■ 프로젝트 생성

New Spring Starter Project

Service URL	https://start.spring.io
Name	Board

☑ Use default location

Location	F:\dev\workspace-sts-4\Board · Browse
Type:	Gradle (Buildship 3.x) · Packaging: Jar
Java Version:	8 · Language: Java
Group	com.example
Artifact	Board
Version	0.0.1-SNAPSHOT
Description	Demo project for Spring Boot
Package	com.example.board

Working sets

☐ Add project to working sets · New...

Working sets: · Select...

⑦   < Back | Next > | Finish | Cancel

New Spring Starter Project Dependencies

Spring Boot Version: 2.2.2

Frequently Used:

☑ H2 Database   ☑ Lombok   ☑ Spring Boot DevTools
☑ Spring Data JPA   ☑ Spring Web   ☑ Thymeleaf

Available:

Type to search dependencies

Selected:

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

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

Make Default | Clear Selection
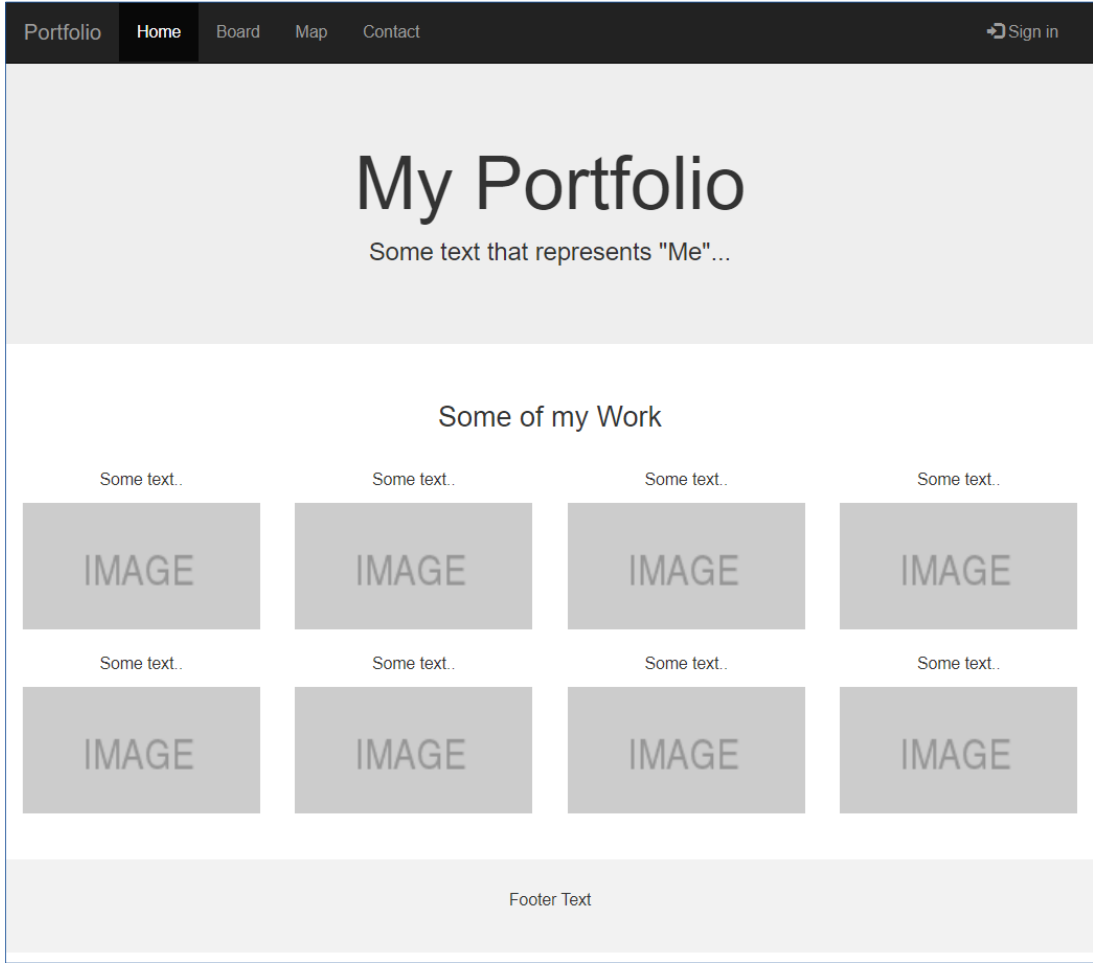
⑦   < Back | Next > | Finish | Cancel

■ 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

| 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
Some text..	Some text..	Some text..	Some text..
IMAGE	IMAGE	IMAGE	IMAGE

Footer Text

■ Board

● 회원가입 / 로그인

| Portfolio | Home | Board | Map | Contact | Sign in |

Email:

Password:

Name:

Sign Up

Footer Text

| Portfolio | Home | Board | Map | Contact | Sign in |

👤 Email

🔒 Password

Sign in Sign up

Footer Text

■ Board

● 게시판

■ Board

● 지도
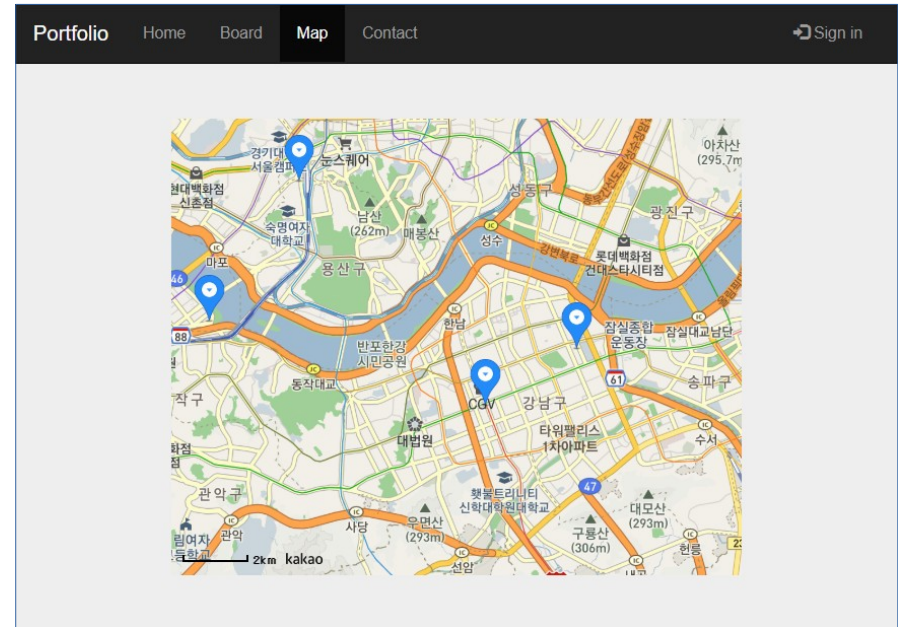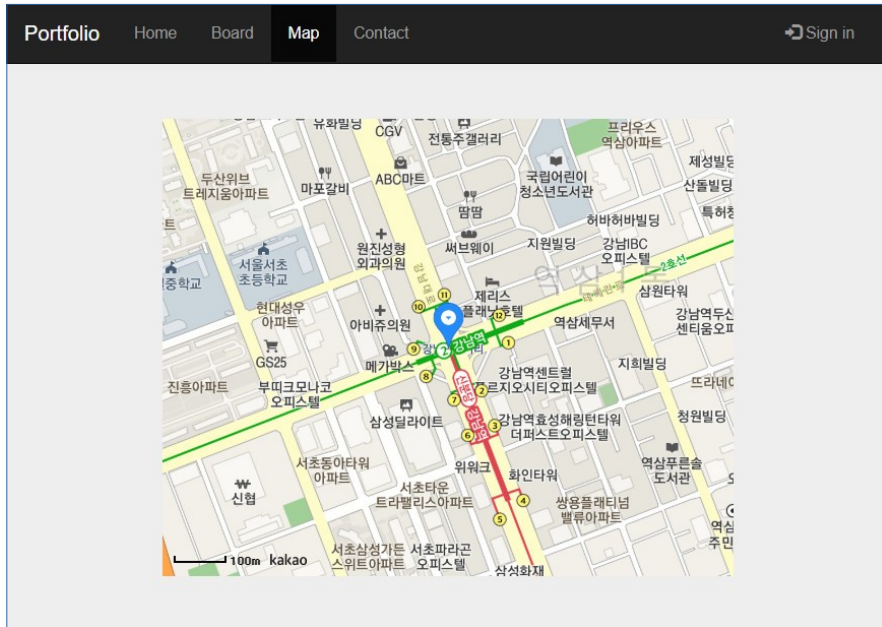
■ Board

● 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

● 소스코드 전체 복사


```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">
  <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 {
```

Result Size: 975 x 230

Run »

Portfolio Home About Gallery Contact   Login

My Portfolio

Some text that represents "Me"...

■ Home

● templates/index.html

```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">

    …

</nav>

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

…

</body>
</html>
```
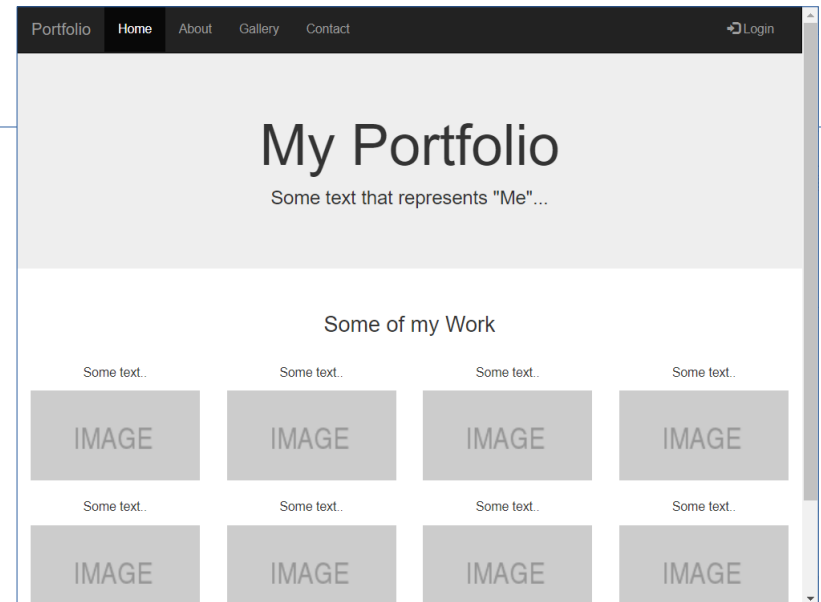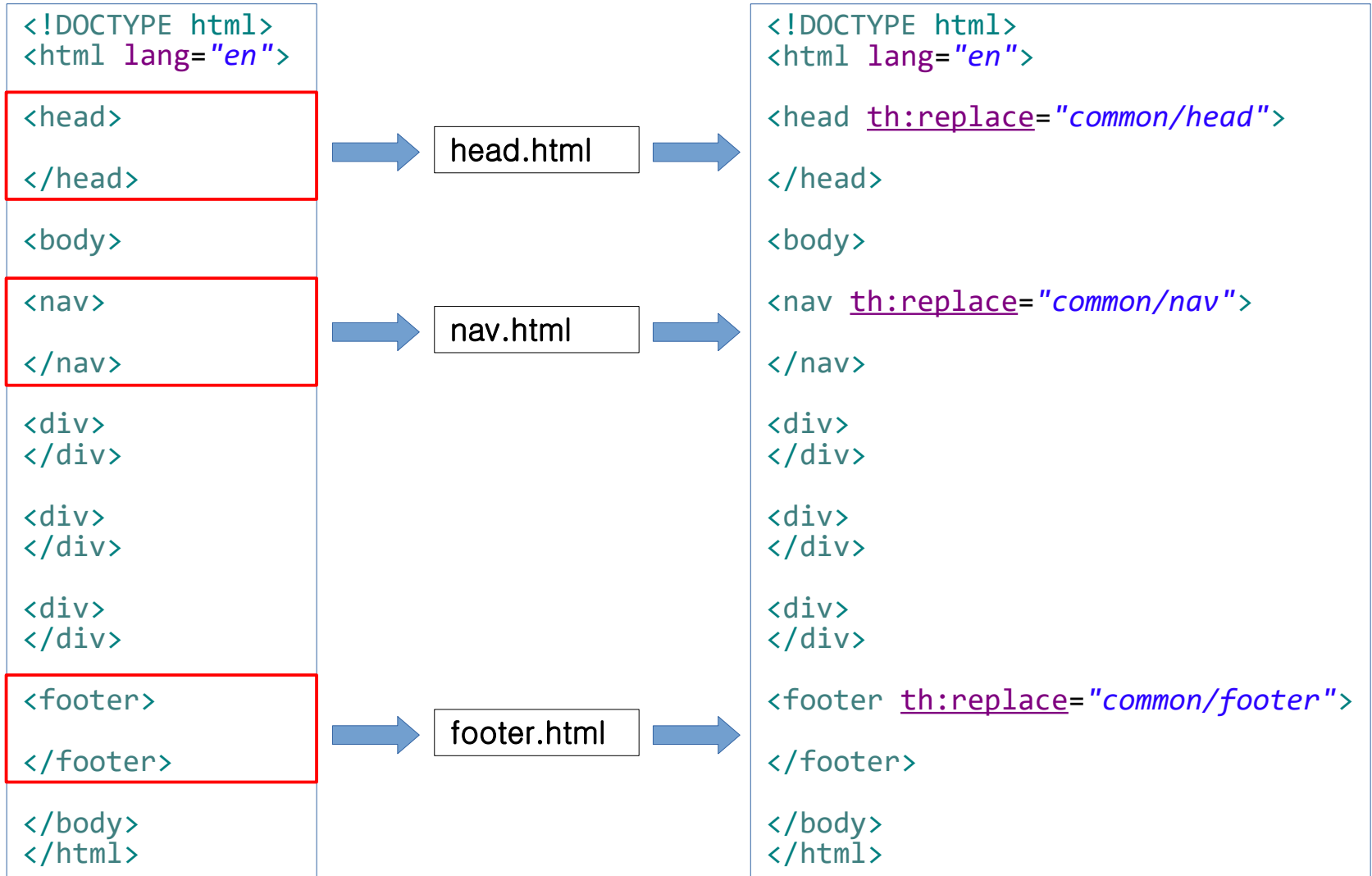
■ Home

● controller/HomeController.java

```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

```
<!DOCTYPE html>
<html lang="en">

<head>

</head>

<body>

<nav>

</nav>

<div>
</div>

<div>
</div>

<div>
</div>

<footer>

</footer>

</body>
</html>
```

head.html

nav.html

footer.html

```
<!DOCTYPE html>
<html lang="en">

<head th:replace="common/head">

</head>

<body>

<nav th:replace="common/nav">

</nav>

<div>
</div>

<div>
</div>

<div>
</div>

<footer th:replace="common/footer">

</footer>

</body>
</html>
```

■ Template 공통 레이아웃 분리

● templates/common/head.html

```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

```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

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

● templates/index.html

```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)

　　– Controller

　　– Thymeleaf

application.properties 설정 필요

■ 회원가입

● templates/signup.html

```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>
```
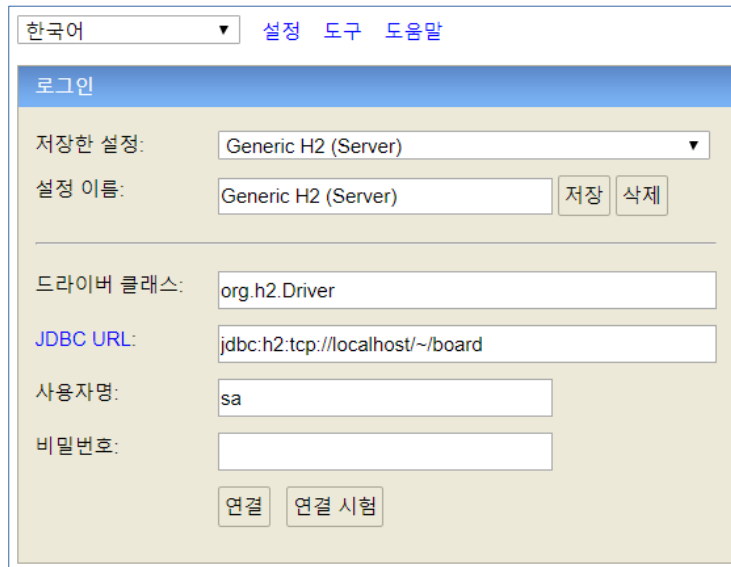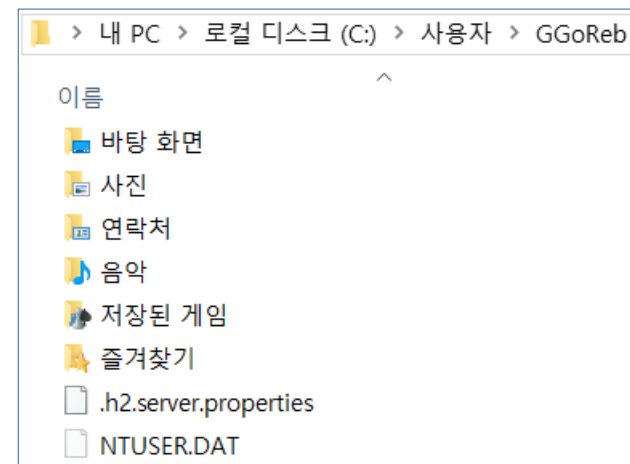
| Email: |
| |
| Password: |
| |
| Name: |
| |
| Sign Up |

■ 회원가입

● H2 Database 실행 및 데이터베이스 생성

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

한국어 ▼ 설정 도구 도움말	> 내 PC > 로컬 디스크 (C:) > 사용자 > GGoReb
로그인	이름
저장한 설정: Generic H2 (Server) ▼	바탕 화면
설정 이름: Generic H2 (Server) 저장 삭제	사진
드라이버 클래스: org.h2.Driver	연락처
JDBC URL: jdbc:h2:tcp://localhost/~/board	음악
사용자명: sa	저장된 게임
비밀번호:	즐겨찾기
연결 연결 시험	.h2.server.properties
	NTUSER.DAT

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
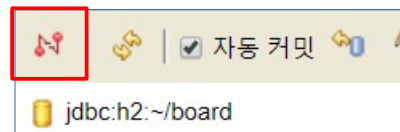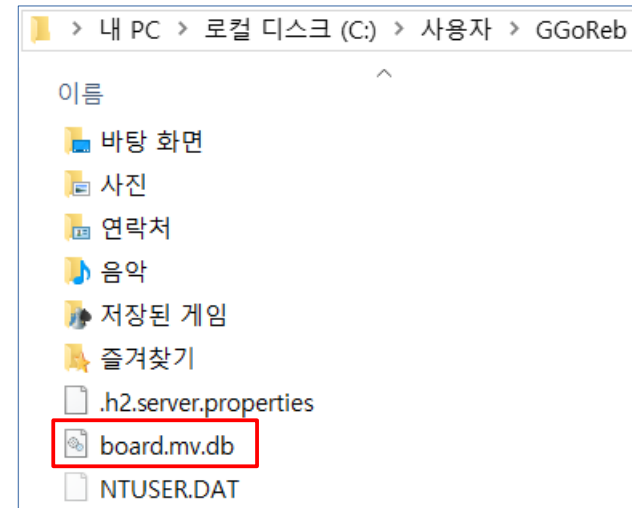
■ 회원가입

   ● 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

```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

```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

```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

■ 로그인

　● 필요 기술 / 라이브러리

　　– HTML Design (bootstrap)

　　– Database (H2)

　　– JPA

　　　・Model (@Entity)

　　　・ModelRepository (JpaRepository 상속)

　　– Controller

　　– Thymeleaf

■ 로그인

● templates/signin.html

```html
…
<div class="jumbotron">
  <div class="container text-center">
    <form method="post" action="/signin">
      <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>
```

■ 로그인

● repository/UserRepository.java

```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
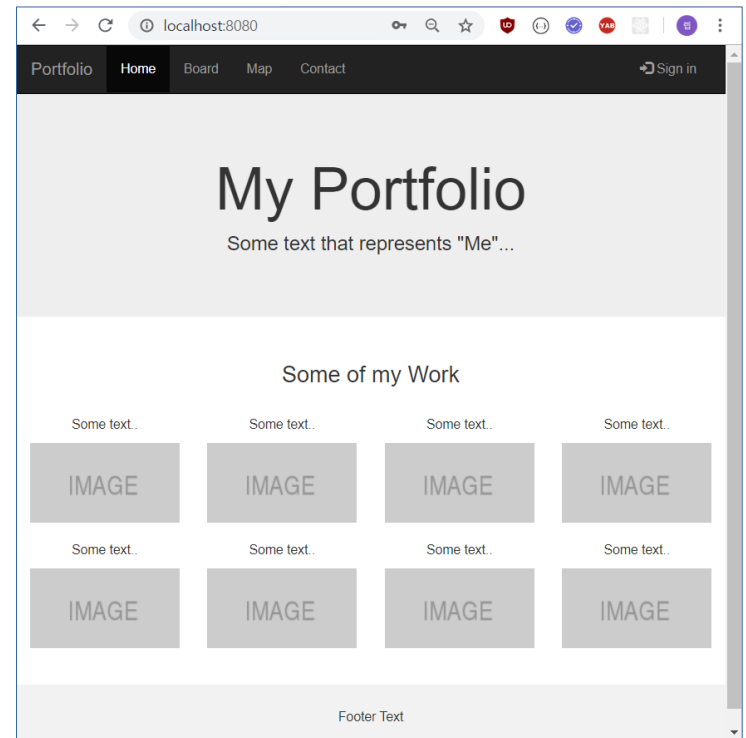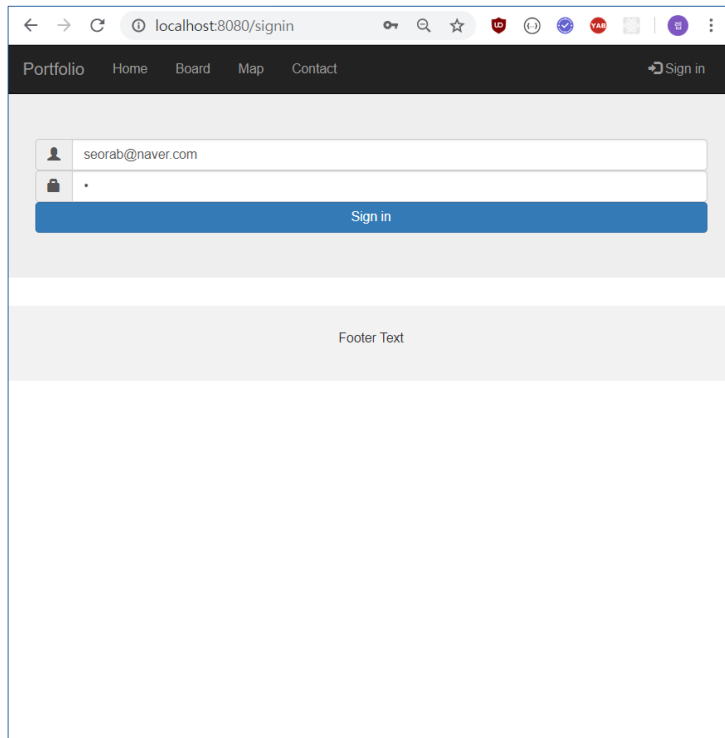
```java
    @Autowired
    HttpSession session;

    @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:/";
    }
```
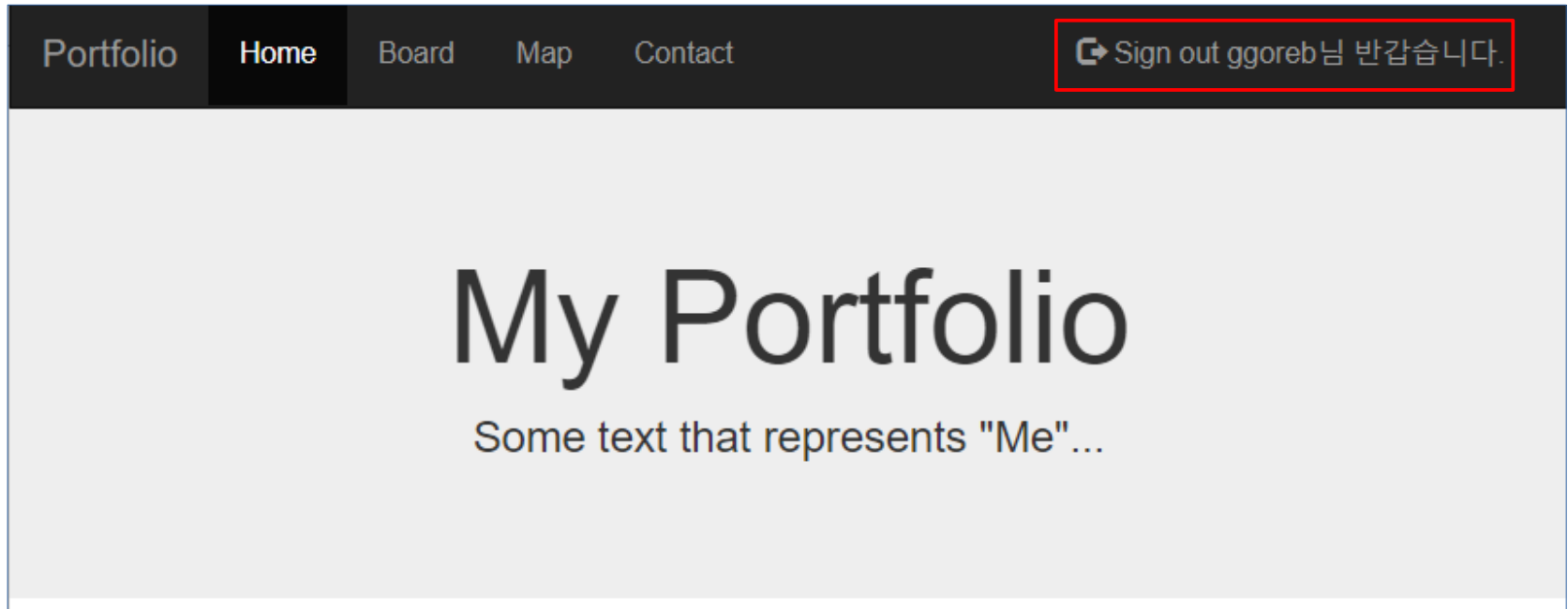
■ 로그인

● 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

```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

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