**[12] 페이징, 답변글 가능한 게시판**

1. 답변글 처리 rpBoard.sql 추가분

-- 9. 답글달기

**SELECT** \* **FROM** BOARD **ORDER** **BY** BGROUP **DESC**, BSTEP;

-- 144번글(원글)

**INSERT** **INTO** BOARD (BID, bNAME, bTITLE, BCONTENT, bEMAIL, bPW, BGROUP, bSTEP, BINDENT, BIP)

**VALUES** (BOARD\_SEQ.NEXTVAL, '홍', '글1', '본문', **NULL**, '1', BOARD\_SEQ.CURRVAL, 0,0, '192.168.0.1');

-- ＠ 144번의 1번째 답글달기

-- 답변글 추가 전단계(엑셀의 ⓐ단계)

**UPDATE** BOARD **SET** BSTEP = BSTEP+1

**WHERE** BGROUP=144 **AND** BSTEP > 0;

-- 답변글 INSERT (BGROUP=144, BSTEP=1, BINDENT=1)

**INSERT** **INTO** BOARD (BID, bNAME, bTITLE, BCONTENT, bEMAIL, bPW, BGROUP, bSTEP, BINDENT, BIP)

**VALUES** (BOARD\_SEQ.NEXTVAL, '답녀', '글1-1', '본문', **NULL**, '1', 144, 1, 1, '192.168.0.1');

-- 확인

**SELECT** \* **FROM** BOARD **ORDER** **BY** BGROUP **DESC**, BSTEP;

-- ＠ 144번의 2번째 답글달기

-- 답변글 추가 전단계(엑셀의 ⓐ단계)

**UPDATE** BOARD **SET** BSTEP = BSTEP+1

**WHERE** BGROUP=144 **AND** BSTEP > 0;

-- 답변글 INSERT (BGROUP=144, BSTEP=1, BINDENT=1)

**INSERT** **INTO** BOARD (BID, bNAME, bTITLE, BCONTENT, bEMAIL, bPW, BGROUP, bSTEP, BINDENT, BIP)

**VALUES** (BOARD\_SEQ.NEXTVAL, '답녀2', '글1-2', '본문', **NULL**, '1', 144, 1, 1, '192.168.0.1');

-- 확인

**SELECT** \* **FROM** BOARD **ORDER** **BY** BGROUP **DESC**, BSTEP;

**COMMIT**;

1. list.jsp 에서 답변글 들여쓰기 처리

<table>

<tr><th>글번호</th><th>작성자</th><th>글제목</th><th>메일</th><th>조회수</th></tr>

<% /\* list.jsp?pageNum=3 또는 list.jsp?pageNum=1 또는 list.jsp로 실행

list.jsp에 paging 추가부분 : 뿌려질 startRow와 endRow설정 (BLOCKSIZE 10, PAGESIZE 10으로 정한다)

\*/

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

**if**(pageNum==**null**)

pageNum="1"; //전달받은 pageNum 파라미터가 없으면 1페이지로 셋팅

**int** currentPage = Integer.parseInt(pageNum);

**final** **int** PAGESIZE = 10, BLOCKSIZE= 10;

**int** startRow = (currentPage - 1) \* PAGESIZE + 1;

**int** endRow = startRow + PAGESIZE - 1;

BoardDao dao = BoardDao.getInstance();

**int** totalCnt = dao.getBoardTotalCnt();

**if**(totalCnt==0){

out.println("<tr><td colspan='5'>등록된 글이 없습니다</td></tr>");

}**else**{

/\*

\* list.jsp에 paging 수정부분

\*/

ArrayList<BoardDto> dtos = dao.listBoard(startRow, endRow);

**for**(BoardDto dto : dtos){

// 글번호, 작성자

out.println("<tr><td>"+dto.getNum()+"</td><td>"+dto.getWriter()+"</td>");

//글제목 <td class='left'><img src='/ch13\_board/img/hot.gif'>

// <a href='/ch13\_board/board/content.jsp?num=1'>글제목</a></td>

out.println("<td class='left'>");

//// 답변글 들여쓰기 + re.git 출력

**if**(dto.getRe\_indent()>0){ // 답변글

**int** width = dto.getRe\_indent() \* 10;

out.println("<img src='"+conPath+"/img/level.gif' width='"+ width + "' height='10' />");

out.println("<img src='"+conPath+"/img/re.gif' />");

}

// hit수가 10이상이면 hot.gif출력

**if**(dto.getReadcount() > 10){

out.println("<img src='"+conPath +"/img/hot.gif'>");

}

out.println("<a href='" + conPath + "/board/content.jsp?num="+ dto.getNum()+"&pageNum="+pageNum+"'>"

+ dto.getSubject() +"</a></td>");

//메일, 조회수

out.println("<td>"+ (dto.getEmail()!=**null** ? dto.getEmail() : "")

+ "</td><td>"+dto.getReadcount() + "</td></tr>");

}

}

%>

</table>

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| num | 제목 | ref | re\_step | re\_indent |  | 1. num은 1씩 증가 |
| 1 | 글1 | 1 | 0 | 0 | 2. ref - 원글이면 num과 같고, |
| 2 | 글2 | 2 | 0 | 0 | 답변글이면 원글의 ref와 같다 |
| 3 | 글3 | 3 | 0 | 0 | 3. re\_step은 원글이면 0 |
| 4 | 글1-1 | 1 | 0+1 | 1 | 답변글이면 다음과 같이 진행한다 |
| 5 | 글2-1 | 2 | 0+1+1+1+1 | 1 | ⓐ ref가 같고 원글보다 re\_step가 |
| 6 | 글3-1 | 3 | 0+1+1 | 1 | 큰 값이 있으면 그 글의 re\_step을 re\_step+1 |
| 7 | 글2-2 | 2 | 0+1+1+1 | 1 | ⓑ 답변글 re\_step = 원글 re\_step + 1 |
| 8 | 글2-3 | 2 | 0+1 | 1 | 4. re\_indent - 원글이면 0 |
| 9 | 글2-3-1 | 2 | 0+1+1 | 2 | 답변글이면 원글의 re\_indent+1 |
| 10 | 글3-2 | 3 | 0+1 | 1 |  |

1. BoardDao.java

// 9. 답변글 저장 전 단계(엑셀에서 ⓐ단계)

**private** **void** preReplyStep(**int** bgroup, **int** bstep) {

Connection conn = **null**;

PreparedStatement pstmt = **null**;

String sql = "UPDATE BOARD SET BSTEP = BSTEP+1 WHERE BGROUP=? AND BSTEP > ?";

**try** {

conn = getConnection();

pstmt = conn.prepareStatement(sql);

pstmt.setInt(1, bgroup);

pstmt.setInt(2, bstep);

**int** result = pstmt.executeUpdate();

System.***out***.println("답변글 "+result + "개 조정됨");

} **catch** (SQLException e) {

System.***out***.println(e.getMessage());

} **finally** {

**try** {

**if**(pstmt!=**null**) pstmt.close();

**if**(conn !=**null**) conn.close();

} **catch** (SQLException e) {

System.***out***.println(e.getMessage());

}

}

}

// 9. 답변글 쓰기

**public** **int** reply(BoardDto dto) {

// bid, bname, btitle, bcontent, bemail, bpw, bgroup, bstep, bindent, bip

// 원글에 대한 정보 : bid, bgroup, bstep, bindent

// 사용자로부터 입력받는 내용 : bname, btitle, bcontent, bemail, bpw

// request.getRemoteAddr() 함수로 부터 : bip

preReplyStep(dto.getBgroup(), dto.getBstep()); // 답글 쓰기 전단계 실행

**int** result = ***FAIL***;

Connection conn = **null**;

PreparedStatement pstmt = **null**;

String sql = "INSERT INTO BOARD (BID, bNAME, bTITLE, BCONTENT, bEMAIL, bPW, "

+ " BGROUP, bSTEP, BINDENT, BIP) "

+ "VALUES (BOARD\_SEQ.NEXTVAL, ?, ?, ?, ?, ?, ?, ?, ?, ?)";

**try** {

conn = getConnection();

pstmt = conn.prepareStatement(sql);

pstmt.setString(1, dto.getBname());

pstmt.setString(2, dto.getBtitle());

pstmt.setString(3, dto.getBcontent());

pstmt.setString(4, dto.getBemail());

pstmt.setString(5, dto.getBpw());

pstmt.setInt(6, dto.getBgroup());

pstmt.setInt(7, dto.getBstep() + 1);

pstmt.setInt(8, dto.getBindent() + 1);

pstmt.setString(9, dto.getBip());

result = pstmt.executeUpdate();

System.***out***.println("답변글쓰기 성공");

} **catch** (SQLException e) {

System.***out***.println(e.getMessage());

System.***out***.println("답변글 쓰다 예외 발생 : " + dto);

} **finally** {

**try** {

**if**(pstmt!=**null**) pstmt.close();

**if**(conn !=**null**) conn.close();

} **catch** (SQLException e) {

System.***out***.println(e.getMessage());

}

}

**return** result;

}

1. content.jsp 의 답변 버튼 추가

<button onclick=*"location.href='replyForm.jsp?bid=*<%=bid%>*&pageNum=*<%=pageNum %>*'"*>

답변

</button>

1. replyForm.jsp

<%@page import=*"com.lec.ex.dao.BoardDao"*%>

<%@page import=*"com.lec.ex.dto.BoardDto"*%>

<%@ page language=*"java"* contentType=*"text/html; charset=UTF-8"*

pageEncoding=*"UTF-8"*%>

<% String conPath = request.getContextPath(); %>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"UTF-8"*>

<title>Insert title here</title>

<link href=*"*<%=conPath %>*/css/style.css"* rel=*"stylesheet"* type=*"text/css"*>

</head>

<body>

<% // 넘어온 파라미터 : pageNum, bid

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

**int** bid = Integer.parseInt(request.getParameter("bid"));

BoardDao bDao = BoardDao.getInstance();

BoardDto originalDto = bDao.modifyForm\_replyForm(bid);

%>

<form action=*"*<%=conPath %>*/board/replyPro.jsp"* method=*"post"*>

<input type=*"hidden"* name=*"pageNum"* value=*"*<%=pageNum%>*"*>

<input type=*"hidden"* name=*"bid"* value=*"*<%=bid%>*"*> <!-- 원글 -->

<input type=*"hidden"* name=*"bgroup"* value=*"*<%=originalDto.getBgroup()%>*"*><!-- 원글 -->

<input type=*"hidden"* name=*"bstep"* value=*"*<%=originalDto.getBstep()%>*"*><!-- 원글 -->

<input type=*"hidden"* name=*"bindent"* value=*"*<%=originalDto.getBindent()%>*"*><!-- 원글 -->

<table>

<caption><%=bid %>번 글의 답변글쓰기</caption>

<tr>

<th>작성자</th>

<td>

<input type=*"text"* name=*"bname"* required=*"required"* autofocus=*"autofocus"*>

</td>

</tr>

<tr>

<th>글제목</th>

<td><input type=*"text"* name=*"btitle"* required=*"required"* value=*"답:*<%=originalDto.getBtitle()%>*"*></td>

</tr>

<tr>

<th>본문</th>

<td>

<textarea rows=*"5"* cols=*"10"* name=*"bcontent"*></textarea>

</td>

</tr>

<tr>

<th>이메일</th>

<td><input type=*"email"* name=*"bemail"*></td>

</tr>

<tr>

<th>비밀번호</th>

<td><input type=*"password"* name=*"bpw"* required=*"required"*></td>

</tr>

<tr>

<td colspan=*"2"*>

<input type=*"submit"* value=*"답글쓰기"* class=*"btn"*>

<input type=*"reset"* value=*"취소"* class=*"btn"*>

<input type=*"button"* value=*"목록"* class=*"btn"*

onclick=*"location.href='*<%=conPath%>*/board/list.jsp?pageNum=*<%=pageNum%>*'"*>

</td>

</tr>

</table>

</form>

</body>

</html>

1. replyPro.jsp

<%@page import=*"com.lec.ex.dao.BoardDao"*%>

<%@ page language=*"java"* contentType=*"text/html; charset=UTF-8"*

pageEncoding=*"UTF-8"*%>

<% String conPath = request.getContextPath(); %>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"UTF-8"*>

<title>Insert title here</title>

</head>

<body>

<%// bid, bgroup, bstep, bindent ( 원글 정보 )

// bname, btitle, bcontent, bemail, bpw ( 답변글 정보 )

request.setCharacterEncoding("utf-8");

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

%>

<jsp:useBean id=*"dto"* class=*"com.lec.ex.dto.BoardDto"* scope=*"page"*/>

<jsp:setProperty property=*"\*"* name=*"dto"*/>

<%

dto.setBip(request.getRemoteAddr()); // 클라이언트가 요청한 컴퓨터 ip

//dto.setRdate(new Timestamp(System.currentTimeMillis())); // 요청이 들어온 시점

BoardDao bDao = BoardDao.getInstance();

**int** result = bDao.reply(dto);

**if**(result == BoardDao.SUCCESS){

%>

<script>

alert('답변글 쓰기 완료');

location.href = '<%=conPath%>/board/list.jsp?pageNum=<%=pageNum%>';

</script>

<%}**else**{%>

<script>

alert('답변글 쓰기 실패(길어)');

history.back();

</script>

<%}%>

</body>

</html>