

2024년 6월 정보처리산업기사 과정형평가 대비

좌석예약(Reservation) 시스템 프로젝트 파일 구조

	<p>▶ 프로젝트 위치</p> <p>C:\wcbq_수험번호\workspace\HRD_수험번호_reservation</p>
	<p>▶ 이클립스 환경 설정</p> <p>이클립스-Window-Show view-Project Explorer Servers</p>
	<p>▶ 톰캣 서버와 연동(8090 포트 사용)</p> <p>이클립스 하단의 Servers - Tomcat v9.0 Server at localhose 버튼을 클릭하여 [Started, Synchronized] 로 표시 되었는지 확인</p>
	<p>▶ 시험 종료 후, 프로젝트 제출</p> <p>C:\wcbq_수험번호 를 cbq_수험번호.zip으로 압축</p>

수강신청(Register) 시스템 프로젝트 준비 작업

순서	내 용
1	메모장 열어서 SQL 쿼리 작성하고 명령프롬프트 창에 복사/붙여넣기 (테이블 생성, 데이터 입력)
	<p>CREATE TABLE 테이블이름(애트리뷰트1이름 형태(길이) not null, 애트리뷰트2이름 형태(길이), 애트리뷰트3이름 형태(길이), primary key(애트리뷰트1이름) <= 기본키가 2개일때는 primary key(이름1, 이름2)); INSERT INTO 테이블이름 values(‘문자값’, ‘문자값’, 숫자값); <= 숫자에는 따옴표 안함</p>
	명령프롬프트에서 sqlplus system/1234 입력하고 SQL 쿼리 각각 블록지정해서 복사-붙여넣기 해서 입력 SQL 끝나고 나갈때 COMMIT;
2	이클립스(작업영역 위치: C:\wcbq_학번\workspace) FILE-NEW-DYNAMIC WEP PROJECT (Project name: hrd_학번_register) 로 프로젝트 생성
	C:\oraclexe\app\oracle\product\11.2.0\server\jdbc\lib\odjbc6.jar 파일을 복사해서 프로젝트 web-inf\lib 에 붙여넣기
	이클립스-window-preferences- jsp, html. css, spelling, workspace 5가지를 검색하여 Encoding 을 UTF-8로 변경하여 한글이 깨지지 않도록 함.

SQL

```

create table tbl_emp_202108(
empno char(04) not null,
empname varchar2(20),
tel1 char(03),
tel2 char(04),
tel3 char(04),
deptcode char(02),
position char(01),
primary key(empno)
);

create table tbl_seat_202108(
seatno char(04) not null,
office varchar2(20),
callno varchar2(10),
useflag char(01),
primary key(seatno)
);

create table tbl_resv_202108(
resvno char(08) not null,
empno char(04),
resvdate char(08),
seatno char(04),
primary key(resvno)
);

insert into tbl_emp_202108 values('1001', '김사원', '010', '1234', '1111', '10', '1');
insert into tbl_emp_202108 values('1002', '이사원', '010', '1234', '2222', '20', '2');
insert into tbl_emp_202108 values('1003', '박사원', '010', '1234', '3333', '30', '3');
insert into tbl_emp_202108 values('1004', '홍사원', '010', '1234', '4444', '10', '4');
insert into tbl_emp_202108 values('1005', '조사원', '010', '1234', '5555', '20', '1');
insert into tbl_emp_202108 values('1006', '정사원', '010', '1234', '6666', '30', '2');
insert into tbl_emp_202108 values('1007', '황사원', '010', '1234', '7777', '10', '3');

insert into tbl_seat_202108 values('S001', '1층 101호', '777-0001', 'N');
insert into tbl_seat_202108 values('S002', '1층 101호', '777-0002', 'Y');
insert into tbl_seat_202108 values('S003', '1층 101호', '777-0003', 'Y');
insert into tbl_seat_202108 values('S004', '1층 102호', '777-0004', 'Y');
insert into tbl_seat_202108 values('S005', '1층 102호', '777-0005', 'Y');
insert into tbl_seat_202108 values('S006', '1층 102호', '777-0006', 'N');
insert into tbl_seat_202108 values('S007', '1층 103호', '777-0007', 'Y');
insert into tbl_seat_202108 values('S008', '1층 103호', '777-0008', 'Y');
insert into tbl_seat_202108 values('S009', '1층 103호', '777-0009', 'Y');

insert into tbl_resv_202108 values('20210001', '1001', '20211004', 'S002');

```

```
insert into tbl_resv_202108 values('20210002', '1002', '20211004', 'S003');
insert into tbl_resv_202108 values('20210003', '1003', '20211004', 'S004');
insert into tbl_resv_202108 values('20210004', '1004', '20211004', 'S005');
insert into tbl_resv_202108 values('20210005', '1005', '20211005', 'S004');
insert into tbl_resv_202108 values('20210006', '1006', '20211005', 'S005');
insert into tbl_resv_202108 values('20210007', '1007', '20211005', 'S007');
insert into tbl_resv_202108 values('20210008', '1001', '20211005', 'S008');
insert into tbl_resv_202108 values('20210009', '1002', '20211006', 'S002');
insert into tbl_resv_202108 values('20210010', '1003', '20211006', 'S003');
```

header.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>  
<header style="position: fixed; top: 0px; left: 0px; width: 100%; height: 40px; line-height: 40px; text-align:  
center; background-color: orange; font-size: 20px">  
<b>(과정평가형 정보처리산업기사) 자율좌석예약 프로그램 ver 2021-08</b>  
</header>  
  
<nav style="position: fixed; top: 40px; left: 0px; width: 100%; height: 30px; line-height: 30px;  
background-color: pink; padding-left: 20px">  
<a href="insert.jsp">근무좌석예약</a> &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~  
<a href="list.jsp">좌석예약조회</a> &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~  
<a href="count.jsp">근무일수집계</a> &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~  
<a href="index.jsp">홈으로</a> &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~  
</nav>  
</body>  
</html>
```

footer.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>
<footer style="position: fixed; bottom: 0px; left: 0px; width: 100%; height: 30px; line-height: 30px;
background-color: orange; text-align: center">
HRDKOREA Copyright©2021 All rights reserved. Human Resources Development Service of Korea
</footer>
</body>
</html>
```

index.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>
<jsp:include page="header.jsp"></jsp:include>

<section style="position: fixed; top: 70px; left: 0px; width: 100%; height: 100%; background-color: lightgray">
<h2 style="text-align: center">과정평가형 자격 CBQ</h2>
<p style="padding-left: 20px">
국가직무능력표준(NCS: National Competency Standards)으로 설계된 교육·훈련 과정을 체계적으로 이수하고 내·외부
평가를 거쳐 취득하는 구각기술자격입니다. <br><br>
<b>
산업현장 중심의 교육 평가로 더 커지는 능력!<br><br>
알고 있는 것에 할 수 있는 것을 더하는<br><br>
과정평가형 자격은<br><br>
현장 중심형 인재육성을 지원합니다.
</b>
</p>
</section>

<jsp:include page="footer.jsp"></jsp:include>
</body>
</html>
```

db.jsp

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

<%
Class.forName("oracle.jdbc.OracleDriver");
Connection con = DriverManager.getConnection
("jdbc:oracle:thin:@//localhost:1521/xe","system","1234");
%>
```

insert.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>
<script type="text/javascript" src="check.js"></script>
<jsp:include page="header.jsp"></jsp:include>

<section style="position:fixed; top:70px; left:0px; width:100%;
height:100%; background-color:lightgray">
<h2 style="text-align:center"> 근무좌석예약 </h2>
<form method="post" action="i_action.jsp" name="frm" style="display:flex; align-items:center;
justify-content:center">
<table border="1">
    <tr>
        <td> 예약번호 </td>
        <td> <input type="text" name="resvno"> 예)20210001 </td>
    </tr>

    <tr>
        <td> 사원번호 </td>
        <td> <input type="text" name="empno"> 예)1001 </td>
    </tr>

    <tr>
        <td> 근무일자 </td>
        <td> <input type="text" name="resvdate"> 예)20211231 </td>
    </tr>

    <tr>
        <td> 좌석번호 </td>
        <td> <input type="text" name="seatno"> 예)S001 ~ S009 </td>
    </tr>

    <tr style="text-align:center">
        <td colspan="2">
            <input type="button" value="등록" onclick="add()">
            <input type="button" value="다시쓰기" onclick="res()">
        </td>
    </tr>
</table>
</form>
</section>

<jsp:include page="footer.jsp"></jsp:include>
</body>
</html>

```

i_action.jsp

```

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

<%
request.setCharacterEncoding("UTF-8");
String resvno = request.getParameter("resvno");
String empno = request.getParameter("empno");
String resvdate = request.getParameter("resvdate");
String seatno = request.getParameter("seatno");
try{
    String sql="INSERT INTO tbl_resv_202108 values(?,?,?,?)";
    PreparedStatement pstmt = con.prepareStatement(sql);
    pstmt.setString(1, resvno);
    pstmt.setString(2, empno);
    pstmt.setString(3, resvdate);
    pstmt.setString(4, seatno);

    pstmt.executeUpdate();
}
catch(Exception e){
    e.printStackTrace();
}

```

```

}
%>

<jsp:forward page="list.jsp"></jsp:forward>

```

check.js

```

function add(){
    if(frm.resvno.value.length==0){
        alert("예약번호가 입력되지 않았습니다!");
        frm.resvno.focus();
        return false;
    }

    else if(frm.empno.value.length==0){
        alert("사원번호가 입력되지 않았습니다!");
        frm.empno.focus();
        return false;
    }

    else if(frm.resvdate.value.length==0){
        alert("근무일자가 입력되지 않았습니다!");
        frm.resvdate.focus();
        return false;
    }

    else if(frm.seatno.value.length==0){
        alert("좌석번호가 입력되지 않았습니다!");
        frm.seatno.focus();
        return false;
    }

    else
        alert("좌석예약정보가 등록 되었습니다!");
        document.frm.submit();
        return true;
}

function res(){
    alert("정보를 지우고 처음부터 다시 입력합니다!");
    document.frm.reset();
}

function search(){
    if(frm2.empno.value.length==0){
        alert("사원번호가 입력되지 않았습니다.");
        frm2.empno.focus();
        return false;
    }
    else
        document.frm2.submit();
        return true;
}

```

list.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>
<script type="text/javascript" src="check.js"></script>
<jsp:include page="header.jsp"></jsp:include>

<section style="position: fixed; top: 70px; left: 0px; width: 100%; height: 100%; background-color: lightgray">
<h2 style="text-align: center">좌석예약조회</h2>
<form method="post" action="_l_action.jsp" name="frm2" style="display: flex; justify-content: center;
align-items: center; text-align: center">
    <table border="1">
        <tr>
            <td> 사원번호를 입력하시오. </td>
            <td> <input type="text" name="empno"> </td>
        </tr>
        <tr>
            <td colspan="2">
                <input type="button" value="좌석예약조회" onclick="search()"> &nbsp; &nbsp;
                <input type="button" value="홈으로" onclick="window.location='index.jsp'">
            </td>
        </tr>
    </table>
</form>
</section>

<jsp:include page="footer.jsp"></jsp:include>
</body>
</html>

```

l_action.jsp

```

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

<%
request.setCharacterEncoding("UTF-8");

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

try{
    String sql="SELECT * FROM tbl_resv_202108 WHERE empno=?";
    PreparedStatement pstmt = con.prepareStatement(sql);
    pstmt.setString(1, empno);

    ResultSet rs = pstmt.executeQuery();
    if(rs.next()){
        <jsp:forward page="success.jsp"></jsp:forward>
    }
    else
        <jsp:forward page="fail.jsp"></jsp:forward>
}
catch(Exception e){
    e.printStackTrace();
}
%>

```


success.jsp

```

<%@ include file="db.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>
<jsp:include page="header.jsp"></jsp:include>

<section style="position: fixed; top: 70px; left: 0px; width: 100%; height: 100%; background-color: lightgray">
<%
request.setCharacterEncoding("UTF-8");
String empno = request.getParameter("empno");
%>
<h2 style="text-align: center"> 사원번호: <%=empno %> 님의 좌석예약조회 </h2>
<form style="display: flex; justify-content: center; align-items: center; text-align: center">
<table border="1">
    <tr>
        <td> 사원번호 </td>
        <td> 이름 </td>
        <td> 근무일자 </td>
        <td> 좌석번호 </td>
        <td> 좌석위치 </td>
        <td> 내선번호 </td>
    </tr>
</table>
<%
try{
    String sql="SELECT re.empno, empname, resvdate, re.seatno, office, callno "+
                "FROM tbl_emp_202108 em, tbl_seat_202108 se, tbl_resv_202108 re "+
                "WHERE em.empno=re.empno AND se.seatno=re.seatno AND re.empno=?";
    PreparedStatement pstmt = con.prepareStatement(sql);
    pstmt.setString(1, empno);
    ResultSet rs = pstmt.executeQuery();
    while(rs.next()){
        String resvdate = rs.getString(3);
        String date =
resvdate.substring(0,4)+"년"+resvdate.substring(4,6)+"월"+resvdate.substring(6,8)+"일";
        <%
        <tr>
            <td> <%=rs.getString(1) %> </td>
            <td> <%=rs.getString(2) %> </td>
            <td> <%=date %> </td>
            <td> <%=rs.getString(4) %> </td>
            <td> <%=rs.getString(5) %> </td>
            <td> <%=rs.getString(6) %> </td>
        </tr>
        <%
    }
    <%
}
catch(Exception e){
    e.printStackTrace();
}
%>
</table>
</form>

<p style="text-align: center">
    <input type="button" value="돌아가기" onclick="window.location='list.jsp'">
</p>

</section>
<jsp:include page="footer.jsp"></jsp:include>
</body>
</html>

```

fail.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>
<jsp:include page="header.jsp"></jsp:include>

<section style="position: fixed; top: 70px; left: 0px; width: 100%; height: 100%; background-color: lightgray">
<h2 style="text-align: center">좌석예매 정보가 존재하지 않습니다.</h2>
    <p style="text-align:center">
        <input type="button" value="돌아가기" onclick="window.location='list.jsp'">
    </p>
</section>
<jsp:include page="footer.jsp"></jsp:include>
</body>
</html>
```

count.jsp

```

<%@ include file="db.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>
<jsp:include page="header.jsp"></jsp:include>

<section style="position: fixed; top: 70px; left: 0px; width: 100%; height: 100%; background-color: lightgray">
<h2 style="text-align: center">부서별근무일수집계</h2>
<form style="display: flex; justify-content: center; align-items: center; text-align: center">
<table border="1">
    <tr>
        <td style="width: 150px">사원번호 </td>
        <td style="width: 150px">이름 </td>
        <td style="width: 150px">부서명 </td>
        <td style="width: 150px">근무일수 </td>
    </tr>

<%
request.setCharacterEncoding("UTF-8");
try{
    String sql="SELECT re.empno, empname, deptcode, count(resvno) "+
                "FROM tbl_emp_202108 em, tbl_resv_202108 re "+
                "WHERE em.empno=re.empno "+
                "GROUP BY re.empno, empname, deptcode "+
                "ORDER BY deptcode";
    PreparedStatement pstmt = con.prepareStatement(sql);
    ResultSet rs = pstmt.executeQuery();
    while(rs.next()){
        String deptcode = rs.getString(3);
        if(deptcode.equals("10")) deptcode="영업팀";
        else if(deptcode.equals("20")) deptcode="총무팀";
        else deptcode="구매팀";
        %>
        <tr>
            <td> <%=rs.getString(1) %> </td>
            <td> <%=rs.getString(2) %> </td>
            <td> <%=deptcode %> </td>
            <td> <%=rs.getString(4) %> </td>
        </tr>
        <%
    }
}
catch(Exception e){
    e.printStackTrace();
}
%>
</table>
</form>
</section>

<jsp:include page="footer.jsp"></jsp:include>
</body>
</html>

```