BLOB

공통 적용 처리

❖ 브라우저 측 컨텍스트 경로 초기 설정

- o <c:url value="/" var="root"/>
 - 브라우저 최초 접속시 JsessionID 쿠키 값이 설정되는 문제 있음
- o EL 내장 객체를 이용하여 컨텍스트 경로 추출하여 root 속성 설정(request 스코프)

```
<c:set value="${pageContext.request.contextPath}/"
    var="root" scope="request"/>
```

공통 적용 처리

resource/js/common.js

o Date 객체에 날짜 출력 문자열 포맷팅 prototype 메서드 정의

```
Date.prototype.toString = function() {
   var year = this.getFullYear();
   var month = this.getMonth() +1;
   month = month < 10 ? '0' + month : month;</pre>
  var date = this.getDate();
   date = date < 10 ? '0' + date : date;</pre>
   return year + '-' + month + '-' + date;
Date.prototype.toDatetime = function() {
   var hour = this.getHours();
   hour = hour < 10? '0' + hour : hour;
  var minute = this.getMinutes();
   minute = minute < 10 ? '0' + minute : minute;</pre>
  var second = this.getSeconds();
   second = second < 10 ? '0' + second : second;</pre>
   return this.toString() + ' ' +
        hour + ':' + minute+ ':' + second;
```

공통 적용 처리

default_template.jsp

```
<c:set value="${pageContext.request.contextPath}/"
            var="root" scope="request"/>
<link rel="stylesheet"</pre>
      href="<c:url value="/resources/css/main.css"/>" />
<script src="<c:url value="/resources/js/common.js"/>"></script>
<script>
$(function(){
});
</script>
</head>
<body>
```

❖ 아바타 크기 조정용 ImageUtil

```
o edu.iot.butter.util 패키지
public class ImageUtil {
  public static byte[] makeThumb(byte [] data) throws Exception {
      return makeThumb(data, 100, 100);
   }
  public static byte[] makeThumb(byte [] data, int width, int height)
                             throws Exception {
     try(
        ByteArrayInputStream in = new ByteArrayInputStream(data);
        ByteArrayOutputStream out = new ByteArrayOutputStream();
      ){
        Thumbnails.of(in)
               .size(width,height)
               .crop(Positions.CENTER)
               .toOutputStream(out);
         return out.toByteArray();
```

❖ AVATAS 테이블 정의

```
CREATE TABLE AVATAS(
   user_id VARCHAR2(20) PRIMARY KEY,
   image BLOB
);
```

❖ 모델

```
@Data
@NoArgsConstructor
@AllArgsConstructor
public class Avata {
   private String userId;
   private byte[] image;
}
```

❖ 매퍼: resources/mapper/avata-mapper.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE mapper PUBLIC "-//mybatis.org//DTD Mapper 3.0//EN"</pre>
            "http://mybatis.org/dtd/mybatis-3-mapper.dtd">
<mapper namespace="edu.iot.butter.dao.AvataDao">
   <select id="getCount" resultType="int">
     SELECT count(*)
     FROM avatas
   </select>
   <select id="selectList" parameterType="Pagination"</pre>
                             resultType="Avata">
     SELECT user id, image
     FROM (
        SELECT ROW_NUMBER() OVER (ORDER BY user_id) AS SEQ,
           user id, image
        FROM avatas)
     WHERE SEQ BETWEEN #{start} AND #{end}
   </select>
```

❖ 叫퍼: resources/mapper/avata-mapper.xml

```
<select id="selectOne" parameterType="int" resultType="Avata">
     SELECT * FROM avatas
     WHERE user_id=#{user_id}
  </select>
  <insert id="insert" parameterType="Avata">
     INSERT INTO avatas (user_id, image)
     values(#{userId}, #{image})
  </insert>
  <update id="update" parameterType="Avata">
     UPDATE avatas SET
        image = #{image}
     WHERE user id=#{userId}
  </update>
  <delete id="delete" parameterType="Avata">
     DELETE avatas WHERE user_id=#{userId}
  </delete>
</mapper>
```

❖ Dao : AvataDao

```
public interface AvataDao extends BaseDao<Avata, String>{
}
```

❖ 서비스 수정: MemberService

```
public interface MemberService {
  // 아바타 처리
  byte[] getAvata(String userId) throws Exception;
  boolean insertAvata(Avata avata)throws Exception;
  boolean updateAvata(Avata avata)throws Exception;
  boolean deleteAvata(String userId) throws Exception;
```

❖ 서비스: MemberServiceImpl

```
@Autowired
AvataDao avataDao;
// 아바타 처리
@Override
public byte[] getAvata(String userId) throws Exception {
  Avata avata = avataDao.selectOne(userId);
   if(avata==null) { // 아바타 이미지가 없는 경우
     // 익명 사용자 미리 하나 등록 해둠
     avata = avataDao.selectOne("anonymous");
  return avata.getImage();
}
@Override
public boolean insertAvata(Avata avata) throws Exception {
  avata.setImage(ImageUtil.makeThumb(avata.getImage()));
  return avataDao.insert(avata) == 1;
```

❖ 서비스: MemberServiceImpl

```
@Override
public boolean updateAvata(Avata avata) throws Exception {
    avata.setImage(ImageUtil.makeThumb(avata.getImage()));
   if(avataDao.update(avata) == 1) {
     return true;
   } else {
     // 존재하지 않는 경우
     return avataDao.insert(avata) == 1;
@Override
public boolean deleteAvata(String userId) throws Exception {
   return avataDao.delete(userId) == 1;
```

❖ 컨트롤러: ProfileController

o 아바타 이미지 내보내기 : /butter/member/avata?userId=admin

❖ 회원 가입, 수정 뷰: account/join.jsp, member/profile.jsp

```
<form:form commandName="member" enctype="multipart/form-data" >
     <div class="md-form">
        <label for="name">이름</label>
        <form:input path="name" class="form-control" required/>
     </div>
     <div class="mb-3">
        <img src="avata?userId=${member.userId}">
        <label for="avata">아바타 이미지</label>
        <input type="file" name="avata"/>
     </div>
```

❖ 컨트롤러: AccountController

return "redirect:/join success";

ㅇ 회워 가입시 아바타 등록 처리 @RequestMapping(value="/join", method=RequestMethod.POST) public String joinSubmit(@Valid Member member, BindingResult result, @RequestParam("avata") MultipartFile mFile, RedirectAttributes ra) throws Exception { if(result.hasErrors()) return "account/join"; service.create(member); // 아바타 저장 if(mFile != null && !mFile.isEmpty()) { service.insertAvata(new Avata(member.getUserId(), mFile.getBytes())); ra.addFlashAttribute("member", member);

❖ 컨트롤러 : ProfileController

ㅇ 회워 정보 수정시 아바타 수정 처리

```
@RequestMapping(value="/edit", method=RequestMethod.POST)
public String editSubmit(@Valid Member member,
                 BindingResult result,
                 @RequestParam("avata") MultipartFile mFile,
                 HttpSession session) throws Exception {
  if(result.hasErrors()) return "member/edit";
   if(!service.update(member)) {// 실패한 경우
     result.reject("updateFail", "비밀번호가 일치하지 않습니다.");
     return "member/edit";
  // 아바타 수정
  if(mFile != null && !mFile.isEmpty()) {
     service.updateAvata(new Avata(member.getUserId(),
                                  mFile.getBytes()));
  session.setAttribute("USER", member);
   return "redirect:profile";
```

❖ 회원 정보 보기: member/profile.jsp

```
:
<div class="row">
        <div class="col-md-2">이름</div>
        <div class="col-md-10">${member.name}</div>
</div>

<div class="row">
        <div class="col-md-2">아바타</div>
        <div class="col-md-10">
              <img src="avata?userId=${member.userId}" class="avata">
        </div>
</div>
```

❖ 메뉴: menu.jsp

❖ 인터셉터 설정

```
<interceptors>
   <interceptor>
     <mapping path="/admin/**" />
     <mapping path="/talk/*" />
     <mapping path="/gallery/*" />
     <mapping path="/member/*" />
     <mapping path="/board/create" />
     <exclude-mapping path="/member/avata" />
     <beans:ref bean="loginInterceptor" />
  </interceptor>
  <interceptor>
     <mapping path="/admin/**" />
     <beans:ref bean="adminInterceptor" />
   </interceptor>
</interceptors>
```