**[13] 페이징, 답변글 가능한 게시판**

1. 답변글 처리 rpBoard.sql 추가분

-- 답변글 처리

**SELECT** \* **FROM** BOARD **ORDER** **BY** REF **DESC**, RE\_STEP;

-- 150번 원글

**INSERT** **INTO** BOARD (NUM, WRITER, SUBJECT, CONTENT, EMAIL, PW, REF, RE\_STEP, RE\_INDENT, IP)

**VALUES** (150, '홍길동','내가 홍길동이다','아버지를 아버지라 못하는데 어찌해야 하나요?','h@h.com','1',150,0,0,'192.168.0.1');

-- ⓐ스텝

**UPDATE** BOARD **SET** RE\_STEP=RE\_STEP+1 **WHERE** REF=150 **AND** RE\_STEP>0;

--답변글 저장

**INSERT** **INTO** BOARD (NUM, WRITER, SUBJECT, CONTENT, EMAIL, PW, REF, RE\_STEP, RE\_INDENT, IP)

**VALUES** ((**SELECT** NVL(MAX(NUM),0)+1 **FROM** BOARD), '고길동','니가 홍길동이냐?', '아버지를 못 불러?','G@G.COM',

'1',150, 0+1, 0+1, '192.168.0.3');

-- 150글의 답글의 답글

-- ⓐ스텝

**UPDATE** BOARD **SET** RE\_STEP=RE\_STEP+1 **WHERE** REF=150 **AND** RE\_STEP>1;

**INSERT** **INTO** BOARD (NUM, WRITER, SUBJECT, CONTENT, EMAIL, PW, REF, RE\_STEP, RE\_INDENT, IP)

**VALUES** ((**SELECT** NVL(MAX(NUM),0)+1 **FROM** BOARD), '고길동','니가 홍길동이냐?', '아버지를 못 불러?','G@G.COM',

'1',150, 1+1, 1+1, '192.168.0.3');

**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. content.jsp 의 답변 버튼 추가

<button onclick=*"location.href='writeForm.jsp?num=*<%=num%>*&pageNum=*<%=pageNum %>*'"*>답변</button>

1. writeForm.jsp

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

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

</head>

<body>

<%

**int** num=0,ref=0, re\_step=0, re\_indent=0;

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

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

pageNum = "1";

}

BoardDto dto = **new** BoardDto(); // 답변글을 위해 들어왔다면 dto에 원글에 대한 정보를 저장

**if**(request.getParameter("num")!= **null**) {

//답변글을 쓰려고 한 경우 dto에 원글에 대한 정보를 넣는다.

num = Integer.parseInt(request.getParameter("num"));

BoardDao dao = BoardDao.getInstance();

dto = dao.getBoardOneLine(num);

ref = dto.getRef(); // 원글의 ref

re\_step = dto.getRe\_step(); // 원글의 re\_step

re\_indent = dto.getRe\_indent(); // 원글의 re\_indent

System.out.println("writeForm.jsp - ref : " + ref);

System.out.println("writeForm.jsp - re\_step : " + re\_step);

System.out.println("writeForm.jsp - re\_indent : " + re\_indent);

}

%>

<form action=*"writePro.jsp"* method=*"post"*>

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

<input type=*"hidden"* name=*"num"* value=*"*<%=num %>*"* />

<input type=*"hidden"* name=*"ref"* value=*"*<%=ref %>*"* />

<input type=*"hidden"* name=*"re\_step"* value=*"*<%=re\_step %>*"* />

<input type=*"hidden"* name=*"re\_indent"* value=*"*<%=re\_indent %>*"* />

<table>

<caption>게시판</caption>

<tr><th>작성자</th>

<td><input type=*"text"* name=*"writer"* required=*"required"*></td>

</tr>

<tr><th>제목</th>

<td><input type=*"text"* name=*"subject"* required=*"required"* value=*"*<%

**if** (dto.getSubject()!=**null**){

out.print("re :" + dto.getSubject());

}

%>*"*></td>

</tr>

<tr><th>이메일</th>

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

</tr>

<tr><th>본문</th>

<td><textarea name=*"content"* rows=*"5"* cols=*"5"*

required=*"required"*></textarea></td>

</tr>

<tr><th>비밀번호</th>

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

</tr>

<tr>

<td colspan=*"2"*>

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

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

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

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

</td>

</tr>

</table>

</form>

</body>

</html>

1. BoardDao.java

// 답변글 ⓐ스텝 : UPDATE BOARD SET RE\_STEP = RE\_STEP + 1 WHERE REF = 150 AND RE\_STEP > 0

**private** **void** preReplyStepA(**int** ref, **int** re\_step) {

Connection conn = **null**;

PreparedStatement pstmt = **null**;

String sql = "UPDATE BOARD SET RE\_STEP = RE\_STEP + 1 WHERE REF = ? AND RE\_STEP > ?";

**try** {

conn = getConnection();

pstmt = conn.prepareStatement(sql);

pstmt.setInt(1, ref);

pstmt.setInt(2, re\_step);

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

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

} **catch** (SQLException e) {

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

} **finally** {

**try** {

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

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

} **catch** (Exception e2) {

System.***out***.println(e2.getMessage());

}

}

}

// 답변글 저장

// 답변글 저장

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

// NUM, WRITER, SUBJECT, CONTENT, EMAIL, PW, REF, RE\_STEP, RE\_LEVEL, IP

// 원글에대한 정보 : ref, re\_step, re\_level

// 사용자로부터 입력받을 답변글 내용 : write, subject, content, email, pw

// 시스템으로부터 가져올 ip

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

System.***out***.printf("DB에 ref(%d)가 같고 re\_step(%d)이상인 친구들 ++",dto.getRef(), dto.getRe\_step());

preReplyStepA(dto.getRef(), dto.getRe\_step()); // step ⓐ먼저하기

Connection conn = **null**;

PreparedStatement pstmt = **null**;

String sql = "INSERT INTO BOARD (NUM, WRITER, SUBJECT, CONTENT, EMAIL, PW, REF, RE\_STEP, RE\_LEVEL, IP ) " +

" VALUES ((SELECT NVL(MAX(NUM),0)+1 FROM BOARD), ?, ?, ?, ?, ?, ?, ?, ?, ?)";

**try** {

conn = getConnection();

pstmt = conn.prepareStatement(sql);

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

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

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

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

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

pstmt.setInt(6, dto.getRef()); // 원글번호

pstmt.setInt(7, dto.getRe\_step()+1);

pstmt.setInt(8, dto.getRe\_indent()+1);

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

result = pstmt.executeUpdate();

//

dto.setRe\_step(dto.getRe\_step()+1);

dto.setRe\_indent(dto.getRe\_indent()+1);

System.***out***.println(result == ***SUCCESS*** ? "답변글 성공"+ dto : "답변글 실패" + dto);

} **catch** (SQLException e) {

System.***out***.println(e.getMessage() + "답변글 실패" + dto);

} **finally** {

**try** {

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

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

} **catch** (Exception e2) {

System.***out***.println(e2.getMessage());

}

}

**return** result;

}

1. writePro.jsp

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

<%@ 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>

<%

request.setCharacterEncoding("utf-8");

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

%>

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

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

<%-- <%=dto %> --%>

<%

dto.setIp(request.getRemoteAddr());

BoardDao dao = BoardDao.getInstance();

**int** result;

**if**(dto.getNum()==0){

result= dao.insertBoard(dto);//새글

}**else**{

result = dao.reply(dto); // 답글쓰기

}

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

%>

<script>

alert('글쓰기 완료');

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

</script>

<%}**else**{%>

<script>

alert('글쓰기 실패');

history.back();

</script>

<%}%>

</body>

</html>

