

게시판 도메인 - Board

- 게시글 들을 포함하는 단위인 게시판 도메인
 - 구현 기능
 - 게시판 생성 사용자는 게시판을 생성할 수 있다.
 - 게시판 조회 사용자는 게시판을 조회 할 수 있다.
 - 게시판 수정 게시판 작성자는 작성한 게시판을 수정할 수 있다.
 - 게시판 삭제 게시판 작성자는 작성한 게시판을 삭제할 수 있다.
 - 구현 페이지
 - 게시판 목록 게시판 목록들이 나열되어 있는 페이지
 - 게시판 생성 게시판을 생성하는 페이지
 - 게시판 수정 게시판을 수정하는 페이지
 - 게시판 게시판 메인 페이지
 - Task
 - CRUD 구현
 - **JdbcTemplate** 을 사용하여 DB 에 접근
 - 엔티티 클래스 객체 생성 시 **Builder 패턴** 적용
 - **API 계층 JUnit 테스트 코드** 작성

BoardController.java

```
package com.elice.boardproject.board.controller;

import com.elice.boardproject.board.dtos.*;
import com.elice.boardproject.board.entity.Board;
import com.elice.boardproject.board.service.BoardService;
import com.elice.boardproject.post.entity.Post;
import com.elice.boardproject.post.service.PostService;
import lombok.RequiredArgsConstructor;
import org.springframework.http.ResponseEntity;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.*;

import java.util.List;
```

```
@Controller
@RequestMapping("/boards")
@RequiredArgsConstructor
public class BoardController {

    private final BoardService boardService;
    private final PostService postService;

    // @GetMapping("/boards")
    // public String showBoard() {
    //     return "board/boards"; // HTML 템플릿 경로가 맞도록 수정
    // }

    // 게시판 생성 폼 페이지
    @GetMapping("/create")
    public String showCreateForm() {
        return "board/createBoard"; // HTML 템플릿 경로가 맞도록 수정
    }

    @PostMapping("/create")
    public String createBoard(@ModelAttribute BoardRequestDto
    boardRequestDto) {
        Board board = new Board();
        board.setTitle(boardRequestDto.getTitle());
        board.setDescription(boardRequestDto.getDescription());
        boardService.create(board);
        return "redirect:/boards";
    }

    // 게시판 목록 페이지
    @GetMapping
    public String getAllBoard(Model model) {
        List<Board> boards = boardService.findAll();
        model.addAttribute("boards", boards);
        return "board/boards";
    }

    // 개별 게시판 상세 페이지
    @GetMapping("/{id}")
    public String getBoardById(@PathVariable("id") Long id, Model model) {
        Board board = boardService.findById(id);
        model.addAttribute("board", board);
        model.addAttribute("posts", postService.findAllByBoardId(id));
        return "board/board";
    }

    @GetMapping("/edit/{id}")
    public String showUpdateForm(@PathVariable("id") Long id, Model model)
    {
        Board board = boardService.findById(id);
        if (board != null) {
            model.addAttribute("board", board);
            return "board/editBoard";
        } else {
            return "redirect:/boards";
        }
    }
}
```

```

        }

    // 게시판 수정
    @PostMapping("/edit/{id}")
    public String updateBoard(@PathVariable("id") Long id, @ModelAttribute
BoardRequestDto boardRequestDto) {
        Board board = new Board();
        board.setId(id);
        board.setTitle(boardRequestDto.getTitle());
        board.setDescription(boardRequestDto.getDescription());
        boardService.update(board);
        return "redirect:/boards";
    }

    @DeleteMapping("/{id}")
    public ResponseEntity<?> deleteBoard(@PathVariable("id") Long id) {
        boardService.delete(id);
        return ResponseEntity.ok().build();
    }
}

```

Boards.html

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
    <head>
        <meta charset="UTF-8" />
        <link
            href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
            rel="stylesheet"
            integrity="sha384-T3c6CoIi6uLrA9TneNEoa7RxnatjcdSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
            crossorigin="anonymous"
        />
        <link
            href="https://font.elice.io/css?family=Elice+DX+Neolli"
            rel="stylesheet"
        />
        <link
            rel="stylesheet"
            href="https://fonts.googleapis.com/css2?family=Material+Symbols+Outlined:opsz,wght,FILL,GRAD@24,400,0,0"
        />

        <style>
            html,
            body {
                font-family: "Elice DX Neolli", sans-serif;
            }

            .card {
                transition: all 0.1s ease-in-out;

```

```
}

.card:hover {
    transform: scale(1.01);
}

.board-item:hover {
    cursor: pointer;
}

.board-item > .btn-group {
    display: none;
}

.board-item:hover > .btn-group {
    display: flex;
}
</style>
<title>게시판</title>
</head>
<body>
    <div class="container my-5">
        <div class="header mb-5">
            <h1 class="text-center">Glow Gallery</h1>
        </div>
        <div class="d-flex justify-content-end mb-3">
            <a th:href="@{/boards/create}" class="btn btn-primary">게시판 생성</a>
        </div>
        <div class="container p-0">
            <div class="row row-cols-3 position-relative">
                <div
                    class="col mb-3"
                    id="board-${board.id}"
                    th:unless="${#lists.isEmpty(boards) }"
                    th:each="board : ${boards}">
                >
                    <div
                        class="card"
                        onmouseover="event.currentTarget.classList.add('shadow')"
                        onmouseleave="event.currentTarget.classList.remove('shadow')"
                    >
                        <a
                            class="board-item pe-auto p-3 link-underline link-underline-opacity-0 d-flex"
                            th:href="@{/board/{id} (id=${board.id}) }"
                        >
                            
                            <div>
                                <h4
                                    class="card-title fw-bold text-dark"
                                    th:text="${board.title}"
                                >
                                    게시판 이름
                                </h4>
                            </div>
                        </a>
                    </div>
                </div>
            </div>
        </div>
    </div>

```

```
<span
    class="card-text text-secondary text-wrap"
    th:text="${board.description}"
    >게시판 설명</span>
</div>
<div
    class="position-absolute end-0 bottom-0 mb-3 me-3 btn-group
bg-white bg-opacity-75"
    role="group"
    aria-label="edit-delete"
>
    <button
        class="btn btn-outline-primary lh-1"
        th:onclick="'event.preventDefault();
location.href='/boards/edit/' + ${board.id} + '''"
    >
        <span class="material-symbols-outlined"> edit </span>
    </button>
    <button
        class="btn btn-outline-danger lh-1"
        data-bs-toggle="modal"
        data-bs-target="#deleteModal"
        th:onclick="handleDeleteButton(event, [[${board.id}]])"
    >
        <span class="material-symbols-outlined"> delete </span>
    </button>
</div>
</a>
</div>
</div>
<span
    th:if="#lists.isEmpty(boards)"
    class="d-block w-100 text-center"
    >생성된 게시판이 없습니다.</span>
</div>
</div>

<div
    class="modal fade"
    id="deleteModal"
    tabindex="-1"
    aria-labelledby="deleteModalLabel"
    aria-hidden="true"
>
    <div class="modal-dialog">
        <div class="modal-content">
            <div class="modal-header">
                <h1 class="modal-title fs-5" id="deleteModalLabel">
                    게시판을 삭제하시겠습니까?
                </h1>
                <button
                    type="button"
                    class="btn-close"
                    data-bs-dismiss="modal"
                    aria-label="Close"
                >
```

```
></button>
</div>
<div class="modal-body">
  <p class="fw-light">게시판에 포함된 모든 게시글이 삭제됩니다.</p>
</div>
<div class="modal-footer">
  <button
    type="button"
    class="btn btn-secondary"
    data-bs-dismiss="modal"
  >
    취소
  </button>
  <button
    type="button"
    class="btn btn-danger"
    onclick="handleDeleteModalButton() "
  >
    삭제
  </button>
</div>
</div>
</div>

<script th:inline="javascript">
  let currentBoard;

  function handleDeleteButton(e, boardId) {
    e.preventDefault();
    currentBoard = boardId;
  }

  function handleDeleteModalButton() {
    fetch(`/boards/${currentBoard}`, {
      method: "DELETE",
    }).then(response => {
      if (response.ok) {
        window.location.href = "/boards";
      } else {
        alert('게시판 삭제에 실패했습니다.');
      }
    }).catch(error => {
      console.error('삭제 중 에러 발생:', error);
      alert('게시판 삭제 중 문제가 발생했습니다.');
    });
  }
</script>

<!-- 부트스트랩 JS 추가 -->
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"
  integrity="sha384-C6RzsynM9kWDrMNeT87bh95OGNyZPhcTNXj1NW7RuBCsyN/o0jlpcV8Qyq46cDfL"

```

```
    crossorigin="anonymous"
  ></script>
</body>
</html>
```

createBoard.html

```
<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
  <head>
    <meta charset="UTF-8" />
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
          rel="stylesheet"
          integrity="sha384-T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
          crossorigin="anonymous"
        />
    <link href="https://font.elice.io/css?family=Elice+DX+Neolli"
          rel="stylesheet"
        />

    <style>
      html,
      body {
        font-family: "Elice DX Neolli", sans-serif;
      }
    </style>
    <title>게시판 생성</title>
  </head>
  <body>
    <div class="container my-5">
      <div class="header mb-5">
        <h1 class="text-center">게시판 생성</h1>
      </div>
      <form th:action="@{/boards/create}" method="post">
        <div class="mb-3">
          <label for="title">게시판 이름</label>
          <input type="text"
                 class="form-control"
                 id="title"
                 name="title"
                 maxlength="20"
                 placeholder="게시판 이름 입력 (최대 20 자)"
                 required
               />
        </div>
        <div class="mb-3">
          <label for="description">게시판 설명</label>
          <textarea
                 class="form-control"
               />
        </div>
      </form>
    </div>
  </body>
</html>
```

```

        id="description"
        name="description"
        maxlength="200"
        placeholder="게시판 설명 입력 (최대 200자)"
    ></textarea>
</div>
<button type="submit" class="btn btn-primary">게시판 추가</button>
<button
    type="button"
    class="btn btn-secondary"
    onclick="window.history.back();"
>
    취소
</button>
</form>
</div>

<!-- 부트스트랩 JS 추가 -->
<script

src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"
    integrity="sha384-C6RzsynM9kWDrMNeT87bh95OGNyZPhcTNXj1NW7RuBCsyN/o0jlpcV8Qyq46cDfL"
    crossorigin="anonymous"
></script>
</body>
</html>

```

Board.html

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
    <head>
        <meta charset="UTF-8" />
        <link
            href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
                rel="stylesheet"
                integrity="sha384-C6RzsynM9kWDrMNeT87bh95OGNyZPhcTNXj1NW7RuBCsyN/o0jlpcV8Qyq46cDfL"
                crossorigin="anonymous"
            />
        <link
            href="https://font.elice.io/css?family=Elice+DX+Neolli"
            rel="stylesheet"
        />
        <link
            rel="stylesheet"
            href="https://fonts.googleapis.com/css2?family=Material+Symbols+Outlined:opsz,wght,FILL,GRAD@24,400,0,0"
        />

        <style>

```

```
html,
body {
    font-family: "Elice DX Neolli", sans-serif;
}
</style>
<title th:text="${board.title}"></title>
</head>
<body>
    <div class="container my-5">
        <a
            class="link link-offset-1 link-offset-2-hover text-sm fs-6 mb-2 d-block"
            style="transition: all 0.1s ease-in-out"
            th:href="@{/boards}"
        >&larr; 게시판 목록으로 돌아가기</a>
    >
    <div class="header mb-5">
        <h1 class="text-center" th:text="${board.title}">게시판 제목</h1>
        <p
            class="text-center text-secondary"
            th:text="${board.description}"
        ></p>
    </div>
    <div class="d-flex w-100 justify-content-between mb-3">
        <form>
            <div class="input-group">
                <input
                    class="form-control"
                    name="keyword"
                    placeholder="키워드 검색"
                    th:value="${keyword}"
                />
                <button class="btn btn-primary lh-1 p-0 px-2">
                    <span class="material-symbols-outlined"> search </span>
                </button>
            </div>
        </form>
        <a
            th:href="@{/posts/create(boardId=${board.id})}"
            class="btn btn-primary"
        >게시글 추가</a>
    >
    </div>
    <div class="list-group position-relative mb-3">
        <a
            class="board-item list-group-item p-3 list-group-item-action"
            th:unless="${postPage.isEmpty()}"
            th:each="post : ${postPage}"
            th:href="@{/posts/{postId}(postId=${post.id})}"
        >
            <h4 class="fw-bold mb-1" th:text="${post.title}">게시글 제목</h4>
            <small class="text-secondary" th:text="${post.createdAt}">
                >게시글 생성일</small>
            >
        </a>
        <span
            th:if="${postPage.isEmpty()}"

```

```

        class="text-center"
        th:text="${keyword != null ? '`' + keyword + '` 키워드에 해당하는
게시글이 없습니다.' : '올라온 게시글이 없습니다.'}"
    ></span>
</div>
<div class="w-100 d-flex justify-content-center">
    <ul class="pagination">
        <li
            th:each="i : ${postPage.totalPages > 1 ? #numbers.sequence(0,
postPage.totalPages - 1) : #numbers.sequence(0, 0)}"
            class="page-item"
            th:classappend="${i == postPage.number ? 'active' : ''}"
        >
            <a
                class="page-link"
                th:href="@{/boards/{boardId}(page=${i}, size=${postPage.size},
boardId=${board.id}, keyword=${keyword})}"
                th:text="${i + 1}"
            >${i + 1}</a>
        </li>
    </ul>
</div>
</div>

<!-- 부트스트랩 JS 추가 -->
<script

src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"
        integrity="sha384-C6RzsynM9kWDrMNeT87bh95OGNyZPhcTNXj1NW7RuBCsyN/o0jlpcV8Qyq46cDfL"
        crossorigin="anonymous"
    ></script>
</body>
</html>

```

editBoard.html

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
    <head>
        <meta charset="UTF-8" />
        <link
            href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
            rel="stylesheet"
            integrity="sha384-C6RzsynM9kWDrMNeT87bh95OGNyZPhcTNXj1NW7RuBCsyN/o0jlpcV8Qyq46cDfL"
            crossorigin="anonymous"
        />
        <link
            href="https://font.elice.io/css?family=Elice+DX+Neolli"
            rel="stylesheet"
        />

```

```
<style>
  html,
  body {
    font-family: "Elice DX Neolli", sans-serif;
  }
</style>
<title>게시판 수정</title>
</head>
<body>
  <div class="container my-5">
    <div class="header mb-5">
      <h1 class="text-center">게시판 수정</h1>
    </div>
    <form th:action="@{/boards/edit/{id} (id=${board.id})}" method="post">
      <div class="mb-3">
        <label for="title">게시판 이름</label>
        <input
          type="text"
          class="form-control"
          id="title"
          name="title"
          maxlength="20"
          placeholder="게시판 이름 입력 (최대 20 자)"
          required
          th:value="${board.title}"
        />
      </div>
      <div class="mb-3">
        <label for="description">게시판 설명</label>
        <textarea
          class="form-control"
          id="description"
          name="description"
          maxlength="200"
          placeholder="게시판 설명 입력 (최대 200 자)"
          th:text="${board.description}"
        ></textarea>
      </div>
      <button type="submit" class="btn btn-primary">게시판 수정</button>
      <button
        type="button"
        class="btn btn-secondary"
        onclick="window.history.back();"
      >
        취소
      </button>
    </form>
  </div>

  <!-- 부트스트랩 JS 추가 -->
  <script
    src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle."
  >
```

```
min.js"
    integrity="sha384-
C6RzsynM9kWDrMNeT87bh95OGNyZPhcTNXj1NW7RuBCsyN/o0jlpcV8Qyq46CDFL"
    crossorigin="anonymous"
    ></script>
</body>
</html>
```