

```
org.zerock.mapper
      BoardAttachMapper.java
     BoardMapper.java
       BoardMapper
      ReplyMapper.java
      TimeMapper.java
  ▶ # org.zerock.sample

<sup>4</sup> 
<sup>8</sup> org.zerock.service

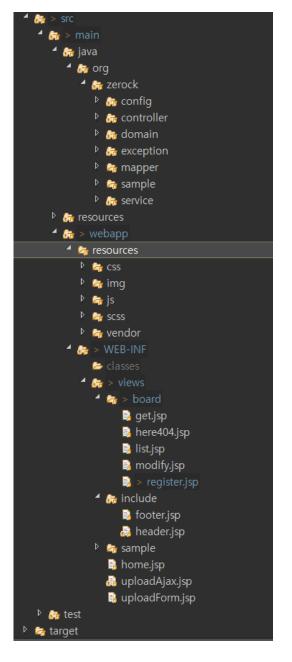
      BoardService.java
       BoardServiceImplemented.java
       ReplyService.java
     ReplyServiceImplemented.java
# src/main/resources
    META-INF
  org
     zerock
       mapper

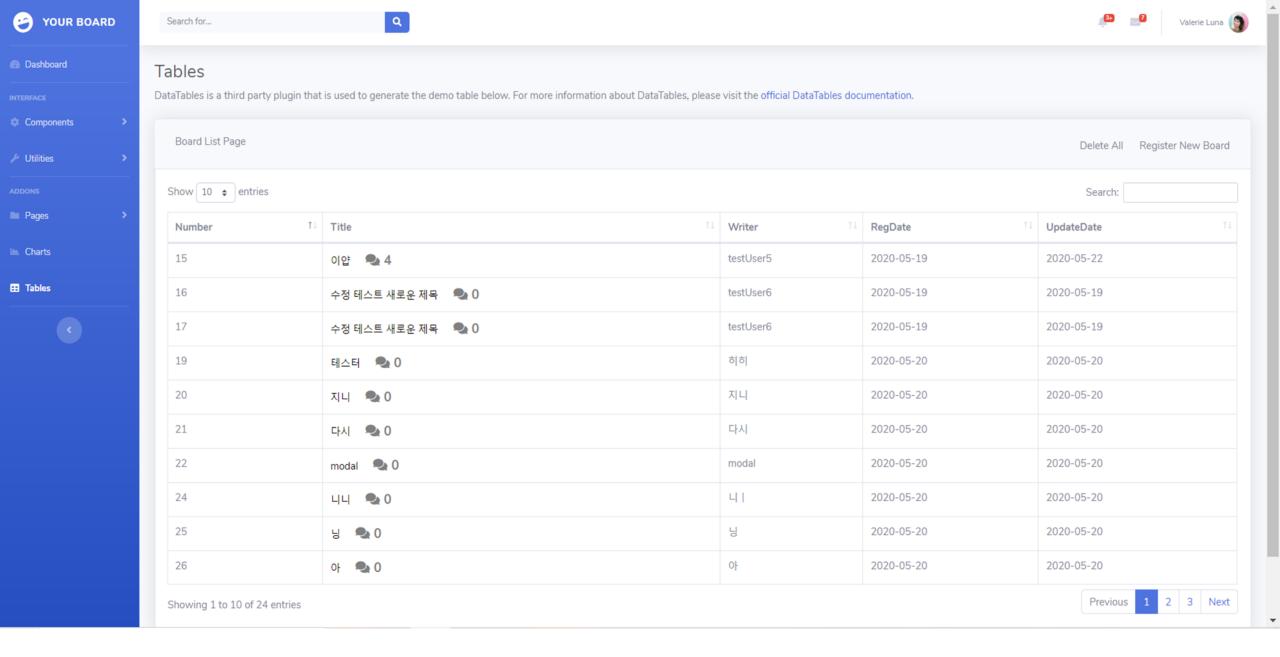
☑ BoardAttachMapper.xml

            BoardMapper.xml
            ReplyMapper.xml
            TimeMapper.xml
    ₩ log4j.xml
    log4jdbc.log4j2.properties

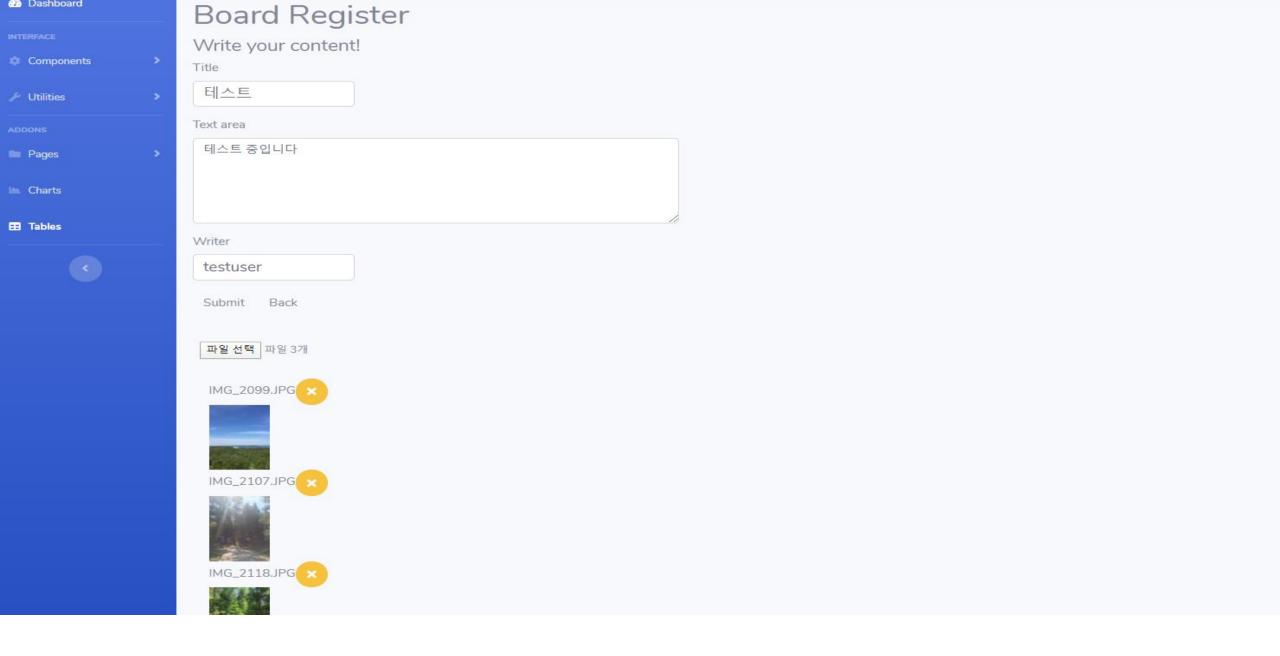
♣ src/test/java

  ▶ # org.zerock.controller
  org.zerock.mapper
  org.zerock.persistence
  org.zerock.service
 src/test/resources
▶ ■ Libraries
Referenced Libraries
Deployed Resources
```

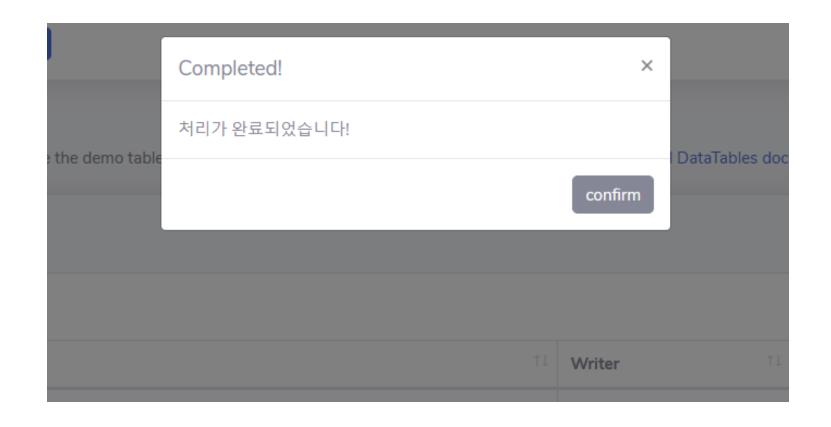




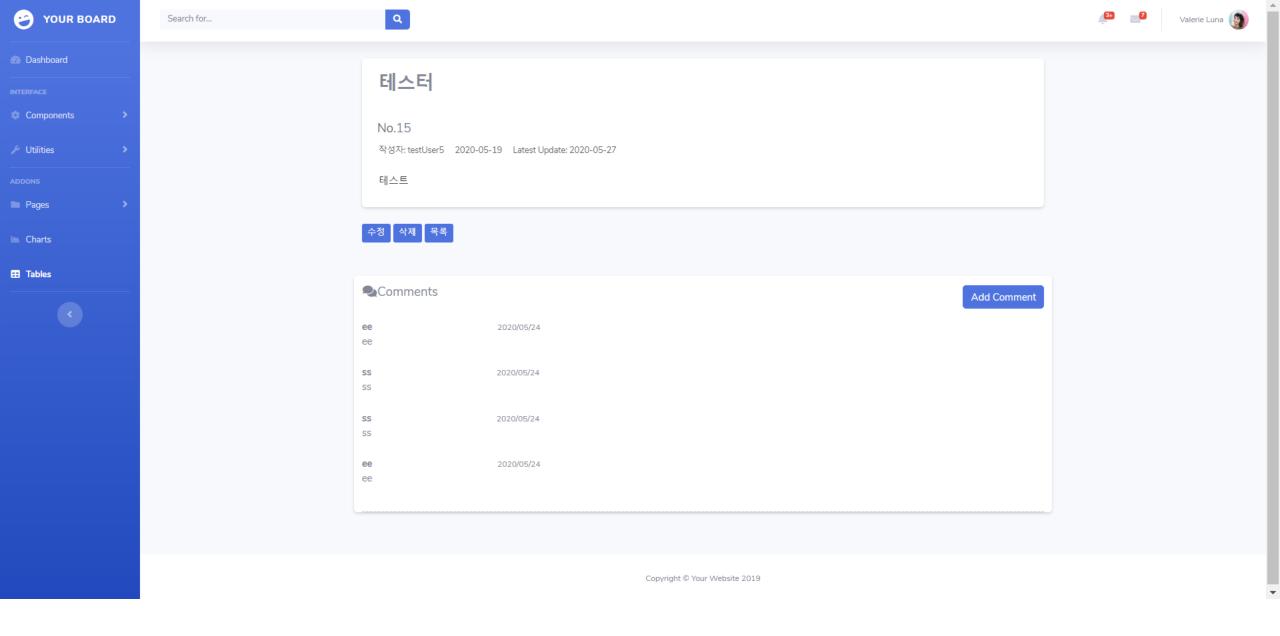
Views/list.jsp : Bootstrap Datatable 기능을 탑재하여 구현, title 옆 댓글 개수 처리 추가



Views/register.jsp 화면: Title, Content, 작성자 기입 / 동시에 여러 개 이미지 or 파일 첨부기능



등록, 수정,삭제 수행 때 마다 confirm message 출력 후 Redirect: /board/list 기능 구현



Views/get.jsp 화면 : 게시물 번호/작성자/등록날짜/수정날짜는 plaintext 처리 REST 방식과 Ajax로 구현한 댓글 기능

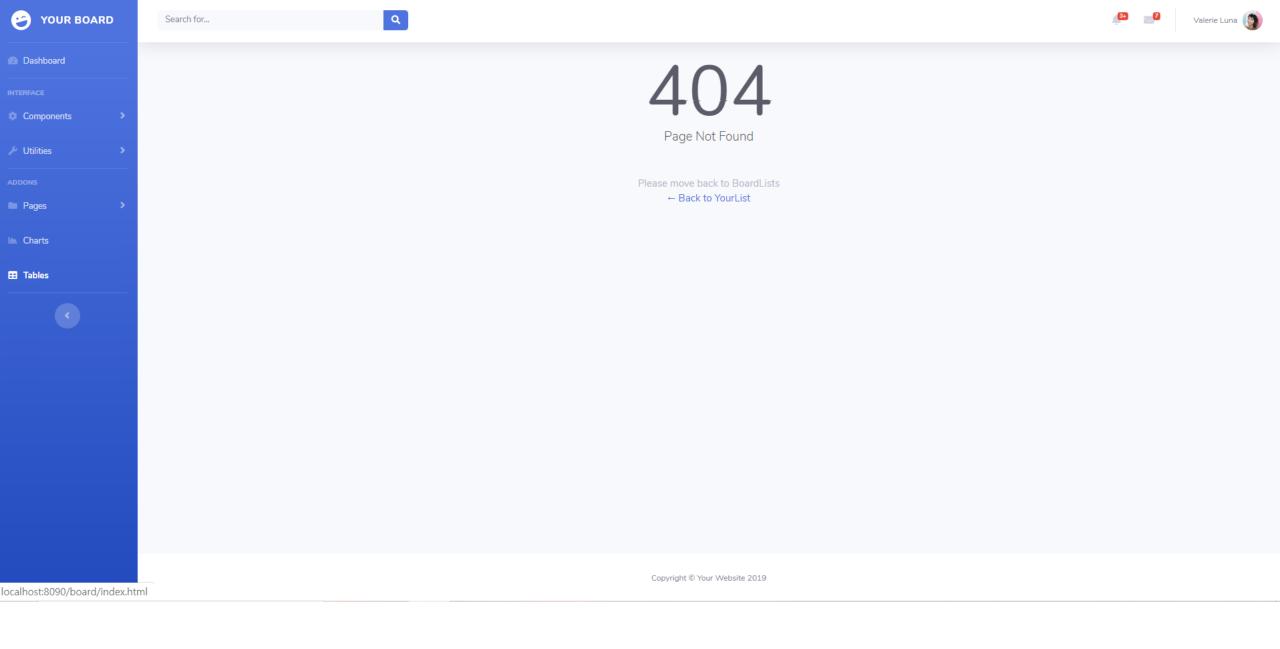
Q	Add Comment
테스터	Reply
No.15	Replyer
작성자: testUser5 2020-	
테스트	
├정 삼제 목록	Add Close
Comments	
	2020/05/24
	2020/05/24

Views/get.jsp >

Modal 창을 활용하여 심플하게 댓글 추가 기능 구현, 작성자와 댓글 내용 제외하고 모두 hidden 처리

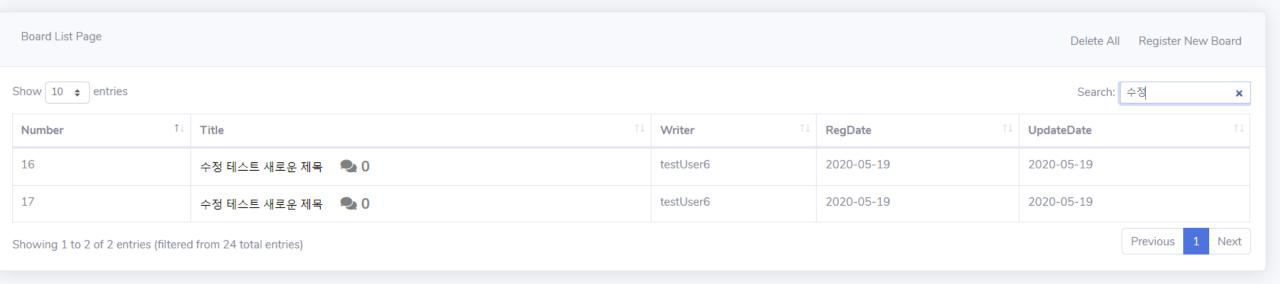
	Add Comment	
스터	Reply	
	ee	
.5	Replyer	
: testUser5 2020-	ee	
≣.	ReplyDate	
	2020/05/24	
삭제 목록		
	Modify Remove Close	
ments		
	2020/05/24	
	0000 (05/0 *	

Views/get.jsp : 해당 댓글을 클릭하면 수정/삭제/상세보기 화면이 동시에 Modal로 출력



Tables

DataTables is a third party plugin that is used to generate the demo table below. For more information about DataTables, please visit the official DataTables documentation.



Copyright © Your Website 2019

Bootstrap 검색 기능을 연동하여 특정 글자 검색 시 보이게 하는 기능 추가

```
create table tbl board (
     bno number (10,0),
     title varchar2(200) not null,
     content varchar2(2000) not null,
     writer varchar2(50) not null,
     regdate date default sysdate,
     updatedate date default sysdate
 alter table tbl board add constraint pk board
 primary key (bno);
 --dummy data
 INSERT into tbl board (bno, title, content, writer) values (seq board.nextval, '테스트제목',
 select * from tbl board;
 commit;
 select * from tbl board where bno > 0;
 commit;
```

create sequence seq board;

오른쪽 이미지: 빠른 검색 속도를 위한 Index 처리

왼쪽 이미지: 게시물(board) 데이터 베이스 정의

```
delete from tbl_board where bno = 11;
alter table tbl_board add(show varchar2(10));
alter table tbl_board drop column show;
select * from tbl_board;

select bno, title, content, writer, regdate, updatedate, replycnt from
(select /*+INDEX_DESC(tbl_board pk_board)*/ * from tbl_board where bno > 0);

commit;
rollback;
```

select /*+ INDEX ASC(tbl board pk board) */ * from tbl board where bno > 0;

오른쪽은 댓글 처리를 위한 데이터베이스 bno 값은 tbl_board의 bno값을 참고

```
alter table
create table tbl_attach (
    uuid varchar2(100) not null,
    uploadPath varchar2(200) not null,
    filename varchar2(100) not null,
    filetype char(1) default 'I',
    bno number(10,0)
);
alter table tbl_attach add constraint pk_attach primary key (uuid);
alter table tbl_attach add constraint fk_board_attach foreign key (bno)
references tbl_board (bno);

select * from tbl_attach;
rollback;
commit;
```

```
create table tbl reply (
     rno number (10, 0),
     bno number (10,0) not null,
     reply varchar2(1000) not null,
     replyer varchar2(100) not null,
     replyDate date default sysdate,
     updateDate date default sysdate
 );
 create sequence seq reply;
 select seq reply.nextval from dual;
 select seq reply.currval from dual;
 alter sequence seq reply increment by -23;
 alter sequence seq reply increment by 1;
 alter table tbl reply add constraint pk reply primary key (rno);
 alter table tbl reply add constraint fk reply board foreign key (bno)
 references tbl board (bno);
```

왼쪽은 첨부파일 처리를 위한 데이터베이스 bno 값 역시 tbl_board의 bno값을 참고