

06. SQL 응용 수행평가

SQL 응용

날짜 : 2022/10/25

이름 : 조주영



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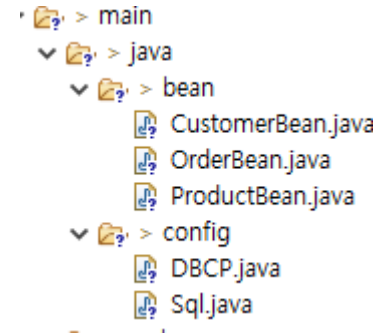
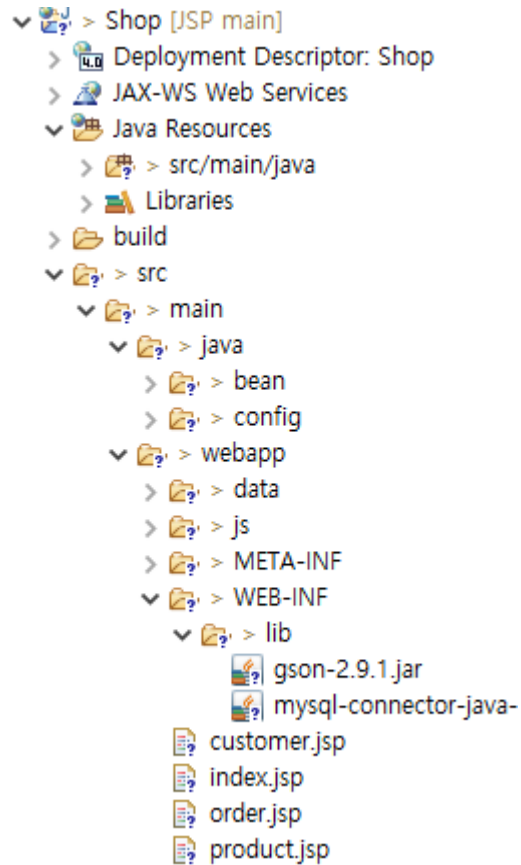
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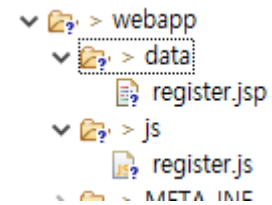
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기능 실행

1. 프로젝트 생성 및 구성



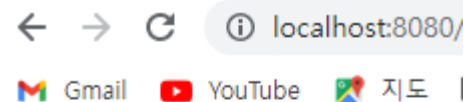
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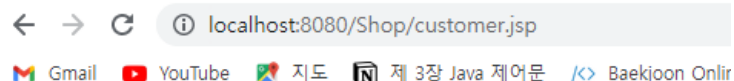
2. 화면 구현



주문목록

[고객목록](#) [주문목록](#) [상품목록](#)

고객

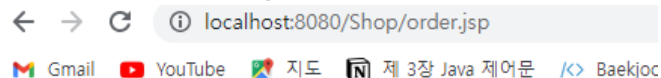


고객목록

[고객목록](#) [주문목록](#) [상품목록](#)

아이디	이름	휴대폰	주소	가입일
c101	김유신	010-1234-1001	김해시 봉황동	2022-01-01
c102	김춘추	010-1234-1002	경주시 보문동	2022-01-02
c103	장보고	010-1234-1003	완도군 청산면	2022-01-03
c104	강감찬	010-1234-1004	서울시 마포구	2022-01-04
c105	이성계	null	null	2022-01-05
c106	정철	010-1234-1006	경기도 용인시	2022-01-06
c107	허준	null	null	2022-01-07
c108	이순신	010-1234-1008	서울시 영등포구	2022-01-08
c109	송상현	010-1234-1009	부산시 동래구	2022-01-09
c110	정약용	010-1234-1010	경기도 광주시	2022-01-10

주문

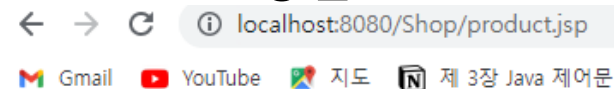


주문목록

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주문번호	주문자	주문상품	주문수량	주문일
1	김춘추	포카칩	2	2022-07-01 13:15:10
2	김유신	양파링	1	2022-07-01 14:16:11
3	이순신	새우깡	1	2022-07-01 17:23:18
4	송상현	마카렛트	5	2022-07-02 10:46:36
5	김춘추	초코파이	1	2022-07-03 09:15:37
6	김유신	뿌셔뿌셔	3	2022-07-03 12:35:12
7	정약용	새우깡	2	2022-07-03 16:55:36
8	강감찬	초코파이	4	2022-07-04 14:23:23
9	김춘추	새우깡	3	2022-07-04 21:54:34
10	허준	마카렛트	1	2022-07-05 14:21:03

상품



상품목록

[고객목록](#) [주문목록](#) [상품목록](#)

상품번호	상품명	재고량	가격	제조사	주문
1	새우깡	5000	1500	농심	주문
2	초코파이	2500	2500	오리온	주문
3	포카칩	3600	1700	오리온	주문
4	양파링	1250	1800	농심	주문
5	조리품	2200	0	크라온	주문
6	마카렛트	3500	3500	롯데	주문
7	뿌셔뿌셔	1650	1200	오뚜기	주문

3. 기능 구현

고객 코드

```
1 <%@page import="config.Sql"%>
2 <%@page import="java.sql.Statement"%>
3 <%@page import="config.DBCP"%>
4 <%@page import="bean.CustomerBean"%>
5 <%@page import="java.util.ArrayList"%>
6 <%@page import="java.sql.ResultSet"%>
7 <%@page import="java.sql.Connection"%>
8 <%@page import="java.util.List"%>
9 <%@ page contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
10 <%
11
12     List<CustomerBean> custs = null;
13
14     try {
15         Connection conn = DBCP.getConnection();
16         Statement stmt = conn.createStatement();
17         ResultSet rs = stmt.executeQuery(Sql.SELECT_CUSTOMER);
18
19         custs = new ArrayList<>();
20         while(rs.next()){
21             CustomerBean cb = new CustomerBean();
22             cb.setCustId(rs.getString(1));
23             cb.setName(rs.getString(2));
24             cb.setHp(rs.getString(3));
25             cb.setAddr(rs.getString(4));
26             cb.setRdate(rs.getString(5));
27
28             custs.add(cb);
29         }
30
31         rs.close();
32         stmt.close();
33         conn.close();
34     } catch (Exception e){
35         e.printStackTrace();
36     }
37
38
39 %>
```

```
40 <!DOCTYPE html>
41 <html>
42     <head>
43         <meta charset="UTF-8">
44         <title>shop::customer</title>
45     </head>
46     <body>
47         <h3>고객목록</h3>
48         <a href="#">고객목록</a>
49         <a href="/order.jsp">주문목록</a>
50         <a href="/product.jsp">상품목록</a>
51         <table border="1">
52             <tr>
53                 <th>아이디</th>
54                 <th>이름</th>
55                 <th>휴대폰</th>
56                 <th>주소</th>
57                 <th>가입일</th>
58             </tr>
59             <% for (CustomerBean cb : custs){ %>
60                 <tr>
61                     <td><%= cb.getCustId() %></td>
62                     <td><%= cb.getName() %></td>
63                     <td><%= cb.getHp() %></td>
64                     <td><%= cb.getAddr() %></td>
65                     <td><%= cb.getRdate() %></td>
66                 </tr>
67             <% } %>
68         </table>
69     </body>
70 </html>
```

3. 기능 구현

주문 코드

```
1 <%@page import="config.Sql"%>
2 <%@page import="java.util.ArrayList"%>
3 <%@page import="java.sql.ResultSet"%>
4 <%@page import="java.sql.Statement"%>
5 <%@page import="config.DBCP"%>
6 <%@page import="java.sql.Connection"%>
7 <%@page import="bean.OrderBean"%>
8 <%@page import="java.util.List"%>
9 <%@ page contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
10 <%
11
12     List<OrderBean> orders = null;
13
14     try {
15         Connection conn = DBCP.getConnection();
16         Statement stmt = conn.createStatement();
17         ResultSet rs = stmt.executeQuery(Sql.SELECT_ORDER);
18         orders = new ArrayList<>();
19         while(rs.next()){
20             OrderBean ob = new OrderBean();
21             ob.setOrderNo(rs.getInt(1));
22             ob.setName(rs.getString(2));
23             ob.setProdName(rs.getString(3));
24             ob.setOrderCount(rs.getInt(4));
25             ob.setOrderDate(rs.getString(5));
26
27             orders.add(ob);
28         }
29
30         rs.close();
31         stmt.close();
32         conn.close();
33     } catch (Exception e){
34         e.printStackTrace();
35     }
36
37
38 %>
```

```
39 <!DOCTYPE html>
40 <html>
41     <head>
42         <meta charset="UTF-8">
43         <title>shop::customer</title>
44     </head>
45     <body>
46         <h3>주문목록</h3>
47         <a href="/customer.jsp">고객목록</a>
48         <a href="#">주문목록</a>
49         <a href="/product.jsp">상품목록</a>
50         <table border="1">
51             <tr>
52                 <th>주문번호</th>
53                 <th>주문자</th>
54                 <th>주문상품</th>
55                 <th>주문수량</th>
56                 <th>주문일</th>
57             </tr>
58             <% for (OrderBean ob : orders){ %>
59                 <tr>
60                     <td><%= ob.getOrderNo() %></td>
61                     <td><%= ob.getName() %></td>
62                     <td><%= ob.getProdName() %></td>
63                     <td><%= ob.getOrderCount() %></td>
64                     <td><%= ob.getOrderDate() %></td>
65                 </tr>
66             <% } %>
67         </table>
68     </body>
69 </html>
```

3. 기능 구현

상품 코드

```
1 |<%@page import="config.Sql"%>
2 |<%@page import="bean.ProductBean"%>
3 |<%@page import="java.util.ArrayList"%>
4 |<%@page import="java.sql.ResultSet"%>
5 |<%@page import="java.sql.Statement"%>
6 |<%@page import="config.DBCP"%>
7 |<%@page import="java.sql.Connection"%>
8 |<%@page import="java.util.List"%>
9 |<%@ page contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
10|<%
11|
12|    List<ProductBean> prods = null;
13|
14|    try {
15|        Connection conn = DBCP.getConnection();
16|        Statement stmt = conn.createStatement();
17|        ResultSet rs = stmt.executeQuery(Sql.SELECT_PRODUCT);
18|        prods = new ArrayList<>();
19|        while(rs.next()){
20|            ProductBean pb = new ProductBean();
21|            pb.setProdNo(rs.getInt(1));
22|            pb.setProdName(rs.getString(2));
23|            pb.setStock(rs.getInt(3));
24|            pb.setPrice(rs.getInt(4));
25|            pb.setCompany(rs.getString(5));
26|
27|            prods.add(pb);
28|        }
29|
30|        rs.close();
31|        stmt.close();
32|        conn.close();
33|    } catch (Exception e){
34|        e.printStackTrace();
35|    }
36|
37|
38|>
```

```
<body>
    <h3>상품목록</h3>
    <a href="/customer.jsp">고객목록</a>
    <a href="/order.jsp">주문목록</a>
    <a href="#">상품목록</a>
    <table border="1">
        <tr>
            <th>상품번호</th>
            <th>상품명</th>
            <th>재고량</th>
            <th>가격</th>
            <th>제조사</th>
            <th>주문</th>
        </tr>
        <% for (ProductBean pb : prods){ %>
        <tr>
            <td><%= pb.getProdNo() %></td>
            <td><%= pb.getProdName() %></td>
            <td><%= pb.getStock() %></td>
            <td><%= pb.getPrice() %></td>
            <td><%= pb.getCompany() %></td>
            <td><input type="submit" value="주문" id="btnRegister"></td>
        </tr>
        <% } %>
    </table>
    <nav></nav>
    <section></section>
</body>
</html>
```

3. 기능 구현

DBCP 커넥션

```
1 package config;
2
3 import java.sql.Connection;
4
5
6
7
8
9
10 public class DBCP {
11
12     private static DataSource ds = null;
13
14     public static Connection getConnection() throws NamingException, SQLException {
15
16         if(ds == null) {
17             ds = (DataSource) new InitialContext().lookup("java:comp/env/dbcp_java2_shop");
18         }
19
20         return ds.getConnection();
21     }
22 }
23
24 }
25
```

```
<Resource
    name="dbcp_java2_shop"
    auth="Container"
    type="javax.sql.DataSource"
    driverClassName="com.mysql.cj.jdbc.Driver"
    url="jdbc:mysql://127.0.0.1:3306/java2_shop"
    username="java2_admin1"
    password="1234"
    maxTotal="16"
    maxIdle="16"
    maxWaitMillis="3000"
/>
```


3. 기능 구현

Sql.jsp

```
1 package config;
2
3 public class Sql {
4
5     public static final String SELECT_CUSTOMER = "SELECT * FROM `customer`";
6     public static final String SELECT_PRODUCT = "SELECT * FROM `product`";
7
8     public static final String SELECT_ORDER = "SELECT a.`orderNo`, b.`name`, c.`prodName`, a.`orderCount`, a.`orderDate` "
9         + "FROM `order` as a "
10        + "join `customer` as b on a.orderId = b.custid "
11        + "join `product` as c on a.orderProduct = c.prodNo";
12
13     public static final String INSERT_ORDER = "INSERT INTO `order` "
14        + "(`orderId`, `orderProduct`, `orderCount`, `orderDate`) "
15        + "VALUES (?, ?, ?, NOW())";
16 }
17
```

4. 기능 실행

아쉬워서 실패한 코드라도 첨부합니다. product.jsp

```
39 <!DOCTYPE html>
40 <html>
41   <head>
42     <meta charset="UTF-8">
43     <title>shop::product</title>
44     <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.1/jquery.min.js"></script>
45     <script src="./js/register.js"></script>
46     <script>
47       $(document).ready(function(){
48         $(document).on('click', '#btnRegister', function(e){
49           e.preventDefault();
50
51           let prodNo = $('input[name=orderProduct]').val();
52           let amount = $('input[name=orderCount]').val();
53           let custid = $('input[name=orderId]').val();
54
55           let jsonData = {
56             "orderProduct":orderProduct,
57             "orderCount":orderCount,
58             "orderId":orderId
59           };
60
61           $.ajax({
62             url: './data/register.jsp',
63             method: 'post',
64             data: jsonData,
65             dataType: 'json',
66             success: function(data){
67               if (data.result == 1){
68                 alert('주문완료!');
69               } else {
70                 alert('다시 시도해주세요.');
```

4. 기능 실행

아쉬워서 실패한 코드라도 첨부합니다. register.jsp

```
1 <%@page import="com.google.gson.JsonObject"%>
2 <%@page import="config.Sql"%>
3 <%@page import="java.sql.PreparedStatement"%>
4 <%@page import="config.DBCP"%>
5 <%@page import="java.sql.Connection"%>
6 <%@page contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
7 <%
8     request.setCharacterEncoding("utf-8");
9     String orderId = request.getParameter("orderId");
10    String orderProduct = request.getParameter("orderProduct");
11    String orderCount = request.getParameter("orderCount");
12    int result = 0;
13
14    try {
15        Connection conn = DBCP.getConnection();
16        PreparedStatement psmt = conn.prepareStatement(Sql.INSERT_ORDER);
17        psmt.setString(1, orderId);
18        psmt.setString(2, orderProduct);
19        psmt.setString(3, orderCount);
20    } catch (Exception e){
21        e.printStackTrace();
22    }
23
24    JsonObject json = new JsonObject();
25    json.addProperty("result", result);
26
27    String jsonData = json.toString();|
28
29    out.print(jsonData);
30
31 %>
32
```

4. 기능 실행

아쉬워서 실패한 코드라도 첨부합니다. register.js

```
1 /**
2  *
3  */
4 function register() {
5
6     $(function() {
7
8         $('section')
9             .append("<h4>주문하기</h4>")
10
11         let table = "<table border='1'>";
12         table += "<tr>"
13         table += "<td>상품번호</td>"
14         table += "<td><input type='text' name='orderProduct' /></td>"
15         table += "</tr>"
16         table += "<tr>"
17         table += "<td>수량</td>"
18         table += "<td><input type='text' name='orderCount' /></td>"
19         table += "</tr>"
20         table += "<tr>"
21         table += "<td>주문자</td>"
22         table += "<td><input type='text' name='orderId' /></td>"
23         table += "</tr>"
24         table += "<td colspan='2' align='right'><input type='submit' id='btnRegister' value='주문하기' /></td>"
25         table += "</tr>"
26         table += "</table>"
27
28         $('section').append(table);
29     });
30 }
31 }
```

감사합니다.

Ajax 이용하는게 아직 많이 모자란 거 같아요.
코드는 다 짰는데 아무리 눌러도 화면에 안 나오네요.