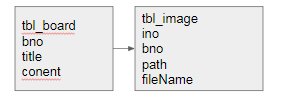
**이미지 처리 Ver 1.(다중 이미지 처리.) 1 -> n관계**

****

**bno를 pk fk 관계**

**-pom(commons-fileupload 필수)**

**<!-- common fileupload -->**

**<dependency>**

**<groupId>commons-fileupload</groupId>**

**<artifactId>commons-fileupload</artifactId>**

**<version>1.2.1</version>**

**</dependency>**

**<dependency>**

**<groupId>commons-io</groupId>**

**<artifactId>commons-io</artifactId>**

**<version>1.4</version>**

**</dependency>**

**<!-- https://mvnrepository.com/artifact/org.imgscalr/imgscalr-lib -->**

**<dependency>**

**<groupId>org.imgscalr</groupId>**

**<artifactId>imgscalr-lib</artifactId>**

**<version>4.2</version>**

**</dependency>**

**-servlet-context.xml**

**<!-- 이미지 업로드multipartResolver-->**

**<beans:bean id="multipartResolver" class="org.springframework.web.multipart.commons.CommonsMultipartResolver">**

**<beans:property name="maxUploadSize" value="90485760"></beans:property>**

**</beans:bean>**

**<!-- 이미지경로 설정 -->**

**<beans:bean id="uploadPath" class="java.lang.String">**

**<beans:constructor-arg value="C:\ImgfileUpload">**

**</beans:constructor-arg>**

**</beans:bean>**

**-web.xml 한글 인코딩.(파일이름을 한글로 변환해주기 위해서 필요하다.)**

**CRUDPaging 으로->**

**테이블 생성.(등록 날짜와 수정 날짜를 써줘도 되지만 기초 버전이다.)**

**create table tbl\_img(**

**ino int PRIMARY key, --pk**

**bno int , --fk**

**path varchar(400) not null, --경로**

**filename varchar(300) not null --파일 이름.**

**)**

**-vo(getter,setter,tostring)**

**private String ino;**

**private String bno;**

**private String path;**

**private String filename;**

**-----------------------------------등록 처리--------------------------------------**

**-insertMapper**

**insert into tbl\_img(ino,bno,path,filename)**

**value**

**(nextval('seq\_img') ,(select bno from tbl\_board order by bno desc limit 1)**

**,#{path} ,#{filename})**

**-dao**

**public void imgInsert(ImgVO vo)throws Exception;**

**-util 파일 추가. (UploadFileUtils)**

**-service(board insert 할때 @Transactional을 이용해서 img도 insert한다.)**

**@Inject**

**private ImgDAO idao;**

**@Resource(name = "uploadPath")**

**private String uploadPath;//사용시 servlet-context.xml에 path를 가져다 쓴다.**

**@Transactional**

**@Override**

**public void insert(BoardVO vo, List<MultipartFile> file) throws Exception {**

**dao.insert(vo);**

**for (int i = 0; i < file.size(); i++) {**

**String originalName = file.get(i).getOriginalFilename();**

**byte[] fileData = file.get(i).getBytes();\**

**String uploadedFileName = UploadFileUtils.saveFile(uploadPath, originalName, fileData);**

**String path = uploadPath + uploadedFileName.substring(0, 12);**

**String saveFileName = uploadedFileName.substring(uploadedFileName.lastIndexOf("/") + 1);**

**String formatName = originalName.substring(originalName.lastIndexOf(".") + 1);**

**//확장자 null 체크**

**if (formatName == null || formatName.equals("")) {**

**}else{**

**ImgVO ivo = new ImgVO();**

**ivo.setFilename(saveFileName);**

**ivo.setPath(path);**

**idao.imgInsert(ivo);**

**}**

**}**

**}**

**-controller(multipartFile을 받고 insertService에 파라미터로 받는다.)**

**@RequestMapping(value = "/insert", method = RequestMethod.POST)**

**public String insert(Model model, BoardVO vo, @RequestParam("file")List<MultipartFile> file) throws Exception {**

**service.insert(vo, file);**

**return "redirect:/board/listPage?page=1";**

**}**

**-jsp(multipart/form-data 설정 필수!)**

**<body>**

**<form id="form" action="/board/insert" method="get" enctype="multipart/form-data">**

**<table border="1">**

**<tr>**

**<th>제목 </th>**

**<th>내용</th>**

**</tr>**

**<tr>**

**<td><input type="text" name="title" id="title"></td>**

**<td><input type="text" name="content" id="content"></td>**

**</tr>**

**</table>**

**<div id="divForm">**

**<input type="file" id="file" class="file" name="file">**

**</div>**

**<button type="button" id="addBtn">추가</button>**

**<button type="button" id="removeBtn">제거</button>**

**<button type="submit" id="insertBtn">등록</button>**

**</form>**

**<script src="http://code.jquery.com/jquery-1.11.2.min.js"></script>**

**<script type="text/javascript">**

**var form = $("#form");**

**var numCheck = 0;**

**$("#insertBtn").on("click", function() {**

**//이미지의 값 중 빈값이 있으면 등록 되지 않도록 구현한다.**

**var fileVal = $('[name="file"]').val();**

**if (fileVal == "" || fileVal == null) {**

**alert("이미지를 1개 이상 등록해 주세요.");**

**} else {**

**form.attr("action", "insert");**

**form.attr("method", "POST");**

**form.submit();**

**}**

**});**

**$("#addBtn").on("click",function() {**

**numCheck = numCheck+1;**

**var txt = '<input type="file" id="file" class="file'+numCheck+'" name="file"> '**

**$("#divForm").append(txt);**

**});**

**$("#removeBtn").on("click", function() {**

**/\*전체 제거 \*/**

**/\* $("#Form \*").remove(); \*/**

**$(".file"+numCheck).remove();**

**numCheck = numCheck-1;**

**});**

**</script>**

**</body>**