Class230113

230113

JSP DB연결 방법

mysql

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JSP MYSQL DB연결 STEP 6

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>

<!-- Step 1 import SQL Packages  -->
<%@ page import="java.sql.*" %>

<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<%
//Step 2 load JDBC Driver
  try {
    Class.forName("com.mysql.jdbc.Driver");
  }catch(ClassNotFoundException err) {
    out.print("JDBC Driver loading error<br>" + err.getMessage());
  }

// Step 3 create Connection Object

  Connection conn = null;

  try {
    conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/","root","0000");
  }catch(SQLException err) {
    out.print("Connection Object error<br>" + err.getMessage());
  }

// Step 4 create Statement Object

  PreparedStatement pstmt = conn.prepareStatement("CREATE DATABASE test2");


// Step 5 excute SQL Query

  pstmt.executeUpdate();

//  Step 6 close Connection

  pstmt.close();
  conn.close();

%>
```

```
</body>
</html>
```

TABLE CREATE

```
// Step 4 create Statement Object
    String sql = "CREATE TABLE student("
    + "hakbun varchar(10),"
    + "name   varchar(10),"
    + "dept   varchar(20),"
    + "addr   varchar(30),"
    + "primary key(hakbun))";


    PreparedStatement pstmt = conn.prepareStatement(sql);
```

TABLE INSERT

```
// Step 4 create Statement Object

     String hakbun = request.getParameter("hakbun");
    String name = request.getParameter("name");
    String dept = request.getParameter("dept");
    String addr = request.getParameter("addr");


    String sql = "INSERT student VALUES(?, ?, ?, ?)";


    PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setString(1, hakbun);
      pstmt.setString(2, name);
      pstmt.setString(3, dept);
      pstmt.setString(4, addr);
```

TABLE LIST

```
// Step 4 create Statement Object
    String sql = "SELECT * FROM student";


    PreparedStatement pstmt = conn.prepareStatement(sql);


// Step 5 excute SQL Query

    /*  pstmt.executeUpdate(); */
```

```
        ResultSet rset = pstmt.executeQuery();


    while(rset.next()){
    %>

    <%=rset.getString("hakbun") %>|
    <%=rset.getString("name") %>|
    <%=rset.getString("dept") %>|
    <%=rset.getString("addr") %><br>

    <%
        }
//Step 6 Close Connection
        rset.close();
        pstmt.close();
        conn.close();
    %>
```

▼ 중복되는 코드 include

텍스트파일로 만들어서 jsp body 안에

<%@ include file = "dbconnect.inc" %>

<%@ include file = "dbclose.inc" %> 포함

1.dbconnect.inc

```
 <%
 // 2 load JDBC Driver
   try{
     Class.forName("com.mysql.jdbc.Driver");
   }catch(ClassNotFoundException err){
       out.print("JDBC Driver loading error<br>"+ err.getMessage());
   }
   // com.mysql.jdbc.Driver mySQL용

 // 3 create Connection Object
   Connection conn = null;

   try{
     conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/", "root", "0000");
   }catch(SQLException err){
       out.print("JDBC Driver loading error<br>"+ err.getMessage());
   }
 %>
```

2. dbclose.inc

```
 <%
 // 6 close Connection

   pstmt.close();
   conn.close();

 %>
```

log in/ logout with session

1. 아이디와 비번을 모두 정상적으로 입력한 경우 → 로그인 성공

2. 비번이 틀릴 경우 → 로그인실패(다시 시도하세요)

3. 아이디가 디비에 존재하지 않는 경우

LoginForm

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>

  <form action="LoginCheck.jsp">


  학번: <input type = "text" name="hakbun">
  <button type="submit">로그인</button>
  </form>


</body>
</html>
```

LoginCheck

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>

<!-- Step 1 import SQL Packages  -->
<%@ page import="java.sql.*" %>

<% // 전송 받는 데이터 한글 처리
  request.setCharacterEncoding("UTF-8");
%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<%
//Step 2 load JDBC Driver
  try {
    Class.forName("com.mysql.jdbc.Driver");
  }catch(ClassNotFoundException err) {
    out.print("JDBC Driver loading error<br>" + err.getMessage());
```

```jsp
  }

// Step 3 create Connection Object

  Connection conn = null;

  try {
    conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/univ","root","0000");
  }catch(SQLException err) {
    out.print("Connection Object error<br>" + err.getMessage());
  }

// Step 4 create Statement Object

    String hakbun = request.getParameter("hakbun");

    String sql = "SELECT * FROM student WHERE hakbun = ? ";
    PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setString(1, hakbun);


// Step 5 excute SQL Query

    /*  pstmt.executeUpdate(); */
    ResultSet rset = pstmt.executeQuery();

    //DB에서 학번에 해당하는 자료가 있어서 반환되었는지 확인
    //만약에 가져온값이 없으면
    if(!rset.isBeforeFirst()){
      out.print("<script>alert('해당 학번은 존재하지 않습니다.');" + "history.back();"+"</script>");
      return;
    }

    //DB에 있는 경우
    rset.next();
    //DB에서 뽑아온 학번
    String dbhakbun  = rset.getString("hakbun");
    String dbname  = rset.getString("name");

    //dbhakbun hakbun 값이 같으면 세션을 생성하세요
    //"hakbun" dbhakbun "name" dbname

    //문자열 값을 비교할 때는 반드시 .equals() / 숫자비교는 ==
    if(dbhakbun.equals(hakbun)){

      session.setAttribute("hakbun" , dbhakbun); //세션생성
      session.setAttribute("name" , dbname);

      out.print(session.getAttribute("hakbun")+"("+ session.getAttribute("name")+")님 방문을 환영합니다. <br>");

    }


//Step 6 Close Connection
      rset.close();
      pstmt.close();
      conn.close();
    %>


</body>
</html>
```

JSP에 CLASS 넣기

1.dbconnclose 클래스 생성

```
package jdbc6step;

import java.sql.*;

public class dbconnclose {
  //DB 연결 공통부분 매서드
  public static Connection getConnection() {
    // 2 load JDBC Driver
    try{
      Class.forName("com.mysql.jdbc.Driver");
    }catch(ClassNotFoundException err){
        System.out.print("JDBC Driver loading error<br>"+ err.getMessage());
    }
    // com.mysql.jdbc.Driver mySQL용

  // 3 create Connection Object
    Connection conn = null;

    try{
      conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/", "root", "0000");
    }catch(SQLException err){
      System.out.print("JDBC Driver loading error<br>"+ err.getMessage());
    }
    return conn;
  }

  //DB 해제 공통부분 매서드
  public static void closeConnection(PreparedStatement pstmt, Connection conn) {
  // 6 close Connection
    try {
    pstmt.close();
    conn.close();
   }catch(SQLException err) {
     System.out.println("Error" + err.getMessage());
   }
  }

}
```

2. jsp파일에 노랗게 표시한 3줄 코드 넣기

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!-- Step 1 import SQL Packages  -->
<%@ page import = "java.sql.*" %>
<%@ page import = "jdbc6step.*" %> <!-- 클래스넣기 -->
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">

<title>Insert title here</title>
</head>
<body>

<%
  Connection conn = dbconnclose.getConnection();

// 4 create Statement Object

  PreparedStatement pstmt = conn.prepareStatement("DROP DATABASE test5");
```

```
// 5 execute SQL Query

  pstmt.executeUpdate();

  dbconnclose.closeConnection(pstmt, conn);

%>

</body>
</html>
```