



#2022.11.08 최아영

수행평가

A grayscale background image showing a laptop, an open notebook with a pen resting on it, and a smartphone. A solid blue vertical bar is on the left side.

서버프로그램 구현



목차

개발환경,공통 모듈,
서버,배치 구현하기

#1, 프로젝트 생성 및 구성

#2, 화면 구현

#3, 기능 구현

#4, 실행

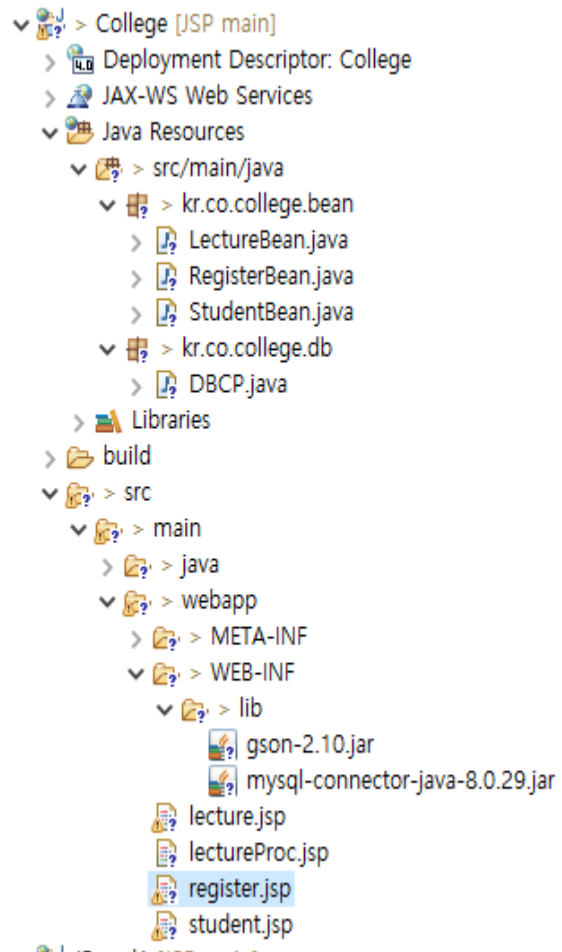


Part 1,

프로젝트 생성 및 구성



프로젝트 생성 및 구성



프로젝트 구조

프로젝트명 : College

WAS : Tomcat 9

DB : java1_college

개발도구 : Eclipse, Workbench

A person is working at a desk with a white Apple monitor, a white keyboard, and a white mouse. The person's hands are visible, typing on the keyboard. A blue overlay is present in the lower-left corner of the image, containing the text "Part 2," and "화면 구현".

Part 2,

화면 구현

Part 2 화면 구현

강좌관리

강좌관리 수강관리 학생관리

강좌현황

등록				
번호	강좌명	학점	시간	강의장
159	인지행동심리학	3	40	본304
167	운영체제론	3	25	본B05
234	중급 영문법	3	20	본201
239	세법개론	3	40	본204
248	빅데이터 개론	3	20	본B01
253	컴퓨팅사고와 코딩	2	10	본B02
349	사회복지 마케팅	2	50	본301

강좌등록

닫기

번호	
강좌명	
학점	
시간	
강의장	
	추가

등록

학번	이름	강좌명	강좌코드	중간시험	기말시험	총점	등급
20201126	234	36	42	78	C		
20201016	248	24	62	86	B		
20201016	253	28	40	68	D		
20201126	239	37	57	94	A		
20210216	349	28	68	96	A		
20210326	349	16	65	81	B		
20201016	167	18	38	56	F		
20220416	349	25	58	83	B		

수강신청

닫기

학번	
이름	
신청강좌	
	신청

학생목록

등록				
학번	이름	휴대폰	학년	주소
20201016	김유신	010-1234-1001	3	null
20201126	김춘추	010-1234-1002	3	경상남도 경주시
20210216	장보고	010-1234-1003	2	전라남도 완도시
20210326	강감찬	010-1234-1004	2	서울시 영등포구
20220416	이순신	010-1234-1005	1	부산시 부산진구
20220521	송상현	010-1234-1006	1	부산시 동래구

학생등록

닫기

학번	
이름	
휴대폰	
학년	
주소	
	추가

Part 3,

기능 구현



Part 3 기능 구현

[SQL연결]

lib
gson-2.10.jar
mysql-connector-java-

```
public class DBCP {  
  
    private static DataSource ds = null;  
  
    public static Connection getConnection() throws NamingException, SQLException {  
        if(ds == null) {  
            ds = (DataSource) new InitialContext().lookup("java:comp/env/dbcp_java1_college");  
        }  
        return ds.getConnection();  
    }  
}
```

<!-- 커넥션 풀 설정 -->

<Resource

```
    name="dbcp_java1_college"  
    auth="Container"  
    type="javax.sql.DataSource"  
    driverClassName="com.mysql.cj.jdbc.Driver"  
    url="jdbc:mysql://127.0.0.1:3306/java1_college"  
    username="root"  
    password="1234"  
    maxTotal="8"  
    maxIdle="8"  
    maxWaitMillis="3000"
```

/>

```

package kr.co.college.bean;

public class LectureBean {
    private int lecNo;
    private String lecName;
    private int lecCredit;
    private int lecTime;
    private String lecClass;

    public int getLecNo() {
        return lecNo;
    }
    public void setLecNo(int lecNo) {
        this.lecNo = lecNo;
    }
    public String getLecName() {
        return lecName;
    }
    public void setLecName(String lecName) {
        this.lecName = lecName;
    }
    public int getLecCredit() {
        return lecCredit;
    }
    public void setLecCredit(int lecCredit) {
        this.lecCredit = lecCredit;
    }
    public int getLecTime() {
        return lecTime;
    }
    public void setLecTime(int lecTime) {
        this.lecTime = lecTime;
    }
    public String getLecClass() {
        return lecClass;
    }
    public void setLecClass(String lecClass) {
        this.lecClass = lecClass;
    }
}

```

```

<%
List<LectureBean> lectures = new ArrayList<>();

try{
    Connection conn = DBCP.getConnection();
    Statement stmt = conn.createStatement();
    ResultSet rs = stmt.executeQuery("select * from `lecture`");

    while(rs.next()){
        LectureBean lb = new LectureBean();
        lb.setLecNo(rs.getInt(1));
        lb.setLecName(rs.getString(2));
        lb.setLecCredit(rs.getInt(3));
        lb.setLecTime(rs.getInt(4));
        lb.setLecClass(rs.getString(5));

        lectures.add(lb);
    }

    rs.close();
    stmt.close();
    conn.close();
} catch (Exception e){
    e.printStackTrace();
}
%>

```

```

<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>강좌관리</title>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.1/jquery.min.js"></script>
<script>
$(function(){

    $('.btnOpen').click(function(){
        $('section').show();
    });

    $('.btnClose').click(function(){
        $('section').hide();
    });

    // 최종 주문하기 버튼
    $('input[type=submit]').click(function(){

        let lecNo = $('input[name=lecNo]').val();
        let lecName = $('input[name=lecName]').val();
        let lecCredit = $('input[name=lecCredit]').val();
        let lecTime = $('input[name=lecTime]').val();
        let lecClass = $('input[name=lecClass]').val();

        let jsonData = {
            "lecNo": lecNo,
            "lecName": lecName,
            "lecCredit": lecCredit,
            "lecTime": lecTime,
            "lecClass": lecClass
        };

        console.log('jsonData : ' + jsonData);

        $.ajax({
            url: './lectureProc.jsp',
            type: 'POST',
            data: jsonData,
            dataType: 'json',
            success: function(data){
                if(data.result == 1){
                    alert('완료!');
                } else {
                    alert('실패!');
                }
            }
        });
    });
});
</script>

```

```

<body>
  <h3>강좌관리</h3>
  <a href="/Lecture.jsp">강좌관리</a>
  <a href="/register.jsp">수강관리</a>
  <a href="/student.jsp">학생관리</a>

  <h4>강좌현황</h4>

  <tr>
    <td colspan="2" align="right"><input type="submit" class="btnOpen" value="등록"/></td>
  </tr>

  <table border="1">

    <tr>
      <th>번호</th>
      <th>강좌명</th>
      <th>학점</th>
      <th>시간</th>
      <th>강의장</th>
    </tr>
    <% for(LectureBean lb : lectures){ %>
    <tr>
      <td><%= lb.getLecNo() %></td>
      <td><%= lb.getLecName() %></td>
      <td><%= lb.getLecCredit() %></td>
      <td><%= lb.getLecTime() %></td>
      <td><%= lb.getLecClass() %></td>
    </tr>
    <% } %>
  </table>

  <section style="display: none">
    <h4>강좌등록</h4>
    <table border="1">
      <button class="btnClose">닫기</button>
      <tr>
        <td>번호</td>
        <td><input type="text" name="LecNo"/></td>
      </tr>
      <tr>
        <td>강좌명</td>
        <td><input type="text" name="LecName"/></td>
      </tr>
      <tr>
        <td>학점</td>
        <td><input type="text" name="LecCredit"/></td>
      </tr>
      <tr>
        <td>시간</td>
        <td><input type="text" name="LecTime"/></td>
      </tr>
      <tr>
        <td>강의장</td>
        <td><input type="text" name="LecClass"/></td>
      </tr>
      <tr>
        <td colspan="2" align="right"><input type="submit" value="추가"/></td>
      </tr>
    </table>
  </section>

```

[college-lectureProc]

```

<%
  request.setCharacterEncoding("utf-8");
  String lecNo = request.getParameter("lecNo");
  String lecName = request.getParameter("lecName");
  String lecCredit = request.getParameter("lecCredit");
  String lecTime = request.getParameter("lecTime");
  String lecClass = request.getParameter("lecClass");

  int result = 0;

  try{
    Connection conn = DBCP.getConnection();
    String sql = "insert into `lecture` (`lecNo`, `lecName`, `lecCredit`, `lecTime`, `lecClass`) ";
    sql += "values (?, ?, ?, ?, ?)";

    PreparedStatement psmt = conn.prepareStatement(sql);
    psmt.setString(1, lecNo);
    psmt.setString(2, lecName);
    psmt.setString(3, lecCredit);
    psmt.setString(4, lecTime);
    psmt.setString(5, lecClass);

    result = psmt.executeUpdate();
    psmt.close();
    conn.close();

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

  // JSON 출력
  JSONObject json = new JSONObject();
  json.addProperty("result", result);

  String jsonData = json.toString();
  out.print(jsonData);
%>

```

```

package kr.co.college.bean;

public class RegisterBean {
    private int regStdNo;
    private int regLecNo;
    private int regMidScore;
    private int regFinalScore;
    private int regTotalScore;
    private String regGrade;

    public int getRegStdNo() {
        return regStdNo;
    }
    public void setRegStdNo(int regStdNo) {
        this.regStdNo = regStdNo;
    }
    public int getRegLecNo() {
        return regLecNo;
    }
    public void setRegLecNo(int regLecNo) {
        this.regLecNo = regLecNo;
    }
    public int getRegMidScore() {
        return regMidScore;
    }
    public void setRegMidScore(int regMidScore) {
        this.regMidScore = regMidScore;
    }
    public int getRegFinalScore() {
        return regFinalScore;
    }
    public void setRegFinalScore(int regFinalScore) {
        this.regFinalScore = regFinalScore;
    }
    public int getRegTotalScore() {
        return regTotalScore;
    }
    public void setRegTotalScore(int regTotalScore) {
        this.regTotalScore = regTotalScore;
    }
    public String getRegGrade() {
        return regGrade;
    }
    public void setRegGrade(String regGrade) {
        this.regGrade = regGrade;
    }
}

<%
    List<RegisterBean> registers = new ArrayList<>();

    try{
        Connection conn = DBCP.getConnection();
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery("select * from `register`");

        while(rs.next()){
            RegisterBean rb = new RegisterBean();
            rb.setRegStdNo(rs.getInt(1));
            rb.setRegLecNo(rs.getInt(2));
            rb.setRegMidScore(rs.getInt(3));
            rb.setRegFinalScore(rs.getInt(4));
            rb.setRegTotalScore(rs.getInt(5));
            rb.setRegGrade(rs.getString(6));

            registers.add(rb);
        }

        rs.close();
        stmt.close();
        conn.close();
    }catch(Exception e){
        e.printStackTrace();
    }
%>

```

```

<body>
    <h3>수강관리</h3>
    <a href="/Lecture.jsp">강좌관리</a>
    <a href="/register.jsp">수강관리</a>
    <a href="/student.jsp">학생관리</a>

    <h4>수강현황</h4>

    <tr>
        <td colspan="2" align="right"><input type="submit" class="btnOpen" value="등록"/></td>
    </tr>

    <table border="1">

        <tr>
            <th>학번</th>
            <th>이름</th>
            <th>강좌명</th>
            <th>강좌코드</th>
            <th>중간시험</th>
            <th>기말시험</th>
            <th>총점</th>
            <th>등급</th>
        </tr>
        <% for(RegisterBean rb : registers){ %>
        <tr>
            <td><%= rb.getRegStdNo() %></td>
            <td><%= rb.getRegLecNo() %></td>
            <td><%= rb.getRegMidScore() %></td>
            <td><%= rb.getRegFinalScore() %></td>
            <td><%= rb.getRegTotalScore() %></td>
            <td><%= rb.getRegGrade() %></td>
        </tr>
        <% } %>
    </table>

    <section style="display: none">
    <h4>수강신청</h4>
    <table border="1">
        <button class="btnClose">닫기</button>
        <tr>
            <td>학번</td>
            <td><input type="text" name="stdNo"/></td>
        </tr>
        <tr>
            <td>이름</td>
            <td><input type="text" name="stdName"/></td>
        </tr>
        <tr>
            <td>신청강좌</td>
            <td><input type="text" name="lecName"/></td>
        </tr>
        <tr>
            <td colspan="2" align="right"><input type="submit" value="신청"/></td>
        </tr>
    </table>
    </section>

```



```
package kr.co.college.bean;

public class StudentBean {
    private int stdNo;
    private String stdName;
    private String stdHp;
    private int stdYear;
    private String stdAddress;

    public int getStdNo() {
        return stdNo;
    }
    public void setStdNo(int stdNo) {
        this.stdNo = stdNo;
    }
    public String getStdName() {
        return stdName;
    }
    public void setStdName(String stdName) {
        this.stdName = stdName;
    }
    public String getStdHp() {
        return stdHp;
    }
    public void setStdHp(String stdHp) {
        this.stdHp = stdHp;
    }
    public int getStdYear() {
        return stdYear;
    }
    public void setStdYear(int stdYear) {
        this.stdYear = stdYear;
    }
    public String getStdAddress() {
        return stdAddress;
    }
    public void setStdAddress(String stdAddress) {
        this.stdAddress = stdAddress;
    }
}
```

```
<%
    List<StudentBean> students = new ArrayList<>();

    try{
        Connection conn = DBCP.getConnection();
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery("select * from `stuc

        while(rs.next()){
            StudentBean sb = new StudentBean();
            sb.setStdNo(rs.getInt(1));
            sb.setStdName(rs.getString(2));
            sb.setStdHp(rs.getString(3));
            sb.setStdYear(rs.getInt(4));
            sb.setStdAddress(rs.getString(5));

            students.add(sb);
        }

        rs.close();
        stmt.close();
        conn.close();
    }catch(Exception e){
        e.printStackTrace();
    }
%>
```

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="UTF-8">
    <title>학생관리</title>
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.1/jquery.min.js"></script>
    <script>
        $(function(){

            $('.btnOpen').click(function(){
                $('#section').show();
            });

            $('.btnClose').click(function(){
                $('#section').hide();
            });

            // 최종 등록 버튼
            $('#input[type=submit]').click(function(){

                let stdNo      = $('#input[name=stdNo]').val();
                let stdName    = $('#input[name=stdName]').val();
                let stdHp      = $('#input[name=stdHp]').val();
                let stdYear    = $('#input[name=stdYear]').val();
                let stdAddress = $('#input[name=stdAddress]').val();

                let jsonData = {
                    "stdNo": stdNo,
                    "stdName": stdName,
                    "stdHp": stdHp,
                    "stdYear": stdYear,
                    "stdAddress": stdAddress
                };

                console.log('jsonData : ' + jsonData);

                $.ajax({
                    url: './studentProc.jsp',
                    type: 'POST',
                    data: jsonData,
                    dataType: 'json',
                    success: function(data){
                        if(data.result == 1){
                            alert('완료!');
                        }else{
                            alert('실패!');
                        }
                    }
                });
            });
        });
    </script>
</head>
<body>
```

```

<uuy>
<h3>학생관리</h3>
<a href="./Lecture.jsp">강좌관리</a>
<a href="./register.jsp">수강관리</a>
<a href="./student.jsp">학생관리</a>

<h4>학생목록</h4>

<tr>
<td colspan="2" align="right"><input type="submit" class="btnOpen" value="등록"/></td>
</tr>

<table border="1">

<tr>
<th>학번</th>
<th>이름</th>
<th>휴대폰</th>
<th>학년</th>
<th>주소</th>
</tr>
<tr>
<td colspan="5"><% for(StudentBean rb : students){ %>
<tr>
<td><%= rb.getStdNo() %></td>
<td><%= rb.getStdName() %></td>
<td><%= rb.getStdHp() %></td>
<td><%= rb.getStdYear() %></td>
<td><%= rb.getStdAddress() %></td>
</tr>
<% } %>
</table>

<section style="display: none">
<h4>학생등록</h4>
<table border="1">
<tr>
<td colspan="5"><button class="btnClose">닫기</button>
<tr>
<td>학번</td>
<td><input type="text" name="stdNo"/></td>
</tr>
<tr>
<td>이름</td>
<td><input type="text" name="stdName"/></td>
</tr>
<tr>
<td>휴대폰</td>
<td><input type="text" name="stdHp"/></td>
</tr>
<tr>
<td>학년</td>
<td><input type="text" name="stdYear"/></td>
</tr>
<tr>
<td>주소</td>
<td><input type="text" name="stdAddress"/></td>
</tr>
<tr>
<td colspan="2" align="right"><input type="submit" value="추가"/></td>
</tr>
</table>
</section>

```

[college-studentProc]

```

<%
request.setCharacterEncoding("utf-8");
String stdNo = request.getParameter("stdNo");
String stdName = request.getParameter("stdName");
String stdHp = request.getParameter("stdHp");
String stdYear = request.getParameter("stdYear");
String stdAddress = request.getParameter("stdAddress");

int result = 0;

try{
Connection conn = DBCP.getConnection();
String sql = "insert into `lecture` (`stdNo`, `stdName`, `stdHp`, `stdYear`, `stdAddress`) ";
sql += "values (?, ?, ?, ?, ?)";

PreparedStatement psmt = conn.prepareStatement(sql);
psmt.setString(1, stdNo);
psmt.setString(2, stdName);
psmt.setString(3, stdHp);
psmt.setString(4, stdYear);
psmt.setString(5, stdAddress);

result = psmt.executeUpdate();
psmt.close();
conn.close();

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

// JSON 출력
JsonObject json = new JsonObject();
json.addProperty("result", result);

String jsonData = json.toString();
out.print(jsonData);
%>

```

A close-up photograph of a brown leather bag with a strap, resting on a dark blue textured surface. Inside the bag, a black smartphone, a brown notebook with a red elastic band, a red and silver pen, and a pair of black-rimmed glasses are visible.

Part 4,

실행

Part 4

실행 [lecture]

강좌관리

강좌관리 수강관리 학생관리

강좌현황

등록

번호	강좌명	학점	시간	강의장
159	인지행동심리학	3	40	본304
167	운영체제론	3	25	본B05
234	중급 영문법	3	20	본201
239	세법개론	3	40	본204
248	빅데이터 개론	3	20	본B01
253	컴퓨팅사고와 코딩	2	10	본B02
349	사회복지 마케팅	2	50	본301

강좌등록

닫기

번호	123
강좌명	테스트1
학점	1
시간	10
강의장	본B101
추가	

강좌현황

등록

번호	강좌명	학점	시간	강의장
123	테스트1	1	10	본B101
159	인지행동심리학	3	40	본304
167	운영체제론	3	25	본B05
234	중급 영문법	3	20	본201
239	세법개론	3	40	본204
248	빅데이터 개론	3	20	본B01
253	컴퓨팅사고와 코딩	2	10	본B02
349	사회복지 마케팅	2	50	본301

강좌관리

[강좌관리](#) [수강관리](#) [학생관리](#)

수강현황

[등록](#)

학번	이름	강좌명	강좌코드	중간시험	기말시험	총점	등급
20201126	234	36	42	78	C		
20201016	248	24	62	86	B		
20201016	253	28	40	68	D		
20201126	239	37	57	94	A		
20210216	349	28	68	96	A		
20210326	349	16	65	81	B		
20201016	167	18	38	56	F		
20220416	349	25	58	83	B		

수강신청

닫기

학번

이름

신청강좌

신청

Part 4

실행 [student]

강좌관리

[강좌관리](#) [수강관리](#) [학생관리](#)



학생목록

[등록](#)

학번	이름	휴대폰	학년	주소
20201016	김유신	010-1234-1001	3	null
20201126	김춘추	010-1234-1002	3	경상남도 경주시
20210216	장보고	010-1234-1003	2	전라남도 완도시
20210326	강감찬	010-1234-1004	2	서울시 영등포구
20220416	이순신	010-1234-1005	1	부산시 부산진구
20220521	송상현	010-1234-1006	1	부산시 동래구



학생등록

닫기

학번	<input type="text"/>
이름	<input type="text"/>
휴대폰	<input type="text"/>
학년	<input type="text"/>
주소	<input type="text"/>
<input type="button" value="추가"/>	

A night sky with a starry background and a blue rectangular overlay. The overlay is a solid blue rectangle that covers the middle portion of the image. The text "감사합니다." is written in white, bold Korean characters in the center of this rectangle. The background shows a dark blue sky with many small stars and a faint, glowing band of light, possibly the Milky Way, curving across the upper right portion of the frame. Below the blue rectangle, the dark silhouettes of mountains or hills are visible against the night sky.

감사합니다.