


Summer Note&File Upload&login

파일 업로드

번호	제목	작성자	파일1	파일2	날짜
12	test1	someone			2023-01-17 12:24:44
15	이거	someone			2023-01-17 17:04:42

▼ FboardForm

```
<%@ 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>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-GLT"
<div class="container">
<form action="FboardInsert.jsp" method="post" enctype="multipart/form-data">
<div class="mb-3"><br>
<label for="exampleFormControlInput1" class="form-label">제목</label>
<input type="text" class="form-control" name="fbtitle" id="exampleFormControlInput1">
</div>
<div class="mb-3">
<label for="exampleFormControlTextarea1" class="form-label">내용</label>
<textarea class="form-control" name="fbcontent" id="exampleFormControlTextarea1" rows="3"></textarea>
</div>
<div class="input-group">
<input type="file" class="form-control" id="inputGroupFile04" name="fbfile1" aria-describedby="inputGroupFileAddon04" aria-label="Text">
<input type="file" class="form-control" id="inputGroupFile04" name="fbfile2" aria-describedby="inputGroupFileAddon04" aria-label="Text">
</div><br>
<button type="submit" class="btn btn-primary">등록</button>
</form>
</div>
</body>
</html>
```

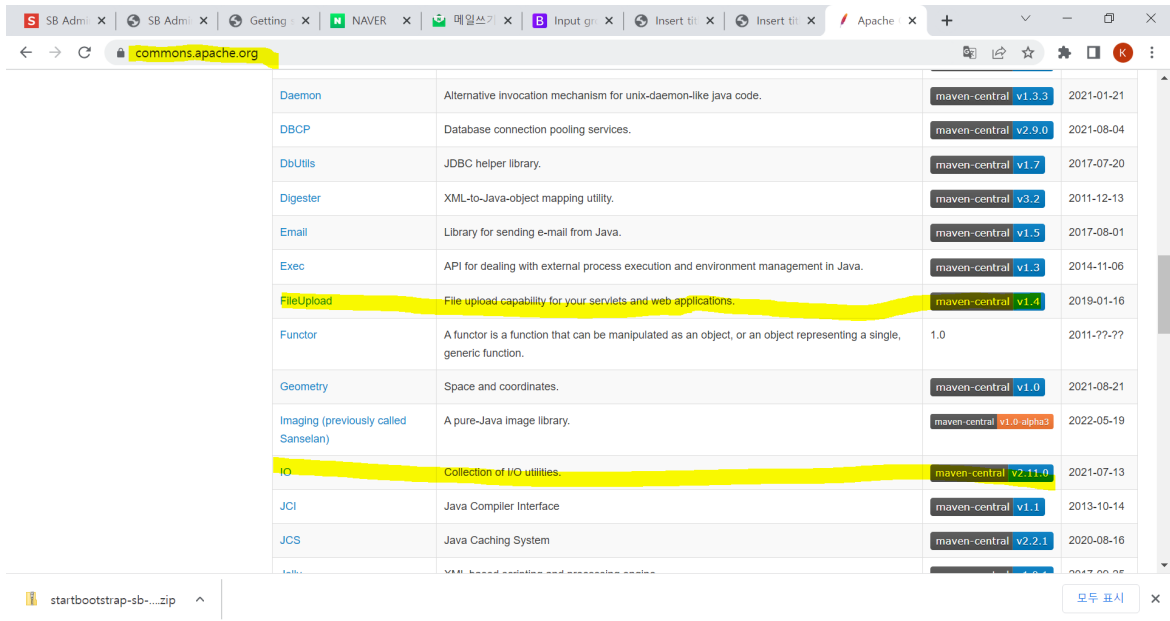
사진 전송을 위해서는 multi/part 옵션을 설정해야 하는데 문제는 기존 방식의 '키값:벨류값' 형태로 데이터를 넘기는 것이 아니라 전체 데이터를 하나의 덩어리로 넘기게 된다.

따라서 게시물의 제목과 내용과 파일이름, 파일내용(사진은 이름과 내용 두개로 분해된다. db에는 파일 이름만 들어감) 으로 각각 추출해서 db에 넣어 주어야 한다.(사진 자체는 db에 들어가지 않고 db에는 이름만 들어가고 사진 자체는 서버의 특정 위치로 전송된다.)

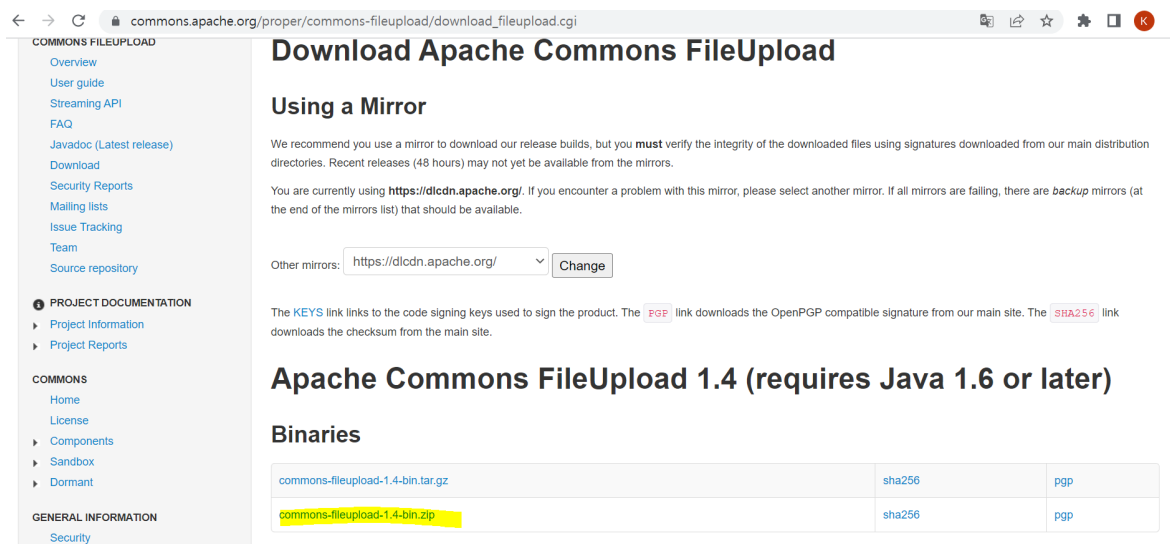
추출을 도와주는 라이브러리를 설치 후 조금 쉽게 추출할수있다.

▼ 파일 2개 다운로드 후 import

<https://commons.apache.org/>



Project Name	Description	Version	Release Date
Daemon	Alternative invocation mechanism for unix-daemon-like java code.	maven-central v1.3.3	2021-01-21
DBCP	Database connection pooling services.	maven-central v2.9.0	2021-08-04
DbUtils	JDBC helper library.	maven-central v1.7	2017-07-20
Digester	XML-to-Java-object mapping utility.	maven-central v3.2	2011-12-13
Email	Library for sending e-mail from Java.	maven-central v1.5	2017-08-01
Exec	API for dealing with external process execution and environment management in Java.	maven-central v1.3	2014-11-06
FileUpload	File upload capability for your servlets and web applications.	maven-central v1.4	2019-01-16
Functor	A functor is a function that can be manipulated as an object, or an object representing a single, generic function.	1.0	2011-??-??
Geometry	Space and coordinates.	maven-central v1.0	2021-08-21
Imaging (previously called Sanselan)	A pure-Java image library.	maven-central v1.0-alpha3	2022-05-19
IO	Collection of I/O utilities.	maven-central v2.11.0	2021-07-13
JCI	Java Compiler Interface	maven-central v1.1	2013-10-14
JCS	Java Caching System	maven-central v2.2.1	2020-08-16



Download Apache Commons FileUpload

Using a Mirror

We recommend you use a mirror to download our release builds, but you **must** verify the integrity of the downloaded files using signatures downloaded from our main distribution directories. Recent releases (48 hours) may not yet be available from the mirrors.

You are currently using <https://dldn.apache.org/>. If you encounter a problem with this mirror, please select another mirror. If all mirrors are failing, there are **backup** mirrors (at the end of the mirrors list) that should be available.

Other mirrors:

The **KEYS** link links to the code signing keys used to sign the product. The **PGP** link downloads the OpenPGP compatible signature from our main site. The **SHA256** link downloads the checksum from the main site.

Apache Commons FileUpload 1.4 (requires Java 1.6 or later)

Binaries

File Name	SHA256	PGP
commons-fileupload-1.4-bin.tar.gz	sha256	pgp
commons-fileupload-1.4-bin.zip	sha256	pgp

```

▼ > WEB-INF
  ▼ > lib
    commons-fileupload-1.4.jar
    commons-io-2.11.0.jar
    mysql-connector-j-8.0.31.jar
  
```

라이브러리에 추가

```

FboardInsert.jsp
1 <%@page import="jdbc.*"%>
2 <%@page import="org.apache.commons.fileupload.*"%>
3 <%@page import="org.apache.commons.fileupload.disk.*"%>
4 <%@page import="org.apache.commons.fileupload.servlet.*"%>
5 <%@ page language="java" contentType="text/html; charset=UTF-8"
6   pageEncoding="UTF-8"%>
7
8=<%
9   String fbtittle = request.getParameter("fbtittle");
10   String fbwriter = "작성자";
11   String fbcontent = request.getParameter("fbcontent");
12   String fbfile = request.getParameter("fbfile");
13
14
15   /* int result = BoardfileDAO.insert(fbtittle, fbwriter, fbcontent,fbfile);
16
17   if(result == 1){
18       out.print("등록성공");
19   }else{
20       out.print("등록 실패");
21   } */
22
23
24
25 %>
26
27 <%=fbtittle%><br>
28 <%=fbwriter%><br>
29 <%=fbcontent%><br>

```

추출에 필요한 기본 메서드 정리

- isFormField() 요소가 키값-벨류값 쌍으로 구성된 필드를 찾아낸다.
- getFieldname() 키값 속성을 추출
- getString() 벨류값을 추출
- getName() 사진(파일) 이름 추출
- get() 사진(파일) 자체를 추출

▼ FboardInsert.jsp

```

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

<%@ page import="java.util.*"%>
<%@ page import="java.io.*" %>
<%@ page import="org.apache.commons.fileupload.*" %>
<%@ page import="org.apache.commons.fileupload.disk.*" %>
<%@ page import="org.apache.commons.fileupload.servlet.*" %>
<%@ page import="jdbc.*"%>
<%@ page import="util.FileUtil"%>

<%
   request.setCharacterEncoding("utf-8"); //한글 처리

   String fbtittle = null; //게시물 제목
   String fbcontent = null; //게시물 내용
   String fbfile1 = null; //사진 이름
   String fbfile2 = null; //사진 이름
   String fbwriter = "someone"; //작성자 는 임시로 설정, 실제로는 세션에서 읽어오자
   byte[] fbu = null; //사진

   ServletFileUpload sfu = new ServletFileUpload(new DiskFileItemFactory());

   List items = sfu.parseRequest(request);

   Iterator iter = items.iterator();

   while(iter.hasNext()) {
       FileItem item = (FileItem) iter.next();
       String name = item.getFieldName(); //키값 속성 추출

```

```

        if(item.isFormField()) { // 키값 별류값 형태의 데이터 추출
            String value = item.getString("utf-8");
            if (name.equals("fbtitle")) fbtitle = value;
            else if (name.equals("fbcontent")) fbcontent = value;
        } else {
            if (name.equals("fbfile1")) {
                fbfile1 = item.getName();
                fbu = item.get();
                String root = application.getRealPath(java.io.File.separator);
                FileUtil.saveImage(root, fbfile1, fbu);
            }
            if (name.equals("fbfile2")) {
                fbfile2 = item.getName();
                fbu = item.get();
                String root = application.getRealPath(java.io.File.separator);
                FileUtil.saveImage(root, fbfile2, fbu);
            }
        }
    }

    int result = FboardDAO.insert(fbtitle, fbwriter, fbcontent, fbfile1,fbfile2);

    if (result == 1) {
        out.print("success");
    }else {
        out.print("fail");
    }
}

%>

```

String value = item.getString("utf-8"); 밑에 부분만 변경하면서 사용하면 됨.

파일 서버에 저장하기 위한 방법 2가지

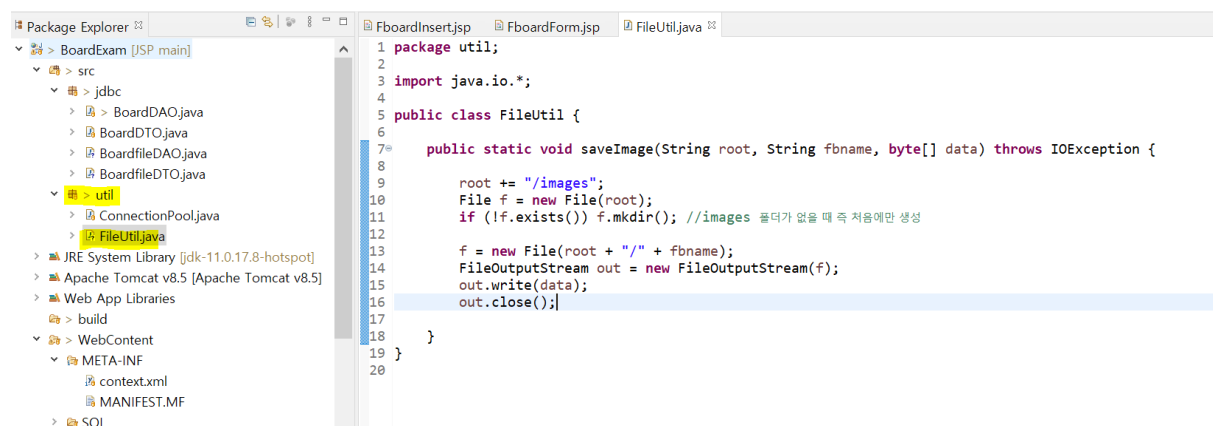
- 데이터베이스 내부에 파일을 직접 넣는 방법
- 서버의 특정 위치에 파일을 그대로 저장하고 DB에는 그 이름과 경로만 저장하는 방법

일반적으로 두 방법중 후자를 실전에서는 많이 사용

이유는 디비 내부에 파일을 저장하게 되면 테이블 크기 자체가 커지게 되어 그에 따라 관리 비용이 크게 증가 하기 때문!

사진 파일을 서버의 특정위치에 전송하는 방법

util → FileUtil파일 만든다.



바꿀거 없이 계속 쓰면된다.

▼ FboardList.jsp

```

<%@page import="jdbc.*"%>
<%@page import="java.util.ArrayList"%>
<%@ 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>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-GLf
</link>

<div class="container">
<table class="table table-hover">
  <thead>
    <tr>
      <th scope="col">번호</th>
      <th scope="col">제목</th>
      <th scope="col">작성자</th>
      <th scope="col">파일1</th>
      <th scope="col">파일2</th>
      <th scope="col">날짜</th>
    </tr>
  </thead>
  <tbody>
<%

    ArrayList<FboardDTO> boards = FboardDAO.getList();

    for (FboardDTO board : boards) {

        String img1 = board.getBfile1();
        String img2 = board.getBfile2();

        String imgstr1 = "";
        if (img1 != null) {
            imgstr1 = "<img src='images/" + img1 + "' width=200";
        }
        String imgstr2 = "";
        if (img2 != null) {
            imgstr2 = "<img src='images/" + img2 + "' width=200";
        }

    %>
    <tr>
      <th scope="row"><%=board.getBno() %></th>
      <td><%=board.getBtitle() %></td>
      <td><%=board.getBwriter() %></td>
      <td><%=imgstr1 %></td>
      <td><%=imgstr2 %></td>
      <td><%=board.getBdate() %></td>
    </tr>

  <%
  }
  %>

  </tbody>
</table>
</div>
</body>
</html>

```

Log in

기본적으로는 index.html 이 호출되지만 html 에서는 jsp 문법을 사용할수가 없다.
따라서 index.html 이 호출되면 자동으로 main.jsp 를 호출하여 사용하면 편리하다.

index.html

<Script>

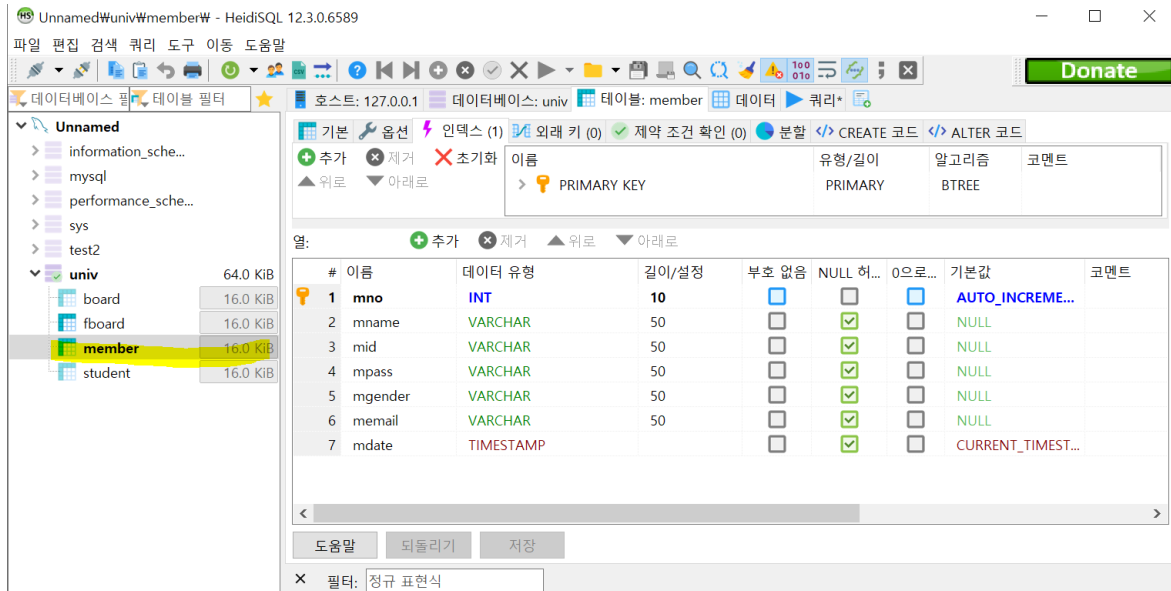
 window.location.href = "main.jsp";

</Script>

회원가입

DB - TABLE - DTO - DAO - signCheck.jsp - signupForm.jsp

▼ member 테이블 생성



▼ memberDTO

```
package jdbc;

public class memberDTO {
    private String mno;
    private String mname;
    private String mid;
    private String mpass;
    private String mgender;
    private String memail;
    private String mdate;

    public String getMno() {
        return mno;
    }
    public void setMno(String mno) {
        this.mno = mno;
    }
    public String getMname() {
        return mname;
    }
    public void setMname(String mname) {
        this.mname = mname;
    }
    public String getMid() {
        return mid;
    }
    public void setMid(String mid) {
        this.mid = mid;
    }
    public String getMpass() {
        return mpass;
    }
    public void setMpass(String mpass) {
        this.mpass = mpass;
    }
    public String getMgender() {
        return mgender;
    }
    public void setMgender(String mgender) {
        this.mgender = mgender;
    }
    public String getMemail() {
        return memail;
    }
}
```

```

    public void setMemail(String memail) {
        this.memail = memail;
    }
    public String getMdate() {
        return mdate;
    }
    public void setMdate(String mdate) {
        this.mdate = mdate;
    }
}

public memberDTO(String mno, String mname, String mid, String mpass, String mgender, String memail, String mdate) {
    super();
    this.mno = mno;
    this.mname = mname;
    this.mid = mid;
    this.mpass = mpass;
    this.mgender = mgender;
    this.memail = memail;
    this.mdate = mdate;
}
}

```

▼ memberDAO

```

package jdbc;

import java.sql.*;

import javax.naming.NamingException;

import util.ConnectionPool;

public class memberDAO {
    public static int insert(String mname, String mid, String mpass, String mgender, String memail) throws NamingException, SQLException {

        String sql = "INSERT INTO member (mname, mid, mpass, mgender, memail) VALUES(?,?,?,?,?)";

        Connection conn = ConnectionPool.get();

        PreparedStatement pstmt = conn.prepareStatement(sql);
        pstmt.setString(1, mname);
        pstmt.setString(2, mid);
        pstmt.setString(3, mpass);
        pstmt.setString(4, mgender);
        pstmt.setString(5, memail);

        int result = pstmt.executeUpdate();

        return result;
    }
}

```

▼ signupForm.jsp

```

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.0/dist/css/bootstrap.min.css">
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<div class="jumbotron">
    <div class="container">
        <h1 class="display-4">회원 가입</h1></div>
    </div>
<!-- 메인 ----- -->
<div class="container">
    <form action="signupCheck.jsp" id="joinFrm" class="form-horizontal" method="get">
        <div class="form-group row">
            <label class="col-sm-2">아이디</label>
            <div class="col-sm-3">
                <input type="text" name="mid" id="mid" class="form-control" required>
            <div class="col-sm-6">
                <span id="idChkMsg" class="text-danger"></span></div>
            </div>

```

```

<div class="form-group row">
  <label class="col-sm-2">비밀번호</label>
  <div class="col-sm-3">
    <input type="password" name="mpass" id="mpass" class="form-control" required></div></div>

<div class="form-group row">
  <label class="col-sm-2">이름</label>
  <div class="col-sm-3">
    <input type="text" name="mname" id="mname" class="form-control" required></div></div>

<div class="form-group row">
  <label class="col-sm-2">이메일</label>
  <div class="col-sm-3">
    <input type="text" name="memail" id="memail" class="form-control" required></div></div>

<div class="form-group row">
  <label class="col-sm-2">성별</label>
  <div class="col-sm-10">
    <label><input type="radio" name="mgender" value="1"> 남자 </label>
    <label><input type="radio" name="mgender" value="2"> 여자 </label>
  </div></div>

<div class="row">
  <div class="col-sm-10 text-right">
    <!-- <input type="button" value="이전으로" class="btn btn-secondary backBtn" -->
    <input type="submit" value="회원가입" class="btn btn-info regBtn">
  </div></div>
</form>
</div>
</body>
</html>

```

▼ signupCheck.jsp

```

<%@ page import = "jdbc.*"%>
<%@ 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>
<%
    String mname = request.getParameter("mname");
    String mid = request.getParameter("mid");
    String mpass = request.getParameter("mpass");
    String mgender = request.getParameter("mgender");
    String memail = request.getParameter("memail");

    int result = memberDAO.insert(mname, mid, mpass,mgender, memail);

    if(result == 1){
        out.print("회원가입이 완료되었습니다.");
    }else{
        out.print("회원가입 실패");
    }
%>

</body>
</html>

```

회원로그인

DB - TABLE -DAO(loginCheck Method)-loginCheck .jsp-loginForm.jsp

- 반환되는 결과의 경우의 수가 3개이다.
1. 입력한 아이디와 비번이 DB의 정보와 모두 일치하는 경우 → 메인화면
 2. 입력한 아이디는 있지만 비번이 다른 경우 → 다시 로그인창으로 보내
 3. 입력한 아이디와 비번 모두 없는 경우 → 회원가입으로 보내

▼ memberDAO

```
public static int login(String mid, String mpass) throws NamingException, SQLException {

    String sql = "SELECT mid, mpass FROM member WHERE mid=?";

    Connection conn = ConnectionPool.get();

    PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.setString(1, mid);

    ResultSet rs = pstmt.executeQuery(); //받아서 나가야돼

    if(!rs.next()) return 1; //DB에 회원 정보가 전혀 없는 경우
    if(!mpass.equals(rs.getString(2))) return 2; //비밀번호만 틀린경우

    return 0; //아이디와 비밀번호 모두 일치하는 경우

}
```

▼ loginFormjs

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>Bootstrap Login Form with Avatar Image</title>
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/font-awesome/4.7.0/css/font-awesome.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.4/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>
<style>
    body {
        color: #fff;
        background: #d47677;
    }
    .form-control {
        min-height: 41px;
        background: #fff;
        box-shadow: none !important;
        border-color: #e3e3e3;
    }
    .form-control:focus {
        border-color: #70c5c0;
    }
    .form-control, .btn {
        border-radius: 2px;
    }
    .login-form {
        width: 350px;
        margin: 0 auto;
        padding: 100px 0 30px;
    }
    .login-form form {
        color: #7a7a7a;
        border-radius: 2px;
        margin-bottom: 15px;
        font-size: 13px;
        background: #ececec;
        box-shadow: 0px 2px 2px rgba(0, 0, 0, 0.3);
        padding: 30px;
        position: relative;
    }
    .login-form h2 {
        font-size: 22px;
        margin: 35px 0 25px;
    }
    .login-form .avatar {
        position: absolute;
        margin: 0 auto;
        left: 0;
        right: 0;
        top: -50px;
        width: 95px;
        height: 95px;
        border-radius: 50%;
        z-index: 9;
    }
```

```

        background: #70c5c0;
        padding: 15px;
        box-shadow: 0px 2px 2px rgba(0, 0, 0, 0.1);
    }
    .login-form .avatar img {
        width: 100%;
    }
    .login-form input[type="checkbox"] {
        margin-top: 2px;
    }
    .login-form .btn {
        font-size: 16px;
        font-weight: bold;
        background: #70c5c0;
        border: none;
        margin-bottom: 20px;
    }
    .login-form .btn:hover, .login-form .btn:focus {
        background: #50b8b3;
        outline: none !important;
    }
    .login-form a {
        color: #fff;
        text-decoration: underline;
    }
    .login-form a:hover {
        text-decoration: none;
    }
    .login-form form a {
        color: #7a7a7a;
        text-decoration: none;
    }
    .login-form form a:hover {
        text-decoration: underline;
    }
}
</style>
</head>
<body>
<div class="login-form">
    <form action="loginCheck.jsp" method="post">
        <h1 class="text-center">Login</h1>
        <div class="form-group">
            <input type="text" class="form-control" name="mid" placeholder="Username" required="required">
        </div>
        <div class="form-group">
            <input type="password" class="form-control" name="mpass" placeholder="Password" required="required">
        </div>
        <div class="form-group">
            <button type="submit" class="btn btn-primary btn-lg btn-block">로그인</button>
        </div>
        <div class="clearfix">
            <label class="pull-left checkbox-inline"><input type="checkbox"> Remember me</label>
            <a href="#" class="pull-right">Forgot Password?</a>
        </div>
    </form>
</div>
</body>
</html>

```

▼ loginCheck.jsp

```

<%@ page import = "jdbc.*"%>
<%@ 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>
<%
    String mid = request.getParameter("mid");
    String mpass = request.getParameter("mpass");

    int result = memberDAO.login(mid, mpass);

    if(result == 0){ //로그인 성공, 세션 생성 후 메인으로 이동
        session.setAttribute("mid", mid);
        response.sendRedirect("main.jsp");
    }
    }else if(result == 1){ //DB에 정보가 없다 회원 가입 페이지로 이동
        response.sendRedirect("signupForm.jsp");
    }

```

```
    }else {  
        response.sendRedirect("login.jsp"); //비번이 틀린 경우 다시 로그인 페이지로 이동  
    }  
%>  
  
</body>  
</html>
```