.
           private Date birthDay;
07.
08.
           public int getId() {
09.
               return id;
10.
           }
11.
12.
           public void setId(int id) {
13.
               this.id = id;
14.
           }
                                                                                u载 ł
15.
16.
           public String getName() {
17.
               return name;
18.
           }
19.
           public void setName(String name) {
20.
21.
               this.name = name;
22.
           }
23.
           public Date getBirthDay() {
24.
25.
               return birthDay;
```

```
[java]
01.
      public class Teacher {
02.
           private int id;
03.
04.
           private String name;
05.
06.
           private String title;
07.
           public int getId() {
08.
               return id;
09.
10.
           }
11.
           public void setId(int id) {
12.
13.
               this.id = id;
14.
           }
                                                                              1载‡
15.
           public String getName() {
16.
               return name;
17.
18.
           }
19.
20.
           public void setName(String name) {
21.
               this.name = name;
22.
           }
23.
           public String getTitle() {
24.
25.
               return title;
26.
           }
27.
           public void setTitle(String title) {
28.
29.
               this.title = title;
30.
           }
31.
           @Override
32.
33.
           public String toString() {
               return "Teacher [id=" + id + ", name=" + name + ", title=" + title
34.
                       + "]";
35.
36.
           }
37.
38.
      }
```

37.38.

}

注意这里定义了一个TableData实体类:

```
[java]
      import java.util.List;
01.
02.
03.
      public class TableData {
94.
05.
           private String tableName;
06.
           private List tableData;
07.
08.
09.
           public String getTableName() {
               return tableName;
10.
           }
11.
12.
13.
           public void setTableName(String tableName) {
                                                                               1载挂
14.
               this.tableName = tableName;
15.
           }
16.
17.
           public List getTableData() {
               return tableData;
18.
19.
           }
20.
           public void setTableData(List tableData) {
21.
22.
               this.tableData = tableData;
23.
           }
      }
24.
```

测试类:

(仔细看将json转回为对象的实现,这里经过两次转化,第一次转回的结果是map不是我们所期望的对象,对map再次转为json后再转为对象,我引用的是Gson2.1的jar处理正常,好像使用Gson1.6的jar会报错,所以建议用最新版本)

```
[java]
01.
      import java.util.ArrayList;
      import java.util.Date;
02.
      import java.util.List;
03.
04.
05.
      import com.google.gson.Gson;
      import com.google.gson.reflect.TypeToken;
06.
07.
08.
      public class GsonTest5 {
09.
          /**
10.
           * @param args
11.
12.
          public static void main(String[] args) {
13.
                                                                             口载扌
14.
              // 对象转为Json-->start
15.
              Student student1 = new Student();
16.
              student1.setId(1);
              student1.setName("李坤");
```

```
2016/1/14
              Json转换利器Gson之实例五-实际开发中的特殊需求处理 - 李坤 廊坊师范学院 信息技术提高班 第五期 - 博客频道 - CSDN.NET
   18.
                  student1.setBirthDay(new Date());
   19.
   20.
                 Student student2 = new Student();
   21.
                 student2.setId(2);
   22.
                 student2.setName("曹贵生");
                 student2.setBirthDay(new Date());
   23.
   24.
   25.
                 Student student3 = new Student();
   26.
                 student3.setId(3):
   27.
                 student3.setName("柳波");
                 student3.setBirthDay(new Date());
   28.
   29.
   30.
                 List<Student> stulist = new ArrayList<Student>();
                 stulist.add(student1);
   31.
   32.
                 stulist.add(student2);
   33.
                 stulist.add(student3);
   34.
   35.
                 Teacher teacher1 = new Teacher();
   36.
                 teacher1.setId(1);
   37.
                 teacher1.setName("米老师");
   38.
                 teacher1.setTitle("教授");
   39.
   40.
                 Teacher teacher2 = new Teacher();
   41.
                 teacher2.setId(2);
   42.
                 teacher2.setName("丁老师");
   43.
                 teacher2.setTitle("讲师");
   44.
                 List<Teacher> teacherList = new ArrayList<Teacher>();
   45.
                 teacherList.add(teacher1);
   46.
                 teacherList.add(teacher2);
   47.
   48.
                 TableData td1 = new TableData();
                 td1.setTableName("students");
   49.
   50
                 td1.setTableData(stulist);
   51.
   52.
                 TableData td2 = new TableData();
   53.
                 td2.setTableName("teachers");
   54.
                 td2.setTableData(teacherList);
   55.
   56.
                 List<TableData> tdList = new ArrayList<TableData>();
   57.
                 tdList.add(td1);
                 tdList.add(td2);
   58.
   59.
                 Gson gson = new Gson();
   60.
                 String s = gson.toJson(tdList);
   61.
   62.
                 System.out.println(s);
                 // 结果:[{"tableName":"students","tableData":[{"id":1,"name":"李
   63.
          坤","birthDay":"Jun 22, 2012 10:44:16 AM"},{"id":2,"name":"曹贵
          生","birthDay":"Jun 22, 2012 10:44:16 AM"},{"id":3,"name":"柳
          波","birthDay":"Jun 22, 2012 10:44:16 AM"}]},{"tableName":"teachers","tableData":
          [{"id":1,"name":"米老师","title":"教授"},{"id":2,"name":"丁老师","title":"讲师"}]}]
   64.
                 // 对象转为Json-->end
   65.
                 66.
   67.
   68.
                 // 将json转为数据-->start
                 List<TableData> tableDatas2 = gson.fromJson(s,
   69.
   70.
                         new TypeToken<List<TableData>>() {
```

```
2016/1/14
               Json转换利器Gson之实例五-实际开发中的特殊需求处理 - 李坤 廊坊师范学院 信息技术提高班 第五期 - 博客频道 - CSDN.NET
    71.
                           }.getType());
    72.
                   for (int i = 0; i < tableDatas2.size(); i++) {</pre>
    73.
                       TableData entityData = tableDatas2.get(i);
                       String tableName = entityData.getTableName();
    74.
    75.
                       List tableData = entityData.getTableData();
                       String s2 = gson.toJson(tableData);
    76.
    77.
                       // System.out.println(s2);
    78.
                       // System.out.println(entityData.getData());
    79.
                       if (tableName.equals("students")) {
    80.
                           System.out.println("students");
                           List<Student> retStuList = gson.fromJson(s2,
    81.
    82.
                                    new TypeToken<List<Student>>() {
    83.
                                    }.getType());
                           for (int j = 0; j < retStuList.size(); j++) {</pre>
    84.
                               System.out.println(retStuList.get(j));
    85.
    86.
                           }
    87.
                       } else if (tableName.equals("teachers")) {
    88.
    89.
                           System.out.println("teachers");
    90.
                           List<Teacher> retTchrList = gson.fromJson(s2,
    91.
                                    new TypeToken<List<Teacher>>() {
    92.
                                    }.getType());
    93.
                           for (int j = 0; j < retTchrList.size(); j++) {</pre>
                               System.out.println(retTchrList.get(j));
    94.
    95.
                           }
    96.
                       }
                   }
    97.
    98.
    99.
                   // Json转为对象-->end
               }
   100.
   101.
          }
```

输出结果:

```
[plain]
01.
      [{"tableName":"students","tableData":[{"id":1,"name":"李
      坤","birthDay":"Jun 22, 2012 10:04:12 PM"},{"id":2,"name":"曹贵
      生","birthDay":"Jun 22, 2012 10:04:12 PM"},{"id":3,"name":"柳
      波","birthDay":"Jun 22, 2012 10:04:12 PM"}]},{"tableName":"teachers","tableData":
      [{"id":1,"name":"米老师","title":"教授"},{"id":2,"name":"丁老师","title":"讲师"}]}]
92.
      students
      Student [birthDay=Fri Jun 22 22:04:12 CST 2012, id=1, name=李坤]
03.
04.
      Student [birthDay=Fri Jun 22 22:04:12 CST 2012, id=2, name=曹贵生]
05.
      Student [birthDay=Fri Jun 22 22:04:12 CST 2012, id=3, name=柳波]
06.
      teachers
07.
      Teacher [id=1, name=米老师, title=教授]
08.
      Teacher [id=2, name=丁老师, title=讲师]
                                                                         1载排
```

Json转换利器Gson之实例一-简单对象转化和带泛型的List转化 (http://blog.csdn.net/lk blog/article/details/7685169) Json转换利器Gson之实例二-Gson注解和GsonBuilder

(http://blog.csdn.net/lk_blog/article/details/7685190)

Json转换利器Gson之实例三-Map处理(上)

(http://blog.csdn.net/lk_blog/article/details/7685210)

Json转换利器Gson之实例四-Map处理(下)

(http://blog.csdn.net/lk_blog/article/details/7685224)

Json转换利器Gson之实例五-实际开发中的特殊需求处理

(http://blog.csdn.net/lk_blog/article/details/7685237)

Json转换利器Gson之实例六-注册TypeAdapter及处理Enum类型

(http://blog.csdn.net/lk_blog/article/details/7685347)

实例代码下载: http://download.csdn.net/detail/lk blog/4387822