통합구현

수행평가

날짜 : 2022/11/18

이름: 공민혁

목차

- 1. 프로젝트 생성 및 구성화면
- 2. 화면구현
- 3.기능 구현
- 4.실행

1. 프로젝트 생성

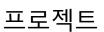
- 프로젝트명 : Bookstore2

- WAS: Tomcat 9

- DB: java1_bookstore

- 개발도구 : Eclipse, Workbench, HeidiSQL







DB

2. 화면 구현

BookStore

도서목록 고객목록

도서목록



처음으로 도서등록

| 도서번호 | 도서명 | 출판사 | 가격 | 관리 |
|------|--------|-------|-------|-------|
| 1 | 축구의 역사 | 굿스포츠 | 7000 | 수정 삭제 |
| 2 | 축구이해함 | 미디어대한 | 50020 | 수정 삭제 |

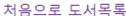


도서등록

도서수정

처음으로 도서목록

| 도서번호 | |
|------|------|
| 도서명 | |
| 출판사 | |
| 가격 | |
| | 등록하기 |



| <u> 서음으로 .</u> | <u>노서목독</u> |
|----------------|-------------|
| 도서번호 | 1 |
| 도서명 | 축구의 역사 |
| 출판사 | 굿스포츠 |
| 가격 | 7000 |
| | 수정 |



고객목록

처음으로 고객등록

| 고객번호 | 고객명 | 주소 | 휴대폰 | 관리 |
|------|-----|---------|---------------|--------------|
| 9 | 공고공 | 부산시 서울구 | 010-1234-2231 | <u>수정 삭제</u> |



고객등록

처음으로 고객목록





처으으로 고개모로

고객수정

| <u> </u> | <u> </u> | |
|----------|---------------|----|
| 고객번호 | 9 | |
| 고객명 | 공고공 | |
| 주소 | 부산시 서울구 | |
| 휴대폰 | 010-1234-2231 | |
| | | 수정 |

3. 기능구현 - vo

```
package vo;
public class BookVO {
    private int bookId;
    private String bookName;
    private String pubName;
    private int price;
    public int getBookId() {
        return bookId;
   public void setBookId(int bookId) {
        this.bookId = bookId;
   public void setBookId(String bookId) {
        this.bookId = Integer.parseInt(bookId);
    public String getBookName() {
        return bookName;
   public void setBookName(String bookName) {
        this.bookName = bookName;
   public String getPubName() {
        return pubName;
   public void setPubName(String pubName) {
        this.pubName = pubName;
   public int getPrice() {
        return price;
    public void setPrice(int price) {
        this.price = price;
   public void setPrice(String price) {
        this.price = Integer.parseInt(price);
```

```
package vo;
public class CustomerVO {
    private int cusId;
    private String cusName;
    private String cusAddr;
    private String cusHp;
    public int getCusId() {
       return cusId;
    public void setCusId(int cusId) {
       this.cusId = cusId;
   public void setCusId(String cusId) {
       this.cusId = Integer.parseInt(cusId);
    public String getCusName() {
       return cusName;
   public void setCusName(String cusName) {
       this.cusName = cusName;
   public String getCusAddr() {
       return cusAddr;
    public void setCusAddr(String cusAddr) {
       this.cusAddr = cusAddr;
    public String getCusHp() {
       return cusHp;
    public void setCusHp(String cusHp) {
       this.cusHp = cusHp;
```

3. 기능구현 - DB, 커넥션풀

```
package db;
import java.sql.Connection; ...
public class DBHelper {
     protected Connection conn = null;
     protected PreparedStatement psmt = null;
     protected Statement stmt = null;
    protected ResultSet rs = null;
    public Connection getConnection() {
             DataSource ds = (DataSource) new InitialContext().lookup("java:comp/env/dbcp java1 bookstore");
             conn = ds.getConnection();
         }catch (Exception e) {
             e.printStackTrace();
         return conn;
     public void close() {
             if(rs != null) {
                rs.close();
             if(stmt != null) {
                 stmt.close();
             if(psmt != null) {
                psmt.close();
             if(conn != null) {
                 conn.close();
         }catch (Exception e) {
             e.printStackTrace();
```

```
Resource

name="dbcp_java1_bookstore"
auth="Container"
type="javax.sql.DataSource"
driverClassName="com.mysql.cj.jdbc.Driver"
url="jdbc:mysql://127.0.0.1:3306/java1_bookstore"
username="root"
password="1234"
maxTotal="8"
maxIdle="8"
maxWaitMillis="3000"
/>
```

3. 기능구현 - dao (book)

public void modifyBook (BookVO vo) {

conn = getConnection();

psmt.setString(1, vo.getBookName());

psmt.setString(2, vo.getPubName());

psmt.setInt(3, vo.getPrice());

psmt.setInt(4, vo.getBookId()); psmt.executeUpdate();

try {

close();

```
public class BookDAO extends DBHelper{
   private static BookDAO instance = new BookDAO();
   public static BookDAO getInstance() {
       return instance;
   private BookDAO() {}
   public BookVO selectBook (String bookName) {
       BookVO vo = null;
       try {
           conn = getConnection();
           psmt = conn.prepareStatement("select * from `book` where `bookName`=?");
           psmt.setString(1, bookName);
           rs = psmt.executeQuery();
           if(rs.next()) {
               vo = new BookVO();
               vo.setBookId(rs.getInt(1));
               vo.setBookName(rs.getString(2));
               vo.setPubName(rs.getString(3));
               vo.setPrice(rs.getInt(4));
           close();
       }catch (Exception e) {
           e.printStackTrace();
       return vo;
   public List<BookVO> selectBooks() {
       List<BookVO> books = new ArrayList<>();
       try {
           conn = getConnection();
           stmt = conn.createStatement();
           rs = stmt.executeQuery("select * from `book`");
```

```
100
       rs = stmt.executeQuery("select * from `book`");
                                                                                 }catch (Exception e) {
       while(rs.next()) {
                                                                                      e.printStackTrace();
           BookVO vo = new BookVO();
           vo.setBookId(rs.getInt(1));
           vo.setBookName(rs.getString(2));
           vo.setPubName(rs.getString(3));
                                                                            public void deleteBook (String BookName) {
           vo.setPrice(rs.getInt(4));
                                                                                 try {
           books.add(vo);
                                                                                      conn = getConnection();
                                                                                      psmt = conn.prepareStatement("delete from `book` where `bookName'=?");
       close();
                                                                                      psmt.setString(1, BookName);
                                                                                      psmt.executeUpdate();
    }catch (Exception e) {
                                                                                      close();
       e.printStackTrace();
                                                                                 }catch (Exception e) {
    return books;
                                                                                      e.printStackTrace();
public void insertBook (BookVO vo) {
   try {
       conn = getConnection();
       psmt = conn.prepareStatement("insert into `book` values (?,?,?,?)");
       psmt.setInt(1, vo.getBookId());
       psmt.setString(2, vo.getBookName());
       psmt.setString(3, vo.getPubName());
       psmt.setInt(4, vo.getPrice());
       psmt.executeUpdate();
       close();
    }catch (Exception e) {
       e.printStackTrace();
```

psmt = conn.prepareStatement("update `book` set `bookName`=?, `pubName`=?, `price`=? where `bookId`=?");

3. 기능구현 - dao (customer)

```
public class CustomerDAO extends DBHelper{
   private static CustomerDAO instance = new CustomerDAO();
   public static CustomerDAO getInstance() {
        return instance;
   private CustomerDAO() {}
   public CustomerVO selectBook (String CusName) {
       CustomerVO vo = null:
        try {
            conn = getConnection();
            psmt = conn.prepareStatement("select * from `customer` where `CusName`=?");
            psmt.setString(1, CusName);
           rs = psmt.executeQuery();
            if(rs.next()) {
               vo = new CustomerVO();
               vo.setCusId(rs.getInt(1));
               vo.setCusName(rs.getString(2));
               vo.setCusAddr(rs.getString(3));
               vo.setCusHp(rs.getString(4));
            close();
        }catch (Exception e) {
            e.printStackTrace();
        return vo;
   public List<CustomerVO> selectCustomers() {
        List<CustomerVO> customers = new ArrayList<>();
        try {
           conn = getConnection();
           stmt = conn.createStatement();
           rs = stmt.executeQuery("select * from `customer`");
```

```
while(rs.next()) {
                                                                                     }catch (Exception e) {
           CustomerVO vo = new CustomerVO();
                                                                                          e.printStackTrace();
           vo.setCusId(rs.getInt(1));
           vo.setCusName(rs.getString(2));
           vo.setCusAddr(rs.getString(3));
           vo.setCusHp(rs.getString(4));
                                                                                public void deleteCustomer (String CusName) {
           customers.add(vo);
                                                                                     try {
                                                                                          conn = getConnection();
                                                                                          psmt = conn.prepareStatement("delete from `customer` where `CusName`=?");
       close();
                                                                                          psmt.setString(1, CusName);
    }catch (Exception e) {
                                                                                          psmt.executeUpdate();
       e.printStackTrace();
                                                                                          close();
   return customers;
                                                                                     }catch (Exception e) {
                                                                                          e.printStackTrace();
public void insertCustomer (CustomerVO vo) {
       conn = getConnection();
       psmt = conn.prepareStatement("insert into `customer` values (?,?,?,?)");
       psmt.setInt(1, vo.getCusId());
       psmt.setString(2, vo.getCusName());
       psmt.setString(3, vo.getCusAddr());
       psmt.setString(4, vo.getCusHp());
       psmt.executeUpdate();
       close();
    }catch (Exception e) {
       e.printStackTrace();
public void modifyCustomer (CustomerVO vo) {
   try {
       conn = getConnection();
       psmt = conn.prepareStatement("update `customer` set `CusName`=?, `CusAddr`=?, `CusHp`=? where `CusId`=?");
       psmt.setString(1, vo.getCusName());
       psmt.setString(2, vo.getCusAddr());
       psmt.setString(3, vo.getCusHp());
       psmt.setInt(4, vo.getCusId());
       psmt.executeUpdate();
       close();
```

3. 기능구현 - controller(book)

```
package controller.book;
import java.io.IOException;
@MebServlet("/book/list.do")
public class ListController extends HttpServlet{
    private static final long serialVersionUID = 1L;

    @Override
    public void init() throws ServletException {
    }

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
        List<BookVO> books = BookDAO.getInstance().selectBooks();
        req.setAttribute("books", books);

        RequestDispatcher dispatcher = req.getRequestDispatcher("/book/list.jsp");
        dispatcher.forward(req, resp);
    }

    @Override
    protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
    }
}
```

List(목록)

```
package controller.book;
import java.io.IOException; ...
@WebServlet("/book/register.do")
public class RegisterController extends HttpServlet{
    private static final long serialVersionUID = 1L;
    @Override
    public void init() throws ServletException {
    protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
        RequestDispatcher dispatcher = req.getRequestDispatcher("/book/register.jsp");
        dispatcher.forward(req, resp);
    @Override
    protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
        String bookId = req.getParameter("bookId");
        String bookName = req.getParameter("bookName");
        String pubName = req.getParameter("pubName");
        String price = req.getParameter("price");
        BookVO vo = new BookVO();
        vo.setBookId(bookId);
        vo.setBookName(bookName);
        vo.setPubName(pubName);
        vo.setPrice(price);
        BookDAO.getInstance().insertBook(vo);
        resp.sendRedirect("/Bookstore2/book/list.do");
                                           Register(등록)
```

3. 기능구현 - controller(book)

```
package controller.book;
import java.io.IOException;
@WebServlet("/book/modify.do")
public class ModifyController extends HttpServlet{
   private static final long serialVersionUID = 1L;
    @Override
    public void init() throws ServletException {
    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
       String bookName = req.getParameter("bookName");
       BookVO vo = BookDAO.getInstance().selectBook(bookName);
       req.setAttribute("vo", vo);
       RequestDispatcher dispatcher = req.getRequestDispatcher("/book/modify.jsp");
       dispatcher.forward(req, resp);
    @Override
    protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
       String bookId = req.getParameter("bookId");
       String bookName = req.getParameter("bookName");
       String pubName = req.getParameter("pubName");
       String price = req.getParameter("price");
       BookVO vo = new BookVO();
       vo.setBookId(bookId);
       vo.setBookName(bookName);
       vo.setPubName(pubName);
       vo.setPrice(price);
       BookDAO.getInstance().modifyBook(vo);
       resp.sendRedirect("/Bookstore2/book/list.do");
```

modify(수정)

```
package controller.book;

import java.io.IOException;
@WebServlet("/book/delete.do")
public class DeleteController extends HttpServlet{
    private static final long serialVersionUID = 1L;

@Override
    public void init() throws ServletException {
    }

@Override
    protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
        String bookName = req.getParameter("bookName");
        BookDAO.getInstance().deleteBook(bookName);
        resp.sendRedirect("/Bookstore2/book/list.do");

}

@Override
    protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
    }
}
```

delete(삭제)

3. 기능구현 - controller(customer)

```
package controller.customer;
import java.io.IOException;
@MebServlet("/customer/list.do")
public class ListController extends HttpServlet{
    private static final long serialVersionUID = 1L;

    @Override
    public void init() throws ServletException {
    }

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
        List<CustomerVO> customers = CustomerDAO.getInstance().selectCustomers();
        req.setAttribute("customers", customers);

        RequestDispatcher dispatcher = req.getRequestDispatcher("/customer/list.jsp");
        dispatcher.forward(req, resp);
    }
    @Override
    protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
     }
}
```

```
package controller.customer;
import java.io.IOException;
@WebServlet("/customer/register.do")
public class RegisterController extends HttpServlet{
    private static final long serialVersionUID = 1L;
    public void init() throws ServletException {
    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
        RequestDispatcher dispatcher = req.getRequestDispatcher("/customer/register.jsp");
        dispatcher.forward(req, resp);
    @Override
    protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
        String cusId = req.getParameter("cusId");
        String cusName = req.getParameter("cusName");
        String cusAddr = req.getParameter("cusAddr");
        String cusHp = req.getParameter("cusHp");
        CustomerVO vo = new CustomerVO();
        vo.setCusId(0);
        vo.setCusName(cusName);
        vo.setCusAddr(cusAddr);
        vo.setCusHp(cusHp);
        CustomerDAO.getInstance().insertCustomer(vo);
        resp.sendRedirect("/Bookstore2/customer/list.do");
```

List(목록)

Register(등록)

3. 기능구현 - controller(customer)

```
package controller.customer;
import java.io.IOException; ...
@WebServlet("/customer/modify.do")
public class ModifyController extends HttpServlet{
   private static final long serialVersionUID = 1L;
    public void init() throws ServletException {
   @Override
   protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
       String cusName = req.getParameter("cusName");
       CustomerVO vo = CustomerDAO.getInstance().selectBook(cusName);
       req.setAttribute("vo", vo);
       RequestDispatcher dispatcher = req.getRequestDispatcher("/customer/modify.jsp");
       dispatcher.forward(req, resp);
   @Override
   protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
       String cusId = req.getParameter("cusId");
       String cusName = req.getParameter("cusName");
       String cusAddr = req.getParameter("cusAddr");
       String cusHp = req.getParameter("cusHp");
       CustomerVO vo = new CustomerVO();
       vo.setCusId(cusId);
       vo.setCusName(cusName);
       vo.setCusAddr(cusAddr);
       vo.setCusHp(cusHp);
       CustomerDAO.getInstance().modifyCustomer(vo);
       resp.sendRedirect("/Bookstore2/customer/list.do");
```

```
modify(수정)
```

```
package controller.customer;
import java.io.IOException;
@MebServlet("/customer/delete.do")
public class DeleteController extends HttpServlet{
    private static final long serialVersionUID = 1L;

    @Override
    public void init() throws ServletException {
    }

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
        String cusName = req.getParameter("cusName");
        CustomerDAO.getInstance().deleteCustomer(cusName);
        resp.sendRedirect("/Bookstore2/customer/list.do");
    }
    @Override
    protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
     }
}
```

delete(삭제)

3. 기능구현 -코드(book)

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset="UTF-8">
      <title>book::list</title>
   </head>
   <body>
      -
<h3>도서목록</h3>
      <a href="/Bookstore2/">처음으로</a>
      <a href="/Bookstore2/book/register.do">도서등록</a>
      도서번호
            도서명
            출판사
            >가격
            관리
         <c:forEach var="book" items="${books}">
               ${book.getBookId()}
               ${book.getBookName()}
               ${book.getPubName()}
               ${book.getPrice()}
               <a href="/Bookstore2/book/modify.do?bookName=${book.bookName}">수정</a>
                  <a href="/Bookstore2/book/delete.do?bookName=${book.bookName}">삭제</a>
               </c:forEach>
      </body>
</html>
```

```
<!DOCTYPE html>
<html>
  <head>
     <meta charset="UTF-8">
     <title>book::register</title>
   </head>
   <body>
     <h3>도서등록</h3>
     <a href="/Bookstore2/">처음으로</a>
     <a href="/Bookstore2/book/list.do">도서목록</a>
     <form action="/Bookstore2/book/register.do" method="post">
        도서번호
              <input type="text" name="bookId"/>
           도서명
              <input type="text" name="bookName"/>
           출판사
              <input type="text" name="pubName"/>
           가격
              <input type="number" name="price"/>
           <input type="submit" value="등록하기"/>
              </form>
  </body>
</html>
```

```
<!DOCTYPE html>
<html>
  <head>
      <meta charset="UTF-8">
      <title>book::modify</title>
   </head>
   <body>
      -
<h3>도서수정</h3>
      <a href="/Bookstore2/">처음으로</a>
      <a href="/Bookstore2/book/list.do">도서목록</a>
      <form action="/Bookstore2/book/modify.do" method="post">
         <input type="text" name="bookId" readonly value="${requestScope.vo.bookId}"/>
            <input type="text" name="bookName" value="${vo.bookName}"/>
            <input type="text" name="pubName" value="${vo.pubName}"/>
            <input type="number" name="price" value="${vo.price}"/>
            <input type="submit" value="수정"/>
               </form>
   </body>
</html>
```

3. 기능구현 -코드(customer)

```
<!DOCTYPE html>
)<html>
   <head>
       <meta charset="UTF-8">
       <title>customer::list</title>
    </head>
    <body>
       -
<h3>고객물록</h3>
       <a href="/Bookstore2/">처음으로</a>
       <a href="/Bookstore2/customer/register.do">고객등록</a>
       >고객번호
             고객명
             >주소
             휴대폰
             관리
          <c:forEach var="customer" items="${customers}">
                 ${customer.getCusId()}
                 ${customer.getCusName()}
                 ${customer.getCusAddr()}
                 ${customer.getCusHp()}
                    <a href="/Bookstore2/customer/modify.do?cusName=${customer.cusName}">수정</a></a></a>
                    <a href="/Bookstore2/customer/delete.do?cusName=${customer.cusName}">삭제</a>
                 </c:forEach>
       </body>
 </html>
```

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset="UTF-8">
      <title>customer::modify</title>
   </head>
   <body>
      -
<h3>고객수정</h3>
      <a href="/Bookstore2/">처음으로</a>
      <a href="/Bookstore2/customer/list.do">고객목록</a>
      <form action="/Bookstore2/customer/modify.do" method="post">
        <input type="text" name="cusId" readonly value="${requestScope.vo.cusId}"/>
            고객명
               <input type="text" name="cusName" value="${vo.cusName}"/>
            >주소
               <input type="text" name="cusAddr" value="${vo.cusAddr}"/>
            휴대폰
               <input type="text" name="cusHp" value="${vo.cusHp}"/>
               <input type="submit" value="수정"/
            </form>
   </body>
</html>
```

```
<!DOCTYPE html>
<html>
  <head>
     <meta charset="UTF-8">
     <title>customer::register</title>
  </head>
  <body>
     <h3>고객등록</h3>
     <a href="/Bookstore2/">처음으로</a>
     <a href="/Bookstore2/customer/list.do">고객목록</a>
     <form action="/Bookstore2/customer/register.do" method="post">
        고객명
              <input type="text" name="cusName"/>
           > 주소
              <input type="text" name="cusAddr"/>
           휴대폰
              <input type="text" name="cusHp"/>
           <input type="submit" value="音写하기"/>
              </form>
  </body>
</html>
```

4.실행 (도서)

도서목록

처음으로 도서등록

| 도서번호 | 도서명 | 출판사 | 가격 | 관리 |
|------|--------|-------|-------|-------|
| 1 | 축구의 역사 | 굿스포츠 | 7000 | 수정 삭제 |
| 2 | 축구이해함 | 미디어대한 | 50020 | 수정 삭제 |

도서등록

처음으로 도서목록

| 도서번호 | 3 |
|------|----------|
| 도서명 | 민혁이의 일대기 |
| 출판사 | 내머리 |
| 가격 | 9999 |
| | 등록하기 |

도서목록

처음으로 도서등록

| 도서번호 | 도서명 | 출판사 | 가격 | 관리 |
|------|----------|-------|-------|--------------|
| 1 | 축구의 역사 | 굿스포츠 | 7000 | <u>수정 삭제</u> |
| 2 | 축구이해함 | 미디어대한 | 50020 | <u>수정</u> 삭제 |
| 3 | 민혁이의 일대기 | 내머리 | 9999 | 수정 삭제 |



도서목록

처음으로 도서등록

| 도서번호 | 도서명 | 출판사 | 가격 | 관리 |
|------|----------|------|------|-------|
| 1 | 축구의 역사 | 굿스포츠 | 7000 | 수정 삭제 |
| 3 | 민혁이의 일대기 | 내머리 | 9999 | 수정 삭제 |

등록 후 삭제하는 화면

4.실행 (고객)



등록 후 삭제하는 화면

고객목록

처음으로 고객등록

| 고객번호 | 고객명 | 주소 | 휴대폰 | 관리 |
|------|-----|---------|---------------|-------|
| 10 | 유신킴 | 부산시 마포구 | 010-9999-9911 | 수정 삭제 |

