

■ 프로젝트 생성

New Spring Starter Project

Service URL:

Name:

☒ Use default location

Location:

Type: Packaging:

Java Version: Language:

Group:

Artifact:

Version:

Description:

Package:

Working sets

☐ Add project to working sets

Working sets:

New Spring Starter Project Dependencies

Spring Boot Version:

Frequently Used:

<input checked="" type="checkbox"/> H2 Database	<input checked="" type="checkbox"/> Lombok	<input checked="" type="checkbox"/> Spring Boot DevTools
<input checked="" type="checkbox"/> Spring Data JPA	<input checked="" type="checkbox"/> Spring Web	<input checked="" type="checkbox"/> Thymeleaf

Available:

Type to search dependencies

- Amazon Web Services
- Developer Tools
- Google Cloud Platform
- I/O
- Messaging
- Microsoft Azure
- NoSQL
- Ops
- Pivotal Cloud Foundry
- SQL
- Security

Selected:

- X Spring Boot DevTools
- X Lombok
- X Spring Data JPA
- X H2 Database
- X Thymeleaf
- X Spring Web

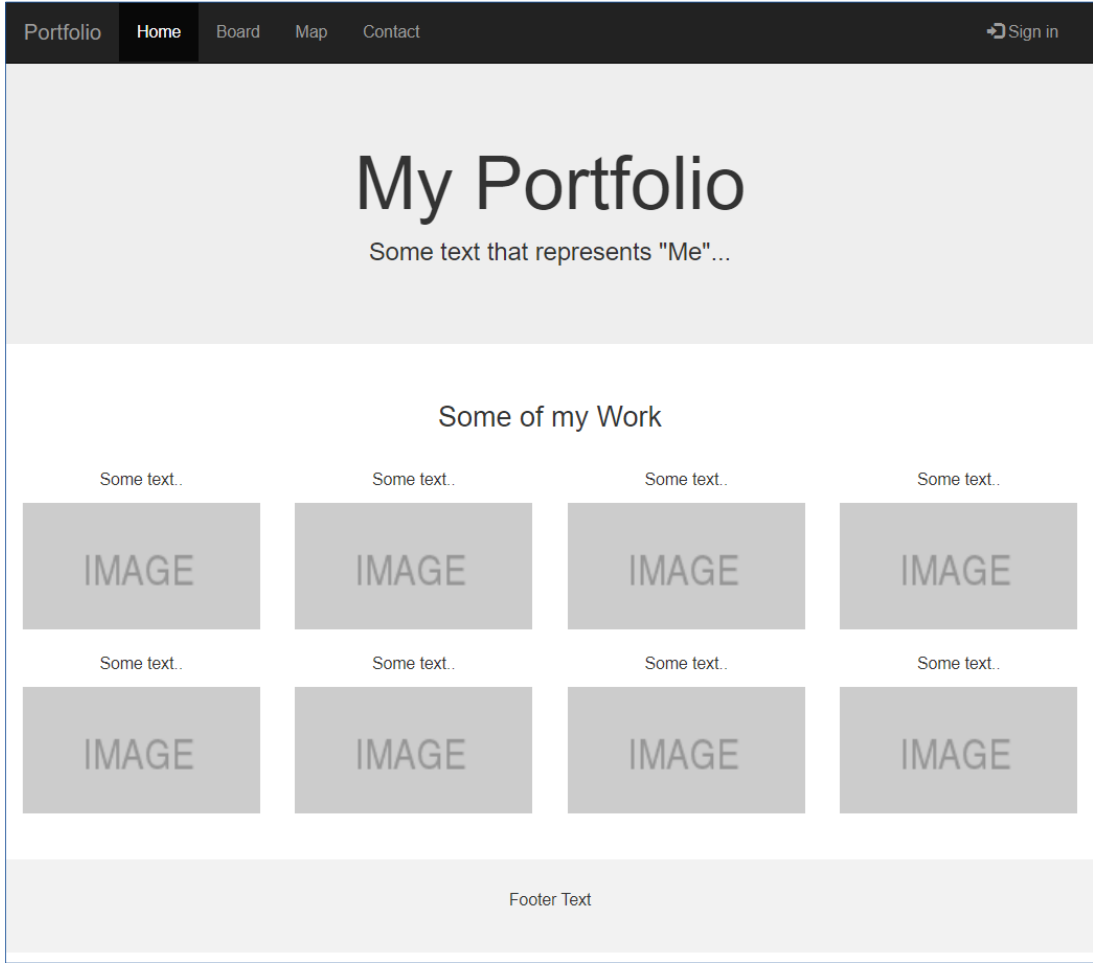
■ Board

● 기능

- 회원가입, 로그인
- 게시판
 - 작성 / 조회(목록, 상세내용) / 수정 / 삭제
- 지도
 - 카카오 지도를 이용한 특정 위치를 기준으로 반경 10KM 이내 지점 표시
- 이메일 발송
 - 구글 SMTP를 이용한 건의사항/의견 제출

■ Board

- Home



■ Board

● 회원가입 / 로그인

[Portfolio](#) [Home](#) [Board](#) [Map](#) [Contact](#) [Sign in](#)

Email:

Password:

Name:

Footer Text

[Portfolio](#) [Home](#) [Board](#) [Map](#) [Contact](#) [Sign in](#)

Footer Text

■ Board

● 게시판

Portfolio Home **Board** Map Contact Sign in

번호	제목	작성자
6	4455	seorab@naver.com
5	444	seorab@naver.com
4	33333	seorab@naver.com

글쓰기

Portfolio Home **Board** Map Contact Sign in

6번
4455
5
seorab@naver.com

목록 수정 삭제

Footer Text

Portfolio Home **Board** Map Contact Sign in

Title:
4455

Content:
5

글쓰기

Portfolio Home **Board** Map Contact Sign in

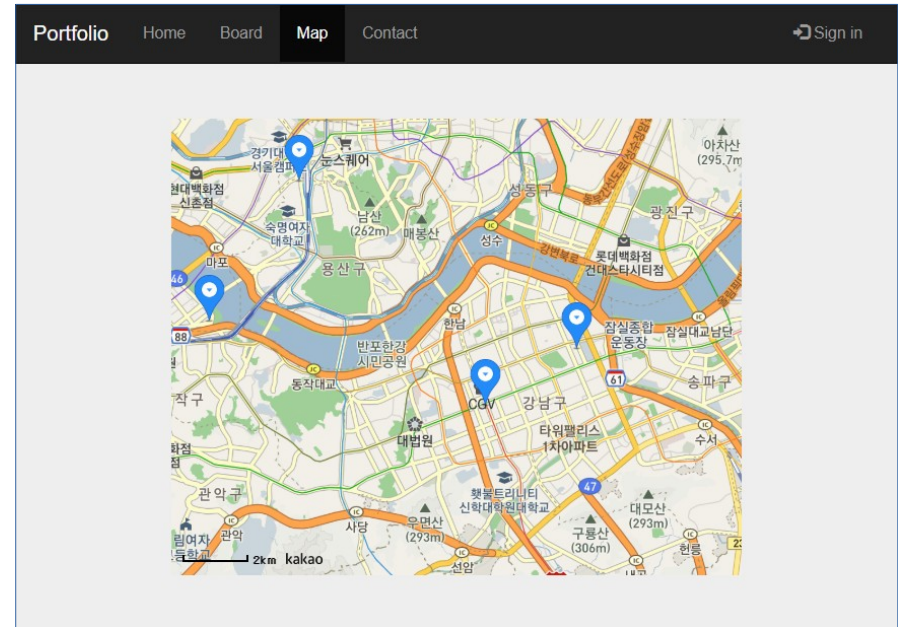
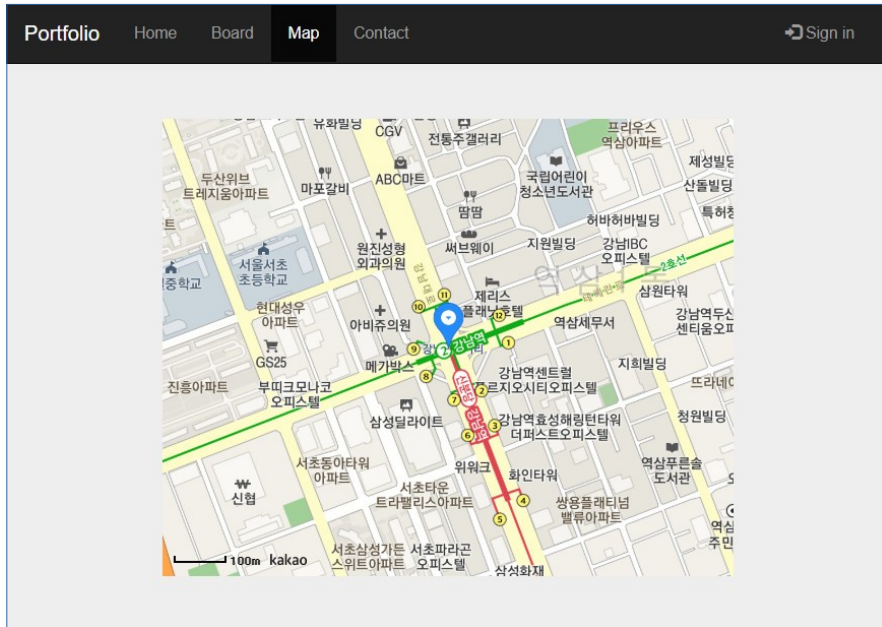
Title:

Content:

글쓰기

■ Board

● 지도



■ Board

● 이메일 발송

Portfolio

Home

Board

Map

Contact

→ Sign in

Email:

Comment:

발송

Footer Text

■ Home

● 필요 기술 / 라이브러리

- HTML Design (bootstrap)
- Controller
- Thymeleaf : 공통(중복) 레이아웃 처리

■ Home

● <https://www.w3schools.com> → Learn Bootstrap → B3 → BS Templates

Home HTML CSS JAVASCRIPT SQL MORE ▾ REFERENCES ▾ EXERCISES ▾

BS Popover
BS Scrollspy
BS Affix
BS Filters

Bootstrap Grids
BS Grid System
BS Stacked/Horizontal
BS Grid Small
BS Grid Medium
BS Grid Large
BS Grid Examples

Bootstrap Themes
BS Templates
BS Theme "Simply Me"
BS Theme "Company"
BS Theme "Band"

Bootstrap Examples
BS Examples
BS Quiz

Blog:

Portfolio:

Webpage:

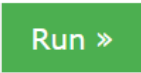





Social:

Accordions
Side Navigation
Top Navigation
Modal
Boxes
Progress Bars
Parallax
Login Form
HTML Includes
Google Maps
Range
Sliders
Tooltips
Slideshow
Filter List
Sort List

SHARE

■ Home

● 소스코드 전체 복사



Result Size: 975 x 230

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
  <style>
    /* Remove the navbar's default margin-bottom and rounded borders */
    .navbar {
```

Portfolio

Home

About

Gallery

Contact

Login

My Portfolio

Some text that represents "Me"...

■ Home

● templates/index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  ...
</head>
<body>
<nav class="navbar navbar-inverse">
  <div class="container-fluid">
    <div class="navbar-header">

      ...

    </div>
  </div>
  ...
</nav>

<div class="jumbotron">
  <div class="container text-center">

    ...

  </div>
</div>

...

</body>
</html>
```

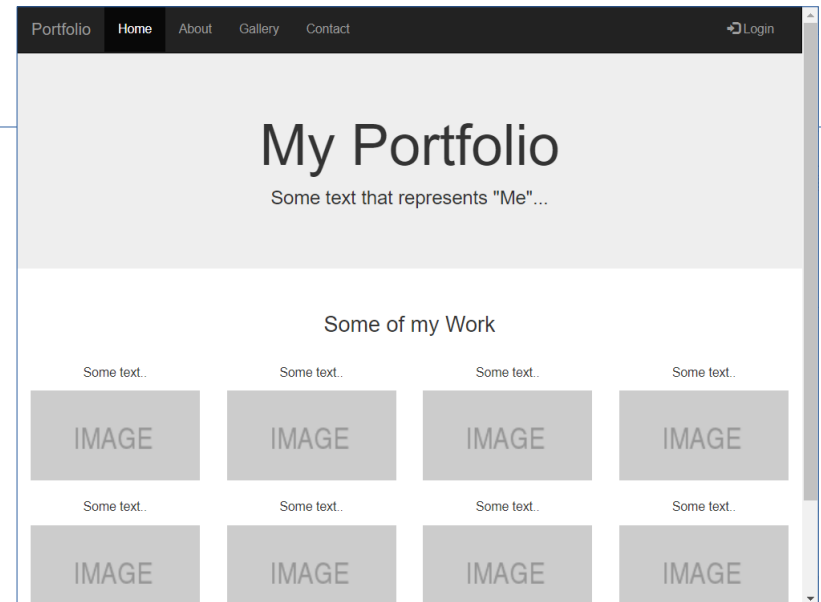
■ Home

● controller/HomeController.java

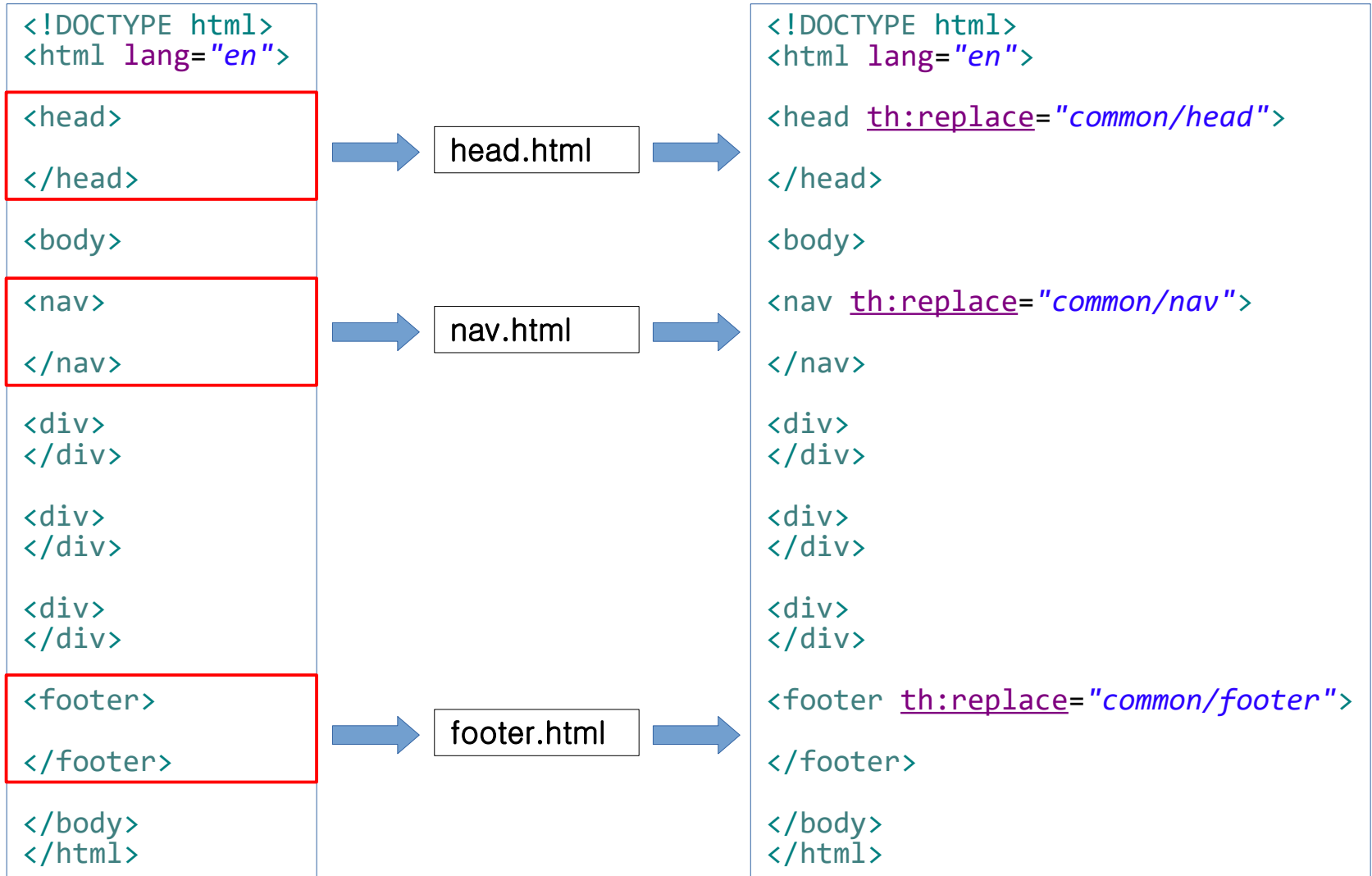
```
package com.example.board.controller;

import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.GetMapping;

@Controller
public class HomeController {
    @GetMapping({"/", "/home"})
    public String index() {
        return "index";
    }
}
```



■ Template 공통 레이아웃 분리



■ Template 공통 레이아웃 분리

● templates/common/head.html

```
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="...">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js">
  </script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js">
  </script>
  <style>
    /* Remove the navbar's default margin-bottom and rounded borders */
    .navbar {
      margin-bottom: 0;
      border-radius: 0;
    }

    /* Add a gray background color and some padding to the footer */
    footer {
      background-color: #f2f2f2;
      padding: 25px;
    }
  </style>
</head>
```

■ Template 공통 레이아웃 분리

● templates/common/nav.html

```
<nav class="navbar navbar-inverse">
  <div class="container-fluid">
    <div class="navbar-header">
      <button type="button" class="navbar-toggle" data-toggle="collapse"
        data-target="#myNavbar">
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
      </button>
      <a class="navbar-brand" href="/">Portfolio</a>
    </div>
    <div class="collapse navbar-collapse" id="myNavbar">
      <ul class="nav navbar-nav">
        <li class="active"><a href="/home">Home</a></li>
        <li><a href="/board">Board</a></li>
        <li><a href="/map">Map</a></li>
        <li><a href="/contact">Contact</a></li>
      </ul>
      <ul class="nav navbar-nav navbar-right">
        <li>
          <a href="#">
            <span class="glyphicon glyphicon-log-in"></span>
            Sign in
          </a>
        </li>
      </ul>
    </div>
  </div>
</nav>
```

■ Template 공통 레이아웃 분리

● templates/common/footer.html

```
<footer class="container-fluid text-center">  
  <p>Footer Text</p>  
</footer>
```

● templates/index.html

```
<!DOCTYPE html>  
<html lang="en">  
<head th:replace="common/head">  
</head>  
  
<body>  
  
<nav class="navbar navbar-inverse" th:replace="common/nav">  
</nav>  
  
...  
  
<footer class="container-fluid text-center" th:replace="common/footer">  
</footer>  
  
</body>  
</html>
```


■ 회원가입

● 필요 기술 / 라이브러리

- HTML Design (bootstrap)

- Database (H2)

- JPA

- Model (@Entity)

- ModelRepository (JpaRepository 상속)

application.properties 설정 필요

- Controller

- Thymeleaf

■ 회원가입

● templates/signup.html

```
...  
<div class="jumbotron">  
  <div class="container text-center">  
    <form method="post" action="/signup">  
      <div class="form-group">  
        <label for="email">Email:</label>  
        <input type="text" class="form-control" id="email" name="email">  
      </div>  
      <div class="form-group">  
        <label for="pwd">Password:</label>  
        <input type="password" class="form-control" id="pwd" name="pwd">  
      </div>  
      <div class="form-group">  
        <label for="name">Name:</label>  
        <input type="text" class="form-control" id="name" name="name">  
      </div>  
      <button class="btn btn-primary btn-block" id="signup">Sign Up</button>  
    </form>  
  </div>  
</div>  
...
```

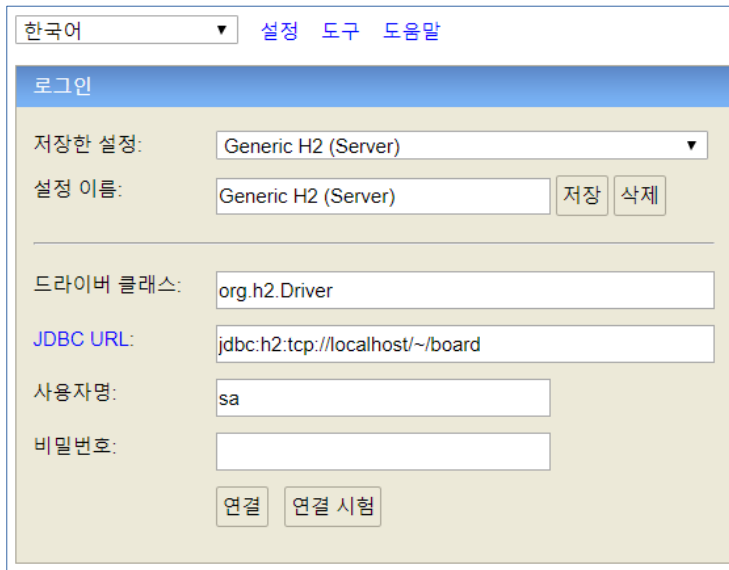
```
<script>  
  $("#signup").click(function() {  
    $("form").submit();  
    return false;  
  });  
</script>
```

Email:	<input type="text"/>
Password:	<input type="password"/>
Name:	<input type="text"/>
<input type="button" value="Sign Up"/>	

■ 회원가입

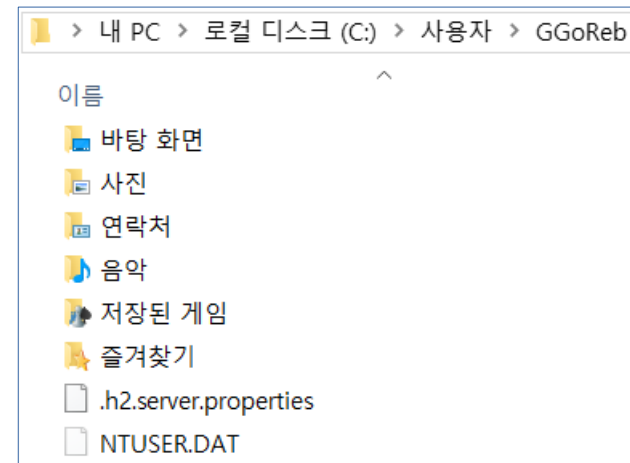
● H2 Database 실행 및 데이터베이스 생성

- 원활한 관리를 위해서 Server 모드로 접속해야 하지만 database 파일이 미리 생성되어 있어야 됨



The image shows the H2 Database GUI Login window. At the top, there is a language dropdown set to '한국어' and links for '설정' (Settings), '도구' (Tools), and '도움말' (Help). The '로그인' (Login) section contains the following fields and buttons:

- '저장한 설정:' (Saved settings) dropdown menu showing 'Generic H2 (Server)'.
- '설정 이름:' (Settings name) text field with 'Generic H2 (Server)', and '저장' (Save) and '삭제' (Delete) buttons.
- '드라이버 클래스:' (Driver class) text field with 'org.h2.Driver'.
- 'JDBC URL:' text field with 'jdbc:h2:tcp://localhost/~:/board'.
- '사용자명:' (Username) text field with 'sa'.
- '비밀번호:' (Password) empty text field.
- '연결' (Connect) and '연결 시험' (Test connection) buttons at the bottom.



Database "C:/Users/GGoReb/board" not found, either pre-create it or allow remote database creation (not recommended in secure environments) [90149-200] 90149/90149 (도움말)

■ 회원가입

● H2 Database 실행 및 데이터베이스 생성

– Embedded로 접속 시 database 파일 자동 생성

한국어 ▼ 설정 도구 도움말

로그인

저장한 설정: Generic H2 (Embedded) ▼

설정 이름: Generic H2 (Embedded) 저장 삭제

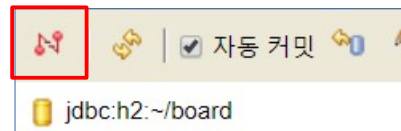
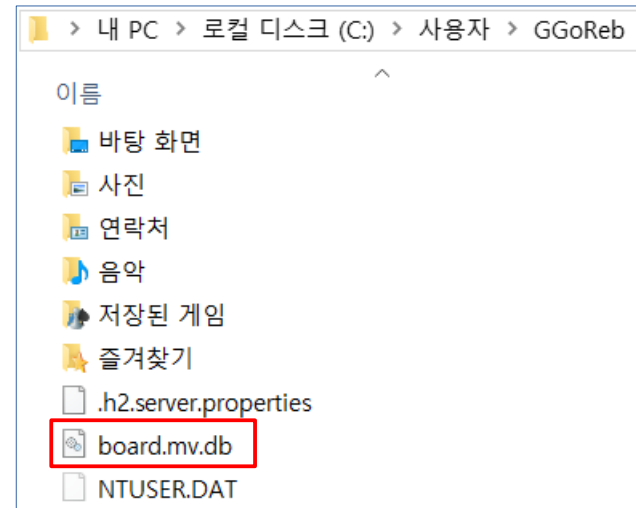
드라이버 클래스: org.h2.Driver

JDBC URL: jdbc:h2:~/board

사용자명: sa

비밀번호:

연결 연결 시험



■ 회원가입

● application.properties

– DataSource

jdbc:h2:~/db명(embedded) → jdbc:h2:tcp://localhost/~/db명

```
# datasource
spring.datasource.url=jdbc:h2:tcp://localhost/~/board
spring.datasource.driverClassName=org.h2.Driver
spring.datasource.username=sa
spring.datasource.password=

# jpa
spring.jpa.hibernate.ddl-auto=update
spring.jpa.database-platform=org.hibernate.dialect.H2Dialect
spring.jpa.show-sql=true
```

■ 회원가입

● model/User.java

```
package com.example.board.model;

import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import lombok.Data;

@Entity
@Data
public class User {
    @Id
    @GeneratedValue(strategy = GenerationType.AUTO)
    private long id;
    private String email;
    private String pwd;
    private String name;
}
```

● repository/UserRepository.java

```
package com.example.board.repository;

import org.springframework.data.jpa.repository.JpaRepository;
import com.example.board.model.User;

public interface UserRepository extends JpaRepository<User, Long> {
}
```

■ 회원가입

● controller/UserController.java

```
package com.example.board.controller;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.PostMapping;

import com.example.board.model.User;
import com.example.board.repository.UserRepository;

@Controller
public class UserController {
    @Autowired
    UserRepository userRepository;

    @GetMapping("/signup")
    public String signup() {
        return "signup";
    }

    @PostMapping("/signup")
    public String signupPost(@ModelAttribute User user) {
        userRepository.save(user);
        return "redirect:/";
    }
}
```

■ 회원가입

● <http://localhost:8080/signup>

localhost:8080/signup

Portfolio Home Board Map Contact Sign in

Email:
seorab@naver.com

Password:
.

Name:
ggoreb

Sign Up

Footer Text



localhost:8080

Portfolio Home Board Map Contact Sign in

My Portfolio

Some text that represents "Me"...

Some of my Work

Some text.. Some text.. Some text.. Some text..

IMAGE IMAGE IMAGE IMAGE

Footer Text

주의 요함 | 192.168.0.2:8082/login.do?jsessi...

실행 Run Selected 자동 완성 지우기 SQL 문:

SELECT * FROM USER;

ID	EMAIL	NAME	PWD
1	seorab@naver.com	ggoreb	1

(1 row, 24 ms)

편집

■ 로그인

● 필요 기술 / 라이브러리



- HTML Design (bootstrap)
- Database (H2)
- JPA
 - Model (@Entity)
 - ModelRepository (JpaRepository 상속)
- Controller
- Thymeleaf

■ 로그인

● templates/signin.html

```
...  
<div class="jumbotron">  
  <div class="container text-center">  
    <form method="post" action="/signup">  
      <div class="form-group">  
        <label for="email">Email:</label>  
        <input type="text" class="form-control" id="email" name="email">  
      </div>  
      <div class="form-group">  
        <label for="pwd">Password:</label>  
        <input type="password" class="form-control" id="pwd" name="pwd">  
      </div>  
      <button class="btn btn-primary btn-block" id="signin">Sign in</button>  
    </form>  
  </div>  
</div>  
...
```

```
<script>  
  $("#signin").click(function() {  
    $("form").submit();  
    return false;  
  });  
</script>
```

	Email
	Password
<div>Sign in</div>	

■ 로그인

● repository/UserRepository.java

```
package com.example.board.repository;

import org.springframework.data.jpa.repository.JpaRepository;
import com.example.board.model.User;

public interface UserRepository extends JpaRepository<User, Long> {
    public User findByEmailAndPwd(String email, String pwd);
}
```

● controller/UserController.java

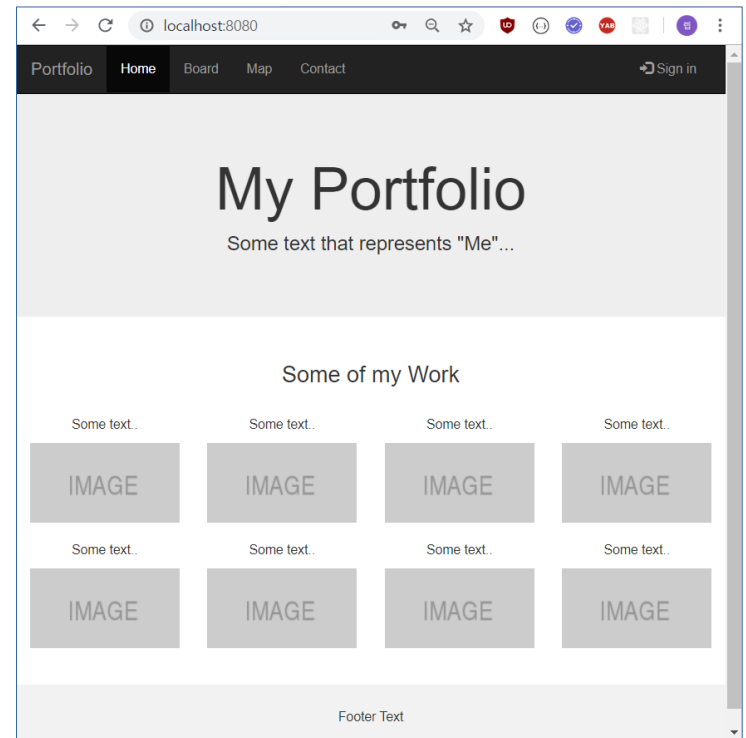
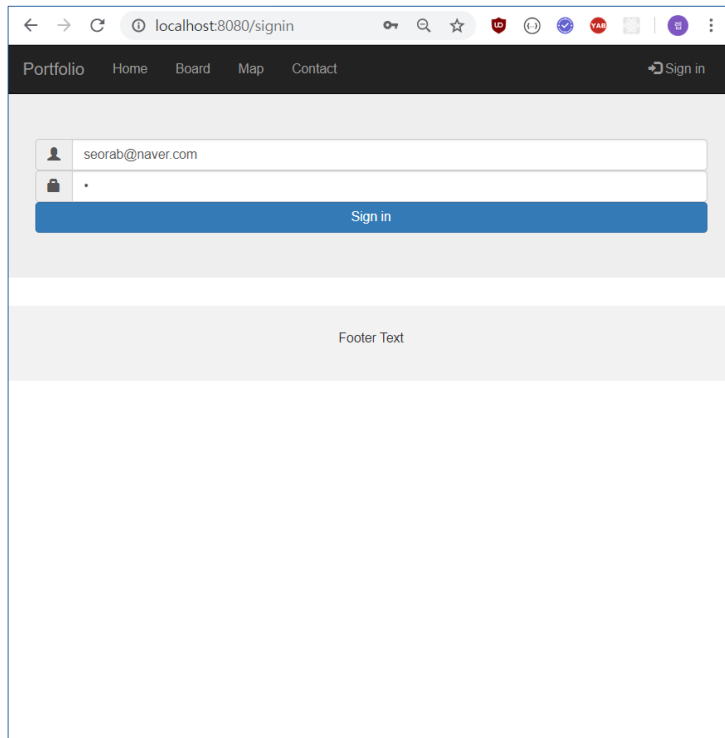
```
@Autowired
HttpSession session;

@GetMapping("/signin")
public String signin() {
    return "signin";
}

@PostMapping("/signin")
public String signinPost(@ModelAttribute User user) {
    User dbUser = userRepository.findByEmailAndPwd(user.getEmail(), user.getPwd());
    if(dbUser != null) {
        session.setAttribute("user_info", dbUser);
    }
    return "redirect:/";
}
```

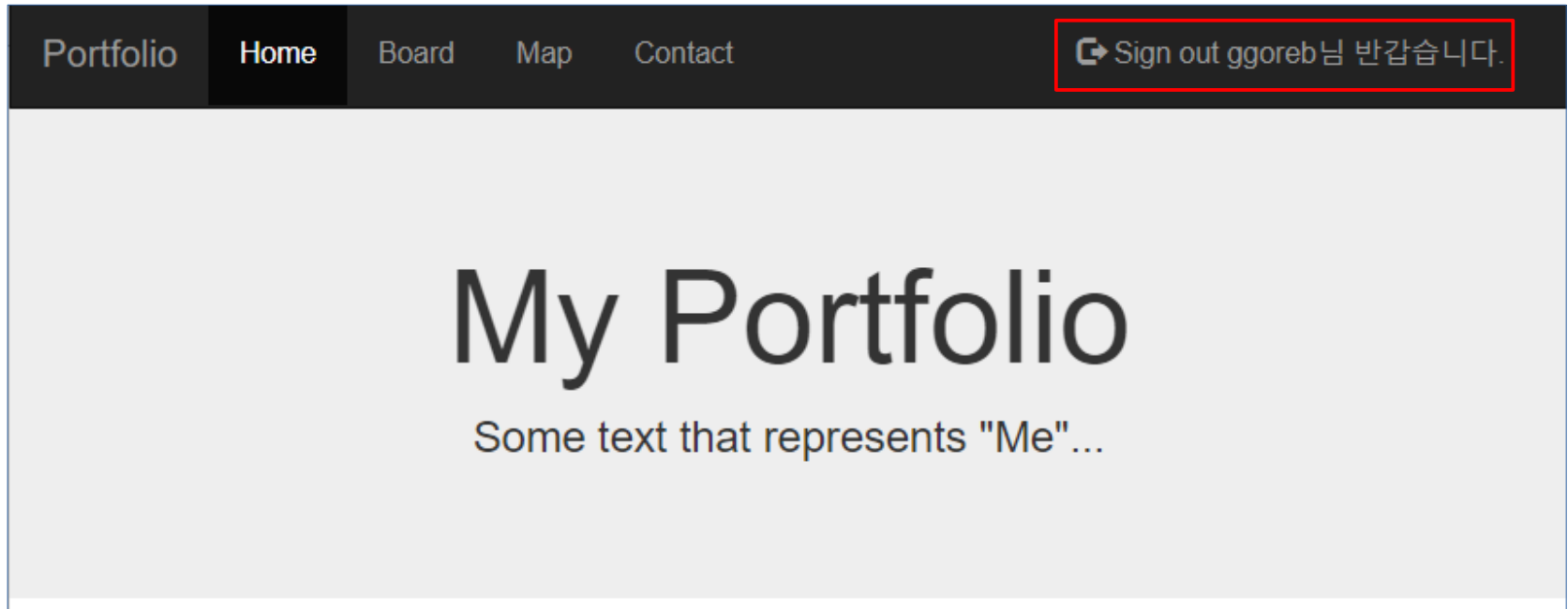
■ 로그인

● <http://localhost:8080/signin>



■ session

- 로그인 후 nav에 사용자 정보 출력



- 로그아웃 시 session에 저장된 정보 삭제
- Thymeleaf session 표현
 - `${session.세션저장명}`

■ session

● templates/common/nav.html

```
<nav class="navbar navbar-inverse">
  <div class="container-fluid">

    ...

    <div class="collapse navbar-collapse" id="myNavbar">
      <ul class="nav navbar-nav">
        <li class="active"><a href="/home">Home</a></li>
        <li><a href="/board">Board</a></li>
        <li><a href="/map">Map</a></li>
        <li><a href="/contact">Contact</a></li>
      </ul>
      <ul class="nav navbar-nav navbar-right">
        <li th:if="${session.user_info} == null">
          <a href="/signin">
            <span class="glyphicon glyphicon-log-in"></span>
            Sign in
          </a>
        </li>
        <li th:if="${session.user_info} != null">
          <a href="/signout">
            <span class="glyphicon glyphicon-log-out"></span>
            Sign out [[${session.user_info.name} + '님 반갑습니다.']]
          </a>
        </li>
      </ul>
    </div>
  </div>
</nav>
```

■ session

● controller/UserController.java

```
@GetMapping("/signout")  
public String signout() {  
    session.invalidate();  
    return "redirect:/";  
}
```

