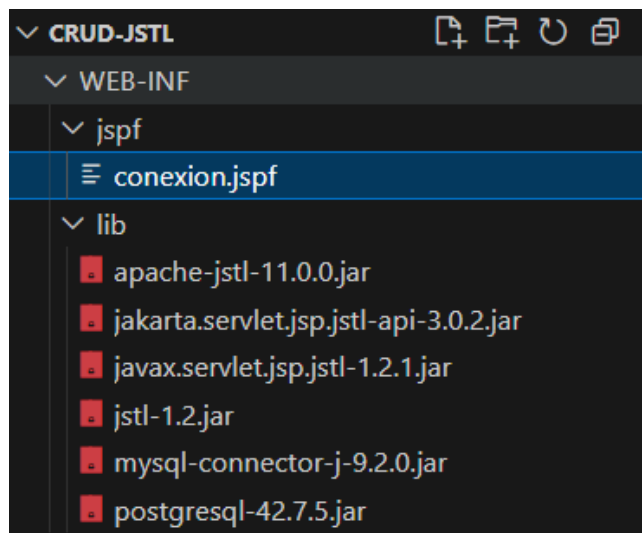


## CRUD EN JSTL CONECTADO A BASE DE DATOS

Crear la base de datos

```
CREATE TABLE categoria (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    descripcion VARCHAR(15) NOT NULL  
);  
  
CREATE TABLE profesor (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    cedula VARCHAR(15),  
    nombre VARCHAR(40),  
    area VARCHAR(25),  
    telefono VARCHAR(20),  
    id_categoria INT NOT NULL,  
    CONSTRAINT fk_categoria FOREIGN KEY (id_categoria) REFERENCES categoria(id)  
);  
  
INSERT INTO categoria (descripcion) VALUES ('DOCTORADO');  
  
COMMIT;  
  
INSERT INTO profesor (cedula, nombre, area, telefono, id_categoria)  
VALUES ('10111011', 'Carlos', 'Sistemas', '3154989845', 1);  
  
Select PROFESOR.ID, PROFESOR.CEDULA as cedula, PROFESOR.NOMBRE as nombre,  
    PROFESOR.AREA as area, CATEGORIA.DESCRIPCION as descripcion  
from PROFESOR  
left join CATEGORIA  
on PROFESOR.ID_CATEGORIA=CATEGORIA.ID;
```

Agregar las dependencias y crear el archivo conexión.jspf



## Conectarlo con la base de datos en conexión.jspf

```
WEB-INF > jspf > conexion.jspf
1  <%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8" %>
2  <%@ taglib prefix="sql" uri="http://java.sun.com/jsp/jstl/sql" %>
3
4  <sql:setDataSource
5  √ var="universidad"
6      driver="com.mysql.cj.jdbc.Driver"
7      url="jdbc:mysql://localhost:3306/universidad"
8      user="root"
9      password=""
10 />
11
```

## Crear index.jsp en donde se visualizaran la tabla con la informacion guardada

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib prefix="sql" uri="http://java.sun.com/jsp/jstl/sql" %>

<%@ include file="/WEB-INF/jspf/conexion.jspf" %>

<!DOCTYPE html>
<html lang="es">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>SISTEMA UNIVERSITARIO</title>

    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
</head>
<body>

    <nav class="navbar navbar-dark bg-dark">
        <a class="navbar-brand" href="index.jsp">Sistema Universitario</a>
    </nav>

    <div class="container mt-4">
        <h2 class="text-center">Datos de Profesores</h2>

        <sql:query var="result" dataSource="${universidad}">
            SELECT P.ID, P.CEDULA, P.NOMBRE, P.AREA, P.ID_CATEGORIA, C.DESCRIPCION AS categoria
            FROM PROFESOR P
            LEFT JOIN CATEGORIA C ON P.ID_CATEGORIA = C.ID;
        </sql:query>

        <div class="table-responsive">
            <table class="table table-striped table-bordered">
                <thead class="thead-dark">
                    <tr>
                        <th>Cedula</th>
                        <th>Nombre</th>
                        <th>Area</th>
                        <th>Categoria</th>
                    </tr>
                </thead>
            </table>
        </div>
    </div>
</body>
</html>
```

```

        <th colspan="2" class="text-center">Acciones</th>
    </tr>
</thead>
<tbody>
    <c:forEach var="fila" items="${result.rows}">
        <tr>
            <td><c:out value="${fila.cedula}" /></td>
            <td><c:out value="${fila.nombre}" /></td>
            <td><c:out value="${fila.area}" /></td>
            <td><c:out value="${fila.descripcion}" /></td>
            <td class="text-center">
                <form action="eliminarProfesor.jsp" method="get">
                    <input type="hidden" name="id" value="${fila.id}">
                    <button type="submit" class="btn btn-danger btn-sm">Eliminar</button>
                </form>
            </td>
            <td class="text-center">
                <form action="actualizarProfesor.jsp" method="get">
                    <input type="hidden" name="id" value="${fila.id}">
                    <button type="submit" class="btn btn-success btn-sm">Editar</button>
                </form>
            </td>
        </tr>
    </c:forEach>
</tbody>
</table>
</div>

<div class="text-center">
    <a href="agregarProfesor.jsp" class="btn btn-info">Nuevo Profesor</a>
</div>
</div>

```

## Crear agregarProfesor.jsp

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib prefix="sql" uri="http://java.sun.com/jsp/jstl/sql" %>

<%@ include file="/WEB-INF/jspf/conexion.jspf" %>
<!DOCTYPE html>
<html lang="es">
<head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>Sistema Universitario</title>

    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
</head>
<body>

    <nav class="navbar navbar-dark bg-dark">
        <a class="navbar-brand" href="#">Sistema Universitario</a>
    </nav>

    <div class="container mt-4">
        <h2 class="text-center">Agregar Profesor</h2>

        <c:if test="${param.nombre == null}">
            <div class="card shadow-sm p-4">
                <form method="post">
                    <input type="hidden" name="id" value="${fila.id}"/>

                    <div class="form-group">
                        <label>Cedula</label>
                        <input type="text" name="cedula" class="form-control" value="${fila.cedula}" required>
                    </div>

                    <div class="form-group">
                        <label>Nombre</label>
                        <input type="text" name="nombre" class="form-control" value="${fila.nombre}" required>
                    </div>

                    <div class="form-group">
                        <label>Area</label>
                        <input type="text" name="area" class="form-control" value="${fila.area}" required>
                    </div>

                    <div class="form-group">
                        <label>Telefono</label>
                        <input type="text" name="telefono" class="form-control" value="${fila.telefono}" required>
                    </div>
                </form>
            </div>
        </c:if>
    </div>
</body>
</html>
```

```

        <div class="form-group">
            <label>Categoria</label>
            <sql:query var="rsCategoria" dataSource="${universidad}">
                SELECT * FROM categoria
            </sql:query>
            <select name="id_categoria" class="form-control" required>
                <option value="">-- Seleccione --</option>
                <c:forEach var="item" items="${rsCategoria.rows}">
                    <option value="${item.id}" <c:if test="${param.id_categoria eq item.id}">selected</c:if>>
                        <c:out value="${item.descripcion}" />
                    </option>
                </c:forEach>
            </select>
        </div>

        <div class="text-center">
            <button type="submit" class="btn btn-success">Insertar</button>
            <a href="index.jsp" class="btn btn-secondary">Cancelar</a>
        </div>
    </form>
</div>
</c:if>

<c:if test="${param.nombre != null}">
    <div class="alert alert-info mt-4">
        <p><strong>Categoria seleccionada:</strong>
            <c:forEach var="item" items="${rsCategoria.rows}">
                <c:if test="${param.id_categoria eq item.id}">
                    <c:out value="${item.descripcion}" />
                </c:if>
            </c:forEach>
        </p>
    </div>

    <sql:update var="result" dataSource="${universidad}">
        INSERT INTO profesor (nombre, cedula, area, telefono, id_categoria)
        VALUES ('${param.nombre}', '${param.cedula}', '${param.area}', '${param.telefono}', '${param.id_categoria}')
    </sql:update>

    <c:if test="${result == 1}">

```

```

        <sql:update var="result" dataSource="${universidad}">
            INSERT INTO profesor (nombre, cedula, area, telefono, id_categoria)
            VALUES ('${param.nombre}', '${param.cedula}', '${param.area}', '${param.telefono}', '${param.id_categoria}')
        </sql:update>

        <c:if test="${result == 1}">
            <div class="alert alert-success text-center">
                <p>Registro Insertado Satisfactoriamente!</p>
                <a href="index.jsp" class="btn btn-primary">Regresar</a>
            </div>
        </c:if>
    </c:if>
</div>

<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"></script>
<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.9.3/dist/umd/popper.min.js"></script>
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
</script>
</body>
</html>

```

## Crear actualizarProfesor.jsp

```
<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix="sql" uri="http://java.sun.com/jsp/jstl/sql" %>
<%@ include file="WEB-INF/jspf/conexion.jspf" %>

<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Sistema Universitario</title>
  <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
</head>
<body class="bg-light">

  <div class="container mt-5">
    <div class="card shadow">
      <div class="card-header bg-primary text-white text-center">
        <h2>Actualizar Profesor</h2>
      </div>
      <div class="card-body">
        <c:if test="${param.modifica == null}">
          <sql:query var="profesores" dataSource="${universidad}">
            SELECT * FROM profesor WHERE id = ?
          <sql:param value="${param.id}" />
        </sql:query>

        <form action="actualizarProfesor.jsp" method="post">
          <c:forEach var="itema" items="${profesores.rows}">
            <input type="hidden" name="id" value="${itema.id}" />

            <div class="form-group">
              <label>Cedula</label>
              <input type="text" class="form-control" name="cedula" value="${itema.cedula}" required>
            </div>

            <div class="form-group">
```

```
              <label>Nombre</label>
              <input type="text" class="form-control" name="nombre" value="${itema.nombre}" required>
            </div>

            <div class="form-group">
              <label>Area</label>
              <input type="text" class="form-control" name="area" value="${itema.area}" required>
            </div>

            <div class="form-group">
              <label>Telefono</label>
              <input type="text" class="form-control" name="telefono" value="${itema.telefono}" required>
            </div>

            <div class="form-group">
              <label>Categoria</label>
              <sql:query var="rsCategoria" dataSource="${universidad}">
                SELECT * FROM categoria
              </sql:query>
              <select name="id_categoria" class="form-control" required>
                <option value="">-- Seleccione --</option>
                <c:forEach var="item" items="${rsCategoria.rows}">
                  <option value="${item.id}" <c:if test="${param.id_categoria eq item.id}">selected</c:if> >
                    <c:out value="${item.descripcion}" />
                  </option>
                </c:forEach>
              </select>
            </div>
          </c:forEach>
        </form>
      </div>
    </div>
  </div>
```

```

        <div class="text-center">
            <input type="submit" class="btn btn-success" value="Actualizar">
            <input type="hidden" name="modifica" value="SI"/>
            <a href="index.jsp" class="btn btn-secondary">Cancelar</a>
        </div>
    </c:forEach>
</form>
</c:if>

<c:if test="${param.modifica != null}">
    <sql:update var="updateResult" dataSource="${universidad}">
        UPDATE profesor
        SET cedula = '${param.cedula}',
            nombre = '${param.nombre}',
            area = '${param.area}',
            telefono = '${param.telefono}',
            id_categoria = ${param.id_categoria}
        WHERE id = ${param.id}
    </sql:update>

    <c:if test="${updateResult == 1}">
        <div class="alert alert-success">
            Profesor actualizado correctamente.
        </div>
        <div class="text-center">
            <a href="index.jsp" class="btn btn-primary">Volver</a>
        </div>
    </c:if>

    <c:if test="${updateResult != 1}">
        <div class="alert alert-danger">
            Ocurrió un error al actualizar el profesor. Intenta nuevamente.
        </div>
        <div class="text-center">
            <a href="index.jsp" class="btn btn-secondary">Volver</a>
        </div>
    </c:if>
</c:if>
</div>
</div>

```

## Crear eliminarProfesor.jsp

```
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@taglib prefix="sql" uri="http://java.sun.com/jsp/jstl/sql" %>
<%@include file="WEB-INF/jspf/conexion.jspf" %>

<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Sistema Universitario</title>
  <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
</head>
<body class="bg-light">

  <div class="container mt-5">
    <div class="text-center">
      <h1 class="text-primary">Sistema Universitario</h1>
      <h2 class="text-danger">Eliminar Profesor</h2>
    </div>

    <c:if test="${param.id != null}">
      <sql:update var="result" dataSource="${universidad}">
        DELETE FROM profesor WHERE id = ${param.id}
      </sql:update>

      <c:if test="${result == 1}">
        <div class="alert alert-success text-center" role="alert">
          Registro Eliminado Satisfactoriamente...
        </div>
        <div class="text-center">
          <a href="index.jsp" class="btn btn-primary">Regresar al Inicio</a>
        </div>
      </c:if>
    </c:if>
  </div>

  <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"></script>
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@4.5.2/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```