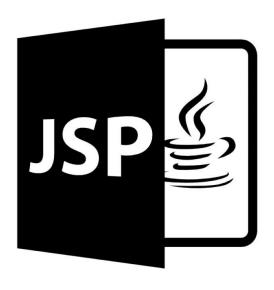
7장. 회원 및 게시판 관리



Member & Board



- 회원관리 프로젝트
 - 프로젝트 이름 : Members

```
🗸 🖼 > Members [javaweb main]
               Deployment Descriptor: Members
               JAX-WS Web Services

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B Java Resources
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→ 38 > src/main/java

                                             > 📠 > board
                                             DBConnectionTest.java
                                                            DBUtil.java

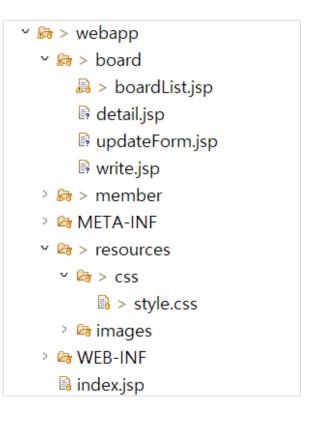
→ □ > member

∨ 
♣ > controller

                                                                            > <a> MemberController.java</a>

∨ 
♣ > model

                                                                            Member.java
                                                                            service
                                                                            MemberService.java
```





java

web

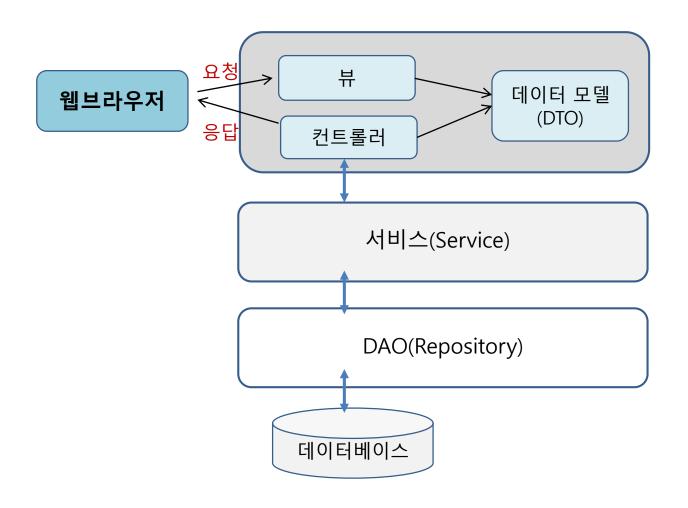
Maven 기반 프로젝트

- 1. 프로젝트 > 우클릭 > configure > Convert to Maven Project
- 2. pox.xml 에 <dependencies> 의존성 관리 (3개 추가)

```
<dependencies>
 <dependency>
     <groupId>jakarta.servlet.jsp.jstl
     <artifactId>jakarta.servlet.jsp.jstl-api</artifactId>
     <version>3.0.0
 </dependency>
 <dependency>
     <groupId>org.glassfish.web
     <artifactId>jakarta.servlet.jsp.jstl</artifactId>
     <version>3.0.1
 </dependency>
 <dependency>
     <groupId>com.mysql
     <artifactId>mysql-connector-j</artifactId>
     <version>8.4.0
 </dependency>
</dependencies>
```



■ 계층적 구조





■ 인덱스 페이지

Good Mall에 오신 것을 환영합니다.





■ 인덱스 페이지

```
<head>
   <meta charset="UTF-8">
   <title>Welcome~ Good Mall...</title>
   <link rel="stylesheet" href="/resources/css/style.css">
</head>
<body>
   <section id="container">
      <div id="main">
          <h2>Good Mall에 오신 것을 환영합니다.</h2>
          <div class="main-pic">
             <img alt="점포" src="/resources/images/store.png">
          </div>
          >
            <a href="/member?action=loginForm">로그인</a> &nbsp;
          </div>
   </section>
</body>
```



style.css

```
#container{
    width: 80%;
    margin: 20px auto;
#main{text-align: center;}
a{text-decoration: none;}
a:hover{text-decoration: underline; }
ul li{margin: 10px;}
∘h2{
    border-bottom: 2px solid □ #ccc;
    padding-bottom: 10px;
.main-pic img{
    width: 40%;
    border-radius: 10px;
table{
    border: 1px solid □ #ccc;
    border-collapse: collapse;
    margin-bottom: 10px;
```



style.css

```
table th, td{
    border: 1px solid □ #ccc;
    padding: 5px 10px;
ul li{list-style: none;}
ul li label{
    width: 80px;
    float: left;
/* login 스타일 */
.btnLogin, .btnJoin{margin-left: 20px;}
/* write 스타일 */
.writeForm, .detail{
    width: 500px;
.writeForm ul, .detail ul{padding: 0;}
textarea{resize: none;}
.btnWrite{
    margin: 10px 10px 10px 350px;
.btnWrite button{padding: 5px;}
```



MemberDTO

```
public class Member {
    private String mid;
    private String passwd;
    private String name;
    private String gender;
    private Timestamp joinDate;
    public Member() {} //기본 생성자
    public Member(String mid, String passwd, String name,
            String gender, Timestamp joinDate) {
        this.mid = mid;
        this.passwd = passwd;
        this.name = name;
        this.gender = gender;
        this.joinDate = joinDate;
```



MemberDTO

```
public String getMid() {
    return mid;
public void setMid(String mid) {
   this.mid = mid;
public String getPasswd() {
    return passwd;
public void setPasswd(String passwd) {
   this.passwd = passwd;
public String getName() {
    return name;
public void setName(String name) {
    this.name = name;
```



MemberDTO

```
public String getGender() {
    return gender;
public void setGender(String gender) {
   this.gender = gender;
public Timestamp getJoinDate() {
    return joinDate;
public void setJoinDate(Timestamp joinDate) {
   this.joinDate = joinDate;
```



■ jspdb > Member 테이블

```
-- member 테이블 생성
create table member(
  mid     varchar(20) primary key,
  passwd    varchar(20) not null,
     name     varchar(30) not null,
     gender    varchar(10),
     joindate timestamp default now()

insert into member values ('today12', 'm1234', '김기용', '남자', now());
```

mid	passwd	name	gender	joindate
today12	m1234	김기용	남자	2025-10-13 17:04:18



■ JDBC 연결 테스트

```
public class DBConnectionTest {
    private static final String URL = "jdbc:mysql://localhost:3306/jspdb";
    private static final String USER = "javauser";
    private static final String PASSWORD = "pwjava";
    public static void main(String[] args) {
        try{
            Connection conn = DriverManager.getConnection(URL, USER, PASSWORD);
            System.out.println(conn + "DB 접속 성공!!");
        }catch(Exception e) {
            e.printStackTrace();
```

com.mysql.cj.jdbc.ConnectionImpl@58ea606cDB 접속 성공!!



DBUtil 클래스

```
public class DBUtil {
    private static final String URL = "jdbc:mysql://localhost:3306/jspdb";
    private static final String USER = "javauser";
    private static final String PASSWORD = "pwjava";
    public static Connection getConnection() {
        try{
            Class.forName("com.mysql.cj.jdbc.Driver");
            return DriverManager.getConnection(URL, USER, PASSWORD);
        }catch(Exception e) {
            e.printStackTrace();
            return null;
```



■ MemberDAO – 회원 가입

```
public void addMember(Member member) {
   String sql = "insert into member(mid, passwd, name, gender, joindate) "
           + "values (?, ?, ?, now())";
   try(Connection conn = DBUtil.getConnection();
           PreparedStatement pstmt = conn.prepareStatement(sql)){
            pstmt.setString(1, member.getMid());
            pstmt.setString(2, member.getPasswd());
            pstmt.setString(3, member.getName());
            pstmt.setString(4, member.getGender());
           pstmt.executeUpdate(); //실행
   }catch(Exception e) {
       e.printStackTrace();
```



■ MemberDAO – 회원 목록

```
public List<Member> getMemberList(){
    List<Member> list = new ArrayList<>();
    String sql = "select * from member";
    try(Connection conn = DBUtil.getConnection();
        PreparedStatement pstmt = conn.prepareStatement(sql);
        ResultSet rs = pstmt.executeQuery()){
        while(rs.next()) {
            Member member = new Member(
                rs.getString("mid"),
                rs.getString("passwd"),
                rs.getString("name"),
                rs.getString("gender"),
                rs.getTimestamp("joindate")
            list.add(member);
    }catch(Exception e) {
        e.printStackTrace();
    return list;
```



■ MemberDAO – 회원 상세(정보)

```
public Member getMember(String mid) {
    Member member = new Member();
    String sql = "select * from member where mid = ?";
    try(Connection conn = DBUtil.getConnection();
            PreparedStatement pstmt = conn.prepareStatement(sql)){
        pstmt.setString(1, mid);
        ResultSet rs = pstmt.executeQuery();
        if(rs.next()) {
            member.setMid(rs.getString("mid"));
            member.setPasswd(rs.getString("passwd"));
            member.setName(rs.getString("name"));
            member.setGender(rs.getString("gender"));
            member.setJoinDate(rs.getTimestamp("joindate"));
    }catch(Exception e) {
        e.printStackTrace();
    return member;
```



■ MemberDAO – 로그인

```
public boolean checkLogin(Member member) {
    String sql = "select * from member where mid=? and passwd=?";
    try(Connection conn = DBUtil.getConnection();
            PreparedStatement pstmt = conn.prepareStatement(sql)){
        pstmt.setString(1, member.getMid());
        pstmt.setString(2, member.getPasswd());
        ResultSet rs = pstmt.executeQuery();
        if(rs.next()) {
            return true;
    }catch(Exception e) {
        e.printStackTrace();
    return false;
```



■ 회원 가입

회원 가입	
아이디	coli
비밀번호	••••
이름	우영우
성별	○남 ◉여
가입 취소	



addMember.jsp

```
<section id="container">
   <h2>회원 가입</h2>
   <form action="/member?action=add" method="post">
       <l
          <label>아이디</label>
              <input type="text" name="mid">
          <
              <label>비밀번호</label>
              <input type="password" name="passwd">
          <
              <label>이름</label>
              <input type="text" name="name">
```



addMember.jsp



■ 회원 목록

회원 목록

Home | [today12]님 로그아웃

번호	아이디	이름	성별	가입일
1	coli	우영우	여자	2025-10-15 16:54:43.0
2	today12	김기용	남자	2025-10-13 17:04:18.0



memberList.jsp

```
<%@ taglib uri="jakarta.tags.core" prefix="c" %>
```

```
<section id="container">
  <h2>회원 목록</h2>
  >
    [${sessionId}]님 <a href="/member?action=logout">로그아웃</a>
  <thead>
      >
        対호
        아이디
        이름
        성별
        가입일
      </thead>
```



memberList.jsp

```
<c:forEach var="member" items="#{memberList}" varStatus="i">

$\{i.count}\
\$\{i.count}\
```



■ 회원 상세 보기

회원 정보

- 아이디: today12
- 비밀번호: m1234
- 이름: 김기용
- 성별: 남자
- 가입일: 2025-10-13 17:04:18.0

목록



memberInfo.jsp

```
<link rel="stylesheet" href="../resources/css/style.css">
</head>
<body>
   <section id="container">
      <h2>회원 정보</h2>
      <l
          이다: ${member.mid}
          시i>비밀번호: ${member.passwd}
          이름: ${member.name}
          성별: ${member.gender}
          기업일: ${member.joinDate}
      <a href="/member?action=list">
          <button type="button">목록</button>
      </a>
   </section>
</body>
```



■ 로그인

로그인	
아이디 비밀번호	coli
로그인 취소	



login.jsp

```
<h2>로그인</h2>
<form action="/member" method="post">
   <input type="hidden" name="action" value="login">
   <l
       <
           <label>아이디</label>
           <input type="text" name="mid">
       <label>비밀번호</label>
           <input type="password" name="passwd">
       <div style="color: red">
       <c:if test="${not empty error}">
         ${error}
       </c:if>
   </div>
   <div class="btnLogin">
       <input type="submit" value="로コピ">
       <input type="reset" value="취소">
   </div>
</form>
```



■ MemberService – 서비스 계층

```
public class MemberService {
    MemberDAO dao = new MemberDAO();
    //회원 가입
    public void addMember(Member member) {
        dao.addMember(member);
    }
    //회원 목록
    public List<Member> getMemberList(){
        return dao.getMemberList();
    }
    //로그인
    public boolean checkLogin(Member member) {
        return dao.checkLogin(member);
    }
    //회원 정보
    public Member getMember(String mid) {
        return dao.getMember(mid);
    }
```



```
@WebServlet("/member")
public class MemberController extends HttpServlet {
    private static final long serialVersionUID = 1L;
    MemberService service = new MemberService(); //인스턴스 생성
    protected void doPost(HttpServletRequest request, HttpServletResponse
        String action = request.getParameter("action");
        String nextPage = "";
        HttpSession session = request.getSession(); //세션 객체 생성
        if(action.equals("list")) {
            List<Member> memberList = service.getMemberList();
            request.setAttribute("memberList", memberList);
            nextPage = "/member/memberList.jsp";
        }else if(action.equals("addForm")) {
            nextPage = "/member/addForm.jsp";
```



```
}else if(action.equals("add")) {
    String mid = request.getParameter("mid");
    String pwd = request.getParameter("passwd");
    String name = request.getParameter("name");
    String gender = request.getParameter("gender");
   Member member = new Member();
   member.setMid(mid);
   member.setPasswd(pwd);
   member.setName(name);
    member.setGender(gender);
    service.addMember(member); //addMember() 호출
    session.setAttribute("sessionId", mid); //세션 발급
    //등록 후 목록 페이지로 이동
    response.sendRedirect("/member?action=list");
    return; //즉시 종료
}else if(action.equals("loginForm")) {
    nextPage = "/member/login.jsp";
```



```
}else if(action.equals("login")) {
   String id = request.getParameter("mid");
   String pw = request.getParameter("passwd");
   Member member = new Member();
   member.setMid(id);
   member.setPasswd(pw);
   boolean result = service.checkLogin(member);
   if(result) {
       session.setAttribute("sessionId", id); //세션 발급
       response.sendRedirect("/member?action=list");
       return;
   }else {
       String error = "아이디나 비밀번호가 일치하지 않습니다.";
       request.setAttribute("error", error);
       nextPage = "/member/login.jsp";
```



```
}else if(action.equals("logout")) {
    session.invalidate();
    nextPage = "index.jsp";
}else if(action.equals("info")) {
   String mid = request.getParameter("mid");
   Member member = service.getMember(mid);
    request.setAttribute("member", member);
    nextPage = "/member/memberInfo.jsp";
//포워딩
RequestDispatcher rd =
        request.getRequestDispatcher(nextPage);
rd.forward(request, response);
```



게시판 관리 프로젝트

■ 인덱스 페이지





게시판 관리 프로젝트

BoardDTO

```
public class Board {
   private int bnum; //글번호
   private String title; //글제목
   private String content; //글내용
   private String mid; //글쓴이(Member join)
   private Timestamp regDate; //작성일
   public int getBnum() {
       return bnum;
   public void setBnum(int bnum) {
       this.bnum = bnum;
   public String getTitle() {
       return title;
   public void setTitle(String title) {
       this.title = title;
```



게시판 관리 프로젝트

BoardDTO

```
public String getContent() {
    return content;
public void setContent(String content) {
    this.content = content;
public String getMid() {
    return mid;
public void setMid(String mid) {
    this.mid = mid;
public Timestamp getRegDate() {
    return regDate;
public void setRegDate(Timestamp regDate) {
    this.regDate = regDate;
```



■ MySQL - 테이블

```
-- board 테이블 생성
create table board(
          int primary key auto increment, -- 자동 순번
   bnum
   title varchar(100) not null,
   content text,
   mid
          varchar(20),
   regdate timestamp default now(),
   foreign key (mid) references member(mid) -- 외래키
   on delete cascade
);
-- 게시글 산인
insert into board (title, content, mid, regdate)
values ('가입 인사', '안녕하세요~ 가입 해요..', 'today12', now());
```



■ BoardDAO – 글 목록 보기

```
public List<Board> getBoardList(){
    List<Board> boardList = new ArrayList<>();
    String sql = "select * from board order by bnum desc";
    try(Connection conn = DBUtil.getConnection();
        PreparedStatement ps = conn.prepareStatement(sql);
        ResultSet rs = ps.executeQuery()){
        while(rs.next()) {
            Board board = new Board();
            board.setBnum(rs.getInt("bnum"));
            board.setTitle(rs.getString("title"));
            board.setContent(rs.getString("content"));
            board.setMid(rs.getString("mid"));
            board.setRegDate(rs.getTimestamp("regdate"));
            boardList.add(board);
    }catch(Exception e) {
        e.printStackTrace();
    return boardList;
```



■ BoardDAO – 글 등록

```
public void addBoard(Board board) {
   String sql = "insert into board(title, content, mid, regdate) "
            + "values (?, ?, ?, now())";
   try(Connection conn = DBUtil.getConnection();
        PreparedStatement ps = conn.prepareStatement(sql)){
        ps.setString(1, board.getTitle());
        ps.setString(2, board.getContent());
        ps.setString(3, board.getMid());
        ps.executeUpdate();
    }catch(Exception e) {
        e.printStackTrace();
```



■ BoardDAO – 글 상세 보기

```
public Board getBoard(int bnum) {
    Board board = new Board();
    String sql = "select * from board where bnum = ?";
    try(Connection conn = DBUtil.getConnection();
        PreparedStatement ps = conn.prepareStatement(sql)){
        ps.setInt(1, bnum);
        ResultSet rs = ps.executeQuery();
        if(rs.next()) {
            board.setBnum(rs.getInt("bnum"));
            board.setTitle(rs.getString("title"));
            board.setContent(rs.getString("content"));
            board.setMid(rs.getString("mid"));
            board.setRegDate(rs.getTimestamp("regdate"));
    }catch(Exception e) {
        e.printStackTrace();
    return board;
```



■ BoardService – 서비스 계층

```
public class MemberService {
   MemberDAO dao = new MemberDAO();
    //회원 가입
    public void addMember(Member member) {
       dao.addMember(member);
    }
    //회원 목록
    public List<Member> getMemberList(){
       return dao.getMemberList();
    }
    //로그인
    public boolean checkLogin(Member member) {
       return dao.checkLogin(member);
    }
    //회원 정보
    public Member getMember(String mid) {
       return dao.getMember(mid);
```



■ BoardController – 컨트롤러 계층

```
@WebServlet("/board")
public class BoardController extends HttpServlet {
    private static final long serialVersionUID = 1L;
    BoardService service = new BoardService();
    protected void doGet(HttpServletRequest request, HttpServletResponse
        doPost(request, response);
    protected void doPost(HttpServletRequest request, HttpServletResponse
        String action = request.getParameter("action");
        String nextPage = "";
        HttpSession session = request.getSession(); //세션 생성
```



■ BoardController – 컨트롤러 계층

```
if("boardList".equals(action)) { //목록 보기
    List<Board> boardList = service.getBoardList();
    request.setAttribute("boardList", boardList);
    nextPage = "/board/boardList.jsp";
}else if("writeForm".equals(action)) { //글쓰기 페이지
    nextPage = "/board/write.jsp";
}else if("write".equals(action)) { //글쓰기 처리
    String title = request.getParameter("title");
    String content = request.getParameter("content");
    String mid = (String)session.getAttribute("sessionId");
    Board board = new Board();
    board.setTitle(title);
    board.setContent(content);
    board.setMid(mid);
    service.addBoard(board); //등록 메서드 호출
    //글쓰기 후 글 목록으로 이동
    response.sendRedirect("/board?action=boardList");
    return;
```



■ BoardController – 컨트롤러 계층

```
}else if("detail".equals(action)) { //글 상세보기
    int bnum = Integer.parseInt(request.getParameter("bnum"));
    Board board = service.getBoard(bnum);
    request.setAttribute("board", board);
    nextPage = "/board/detail.jsp";
//포워딩
RequestDispatcher rd =
        request.getRequestDispatcher(nextPage);
rd.forward(request, response);
```



■ 게시글 목록

게시글 목록

홈으로

글번호	글제목	글쓴이	작성일
3	K-move	today12	2025-10-16 18:25:40.0
2	가을 풍경	coli	2025-10-16 17:12:28.0
1	가입 인사	today12	2025-10-16 17:10:37.0

글쓰기



■ 게시글 목록

```
<head>
  <meta charset="UTF-8">
  <title>게시판 목록</title>
  <link rel="stylesheet" href="../resources/css/style.css">
</head>
<body>
  <section id="container">
     <h2>게시글 목록</h2>
     홈으로</a>
     <thead>
           >
              글번호
              글제목
              글쓴이
              작성일
           </thead>
```



■ 게시글 목록

```
<c:forEach var="board" items="${boardList}">
          ${board.bnum}
             <a href="/board?action=detail&bnum=${board.bnum}">
                    ${board.title}</a>
             ${board.mid}
             <fmt:formatDate value="${board.regDate}"
                       pattern="yyyy-MM-dd HH:mm:ss" />
          </c:forEach>
      <div class="btnWrite">
      <a href="/board?action=writeForm" >
          <button type="button">글쓰기</button>
      </a>
   </div>
</section>
```



■ 게시글 등록

글쓰기는 로그인한 회원만 가능함



로그인	
아이디 비밀번호	
로그인 취소	



■ 게시글 등록

K-Move			
today12			
해외 취업 풀 스택 웹 개발자 괴	· 정		



■ 게시글 등록

```
<section id="container">
   <c:if test="${empty sessionId }">
        <script>
            alert("로그인이 필요합니다.");
            location.href="/member?action=loginForm";
       </script>
   </c:if>
    <h2>글쓰기</h2>
    <form action="/board" method="post" class="writeForm">
        <input type="hidden" name="action" value="write">
        <fieldset>
           <l
               <1i>>
                    <input type="text" name="title" size=62</pre>
                            placeholder="제목">
```



■ 게시글 등록



■ 게시글 상세 보기

가을 옷을 준비 벌써 겨울이 오고있네	글 상세보기		
벌써 겨울이 오고있네	을 옷을 준비		
	써 겨울이 오고있네		
글쓴이: today12 (작성일: 2025-10-20 06:03:34.0)	쓴이: today12 (작성일: 2025-10-2	20 06:03:34.0)	



■ 게시글 상세 보기

```
<h2>게시글 상세보기</h2>
<div class="detail">
   <fieldset>
       <l
           <1i>>
               <input type="text" name="title" size=62</pre>
                       value="${board.title}" readonly>
           <
               <textarea name="content" rows="10" cols="60"</pre>
                       readonly>${board.content}</textarea>
           <1i>
               <input type="text" name="mid" size=62</pre>
                       value="글쓴이: ${board.mid} (작성일: ${board.regDate})">
           </fieldset>
</div>
```



■ 게시글 상세 보기

