

0905 - 프로젝트 환경설정

- Java - 17 이상
- IDE - IntelliJ

<https://start.spring.io/>

- spring boot 3.0 이상

The screenshot shows the Spring Boot Start page with the following configuration options:

- Project:** ☒ Gradle - Groovy, ☐ Gradle - Kotlin, ☐ Maven
- Language:** ☒ Java, ☐ Kotlin, ☐ Groovy
- Spring Boot:** ☐ 3.4.0 (SNAPSHOT), ☐ 3.4.0 (M2), ☐ 3.3.4 (SNAPSHOT), ☒ 3.3.3, ☐ 3.2.10 (SNAPSHOT), ☐ 3.2.9
- Project Metadata:**
 - Group: hello
 - Artifact: hello-spring
 - Name: hello-spring
 - Description: Demo project for Spring Boot
 - Package name: hello.hello-spring
- Packaging:** ☒ Jar, ☐ War
- Java:** ☐ 22, ☐ 21, ☒ 17
- Dependencies:**
 - Spring Web** (WEB): Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the default embedded container.
 - Thymeleaf** (TEMPLATE ENGINES): A modern server-side Java template engine for both web and standalone environments. Allows HTML to be correctly displayed in browsers and as static prototypes.

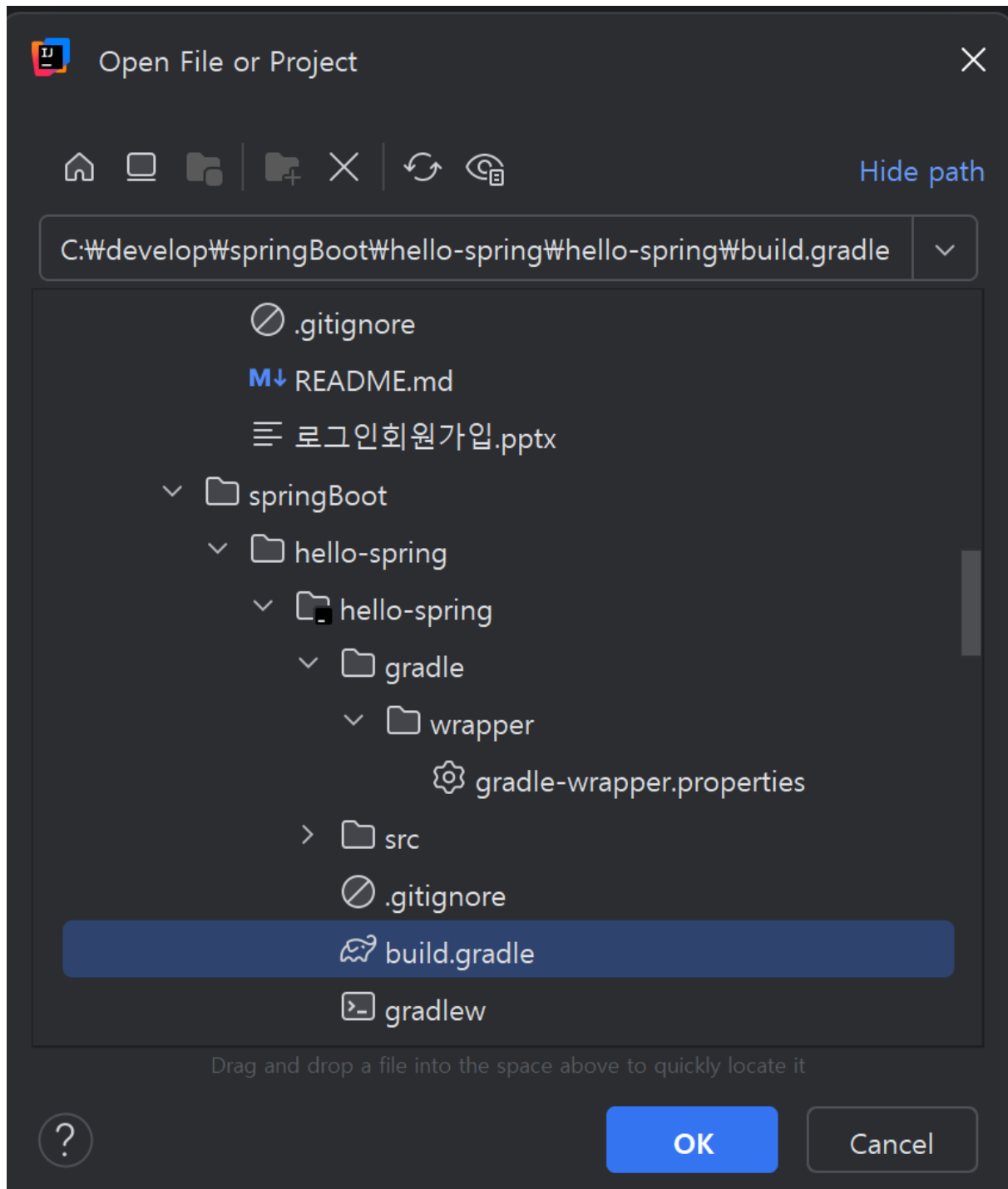
At the bottom, there are three buttons: **GENERATE** (CTRL + G), **EXPLORE** (CTRL + SPACE), and **SHARE...**

Spring Web - Spring Framework의 하위 모듈, 웹 애플리케이션을 구축하기 위한 기능들을 제공

- MVC(Model-View-Controller) 아키텍처 - 클라이언트의 요청을 컨트롤러에서 처리하고, 결과를 모델로 전달하여 뷰를 통해 사용자에게 반환하는 구조
- RestController - RESTful API를 쉽게 개발할 수 있도록 지원하는 애너테이션과 구조를 제공
- HandlerMapping 및 DispatcherServlet을 통해 URL 매핑 및 요청을 처리

Thymeleaf - 서버 사이드 템플릿 엔진으로, HTML 파일을 기반으로 동적인 웹 페이지를 생성

build.gradle



오류!

```
A problem occurred configuring root project 'hello-spring'.  
> Could not resolve all artifacts for configuration ':classpa
```

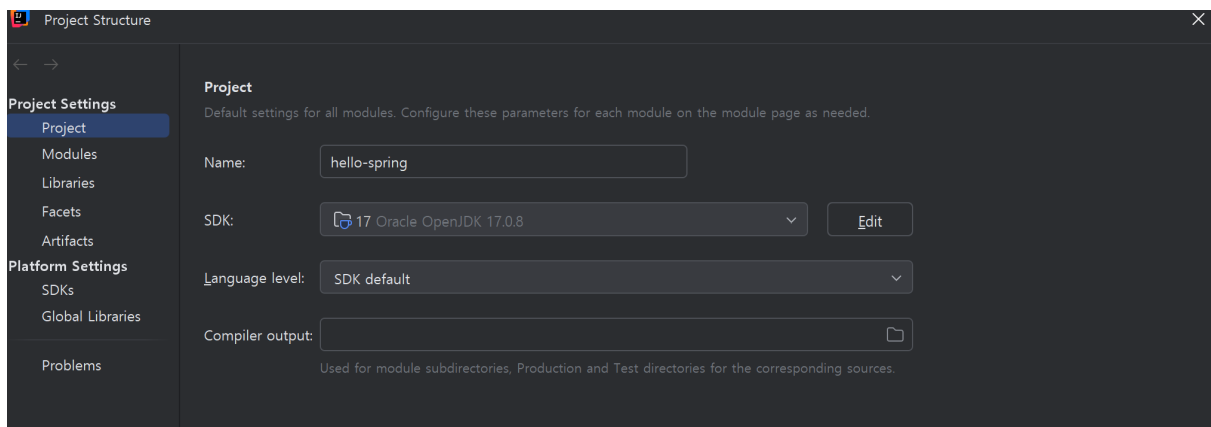
```
> Could not resolve org.springframework.boot:spring-boot-g
Required by:
    project : > org.springframework.boot:org.springframework
> Dependency requires at least JVM runtime version 17.
```

* Try:

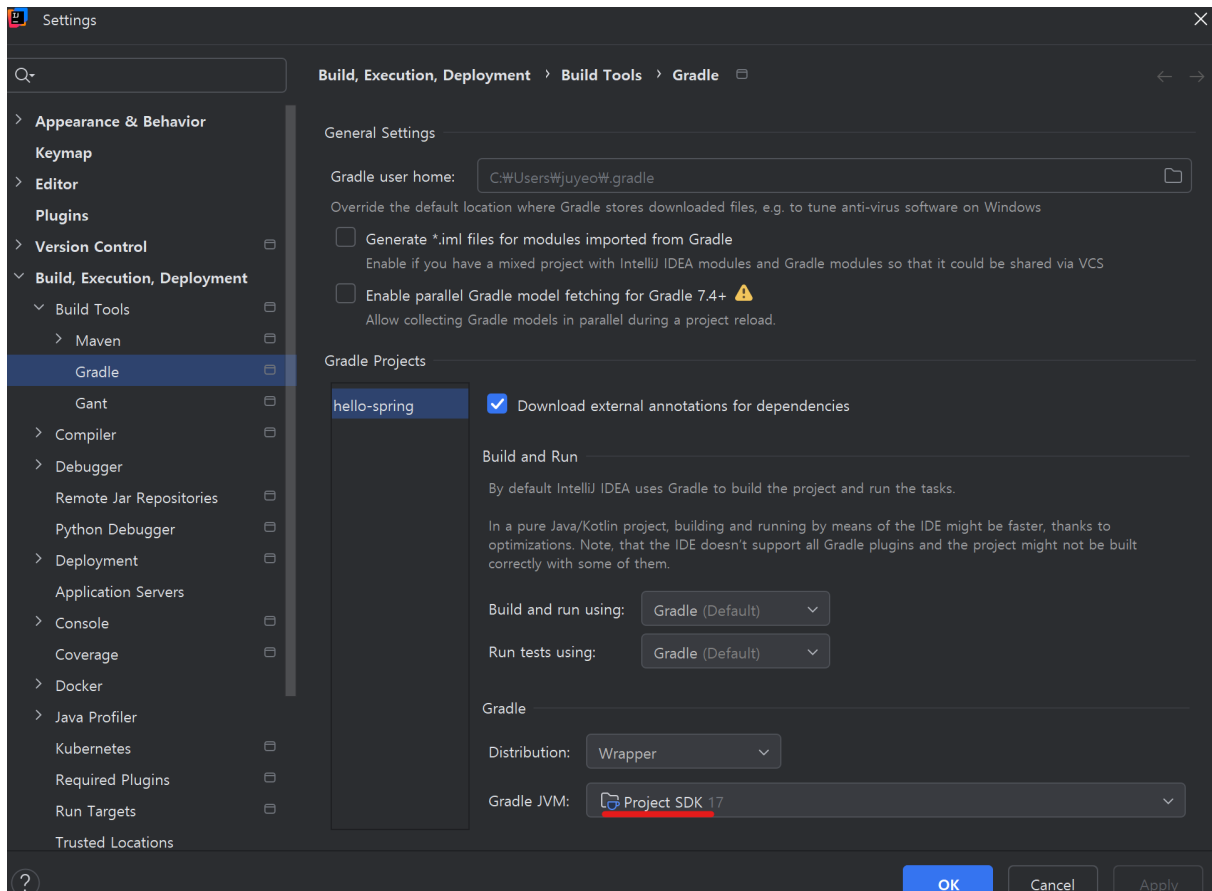
```
> Run this build using a Java 17 or newer JVM.
> Run with --stacktrace option to get the stack trace.
> Run with --info or --debug option to get more log output.
> Run with --scan to get full insights.
> Get more help at https://help.gradle.org.
```

JDK 버전을 17로 했는데 자꾸 안된다고 해서 ..

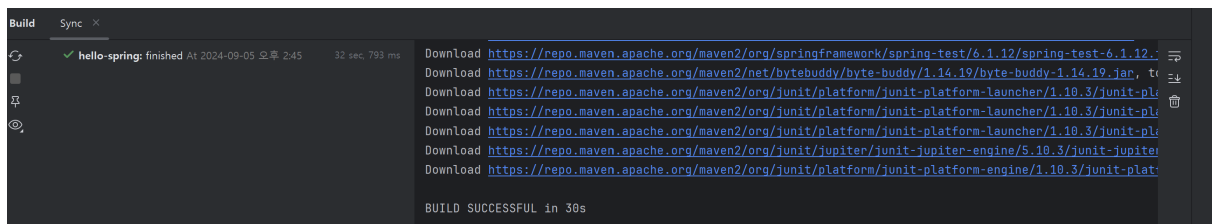
처음에는 이렇게 했는데 계속 오류가 났다



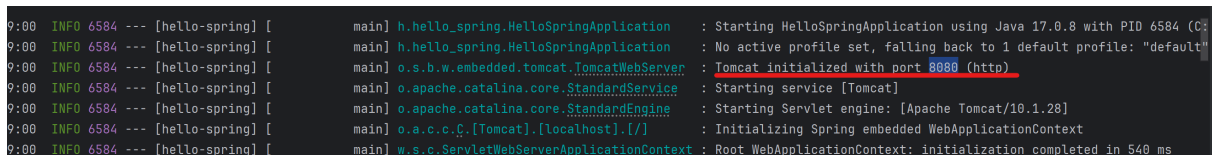
Settings - Build - Gradle 에 들어가서 밑줄 친 부분을 수정하니 해결됐다



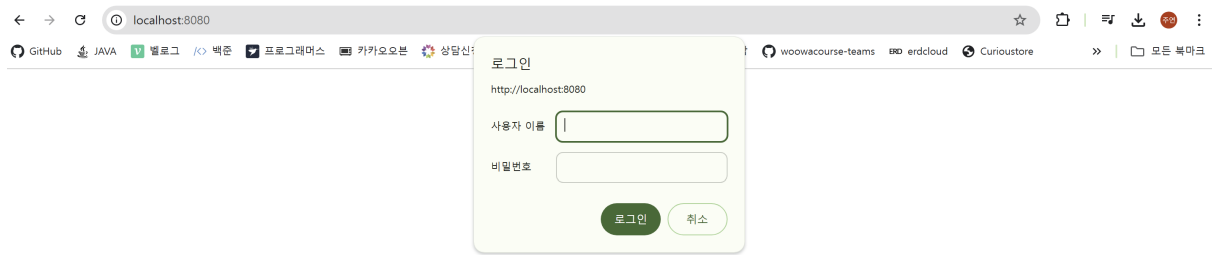
라이브러리를 가져왔다



<http://localhost:8080/>



오류!



포트번호를 바꿔보았다

application.properties 파일에 추가해줬다

```
server.port=9904
```

다시 실행하니 포트번호가 변경되었다

```
024-09-05T15:08:57.015+09:00 INFO 9320 --- [hello-spring] [main] h.hello_spring.HelloSpringApplication : Starting HelloSpringApplication using Java
024-09-05T15:08:57.018+09:00 INFO 9320 --- [hello-spring] [main] h.hello_spring.HelloSpringApplication : No active profile set, falling back to 1
024-09-05T15:08:57.626+09:00 INFO 9320 --- [hello-spring] [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port 9904 (http)
```

<http://localhost:9904/>

Whitelabel Error Page

This application has no explicit mapping for /error, so you are seeing this as a fallback.

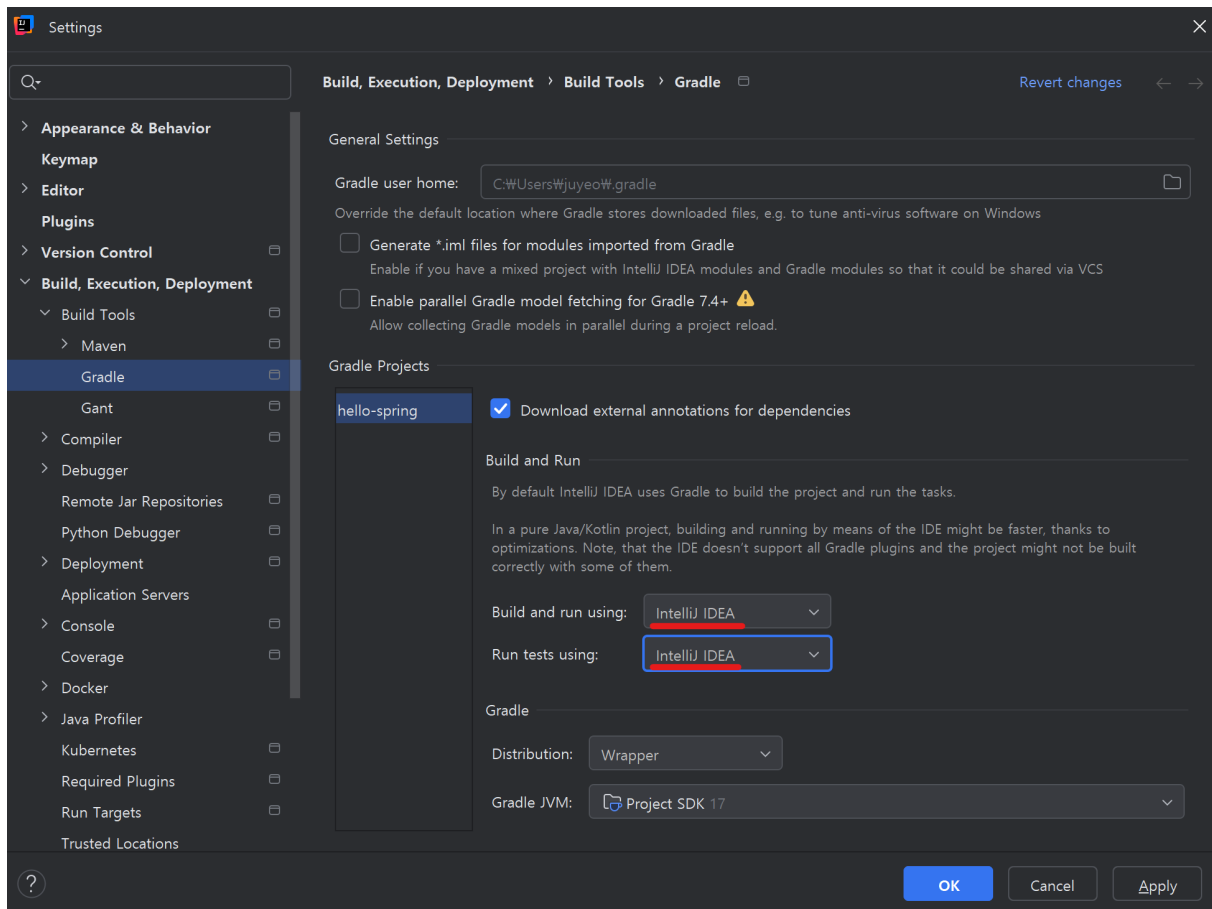
Thu Sep 05 15:09:42 KST 2024

There was an unexpected error (type=Not Found, status=404).

@SpringBootApplication

- 톰캣이랑 웹서버를 내장하고 있다
- 실행하면 톰캣 웹서버가 실행되면서 스프링 부트를 같이 실행한다

Settings - Build - Gradle 밑줄 친 부분 IntelliJ IDEA로 수정



Gradle를 거치지 않고 인텔리제이에서 자바를 실행한다(속도가 빨라짐)