



If you do not pay any relevant course fee to maintain Earth University BIT platform,
Be ethical enough to contribute while you are using our Academic Contents

www.earth.lk/community
2004-2024 (20th Anniversary)

Sprint-2 Plan


Employee Detail Management

1. Establishing Project Folder Architecture
2. **Server App Initialization**
3. Sprint-2 Execution [2(a), 2(b), 2(c), 2(d), 2(e), 2(f)]
4. Completing Sprint-1 Objectives

1. Setup Project Architecture with Required Dependencies
2. Download Project Folder Architecture for Spring Project
3. Open the Project with IntelliJ-IDEA (Download Gradle, Download Dependent Libraries, Indexing Files)
4. Add Valid Database Connection Details (Create the Database using Sprint-ER, follow 2(a) Steps in Sprint Execution)
5. Run & Test the Project with enabled Spring Security
6. Run & Test the Project disabling Spring Security

(1) Setup Project Architecture with Required Dependencies

start.spring.io

 **spring** initializr

Project

☐ Gradle - Groovy ☒ Gradle - Kotlin ☐ Maven

Language

☒ Java ☐ Kotlin ☐ Groovy

Spring Boot

☐ 3.1.0 (SNAPSHOT) ☐ 3.1.0 (M2) ☐ 3.0.6 (SNAPSHOT) ☐ 3.0.5 ☐ 2.7.11 (SNAPSHOT) ☒ 2.7.10

Project Metadata

Group

lk.earth

Artifact

earthuniversity

Name

earthuniversity

Description

Earth University Administrative And Academic Management System

Package name

lk.earth.earthuniversity

Packaging

☐ Jar ☒ War

Java

☐ 20 ☐ 17 ☒ 11 ☐ 8

Dependencies

ADD DEPENDENCIES... CTRL + B

Spring Web

WEB

Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the default embedded container.

Validation

I/O

Bean Validation with Hibernate validator.

Spring Security

SECURITY

Highly customizable authentication and access-control framework for Spring applications.

Spring Data JPA

SQL

Persist data in SQL stores with Java Persistence API using Spring Data and Hibernate.

MySQL Driver

SQL

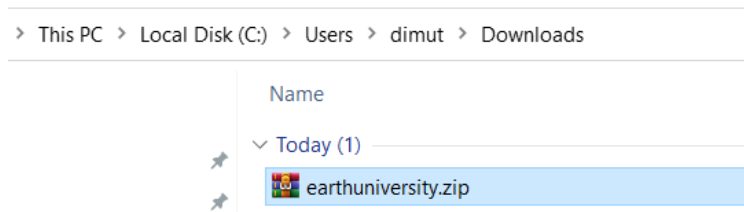
MySQL JDBC driver.

GENERATE CTRL + G

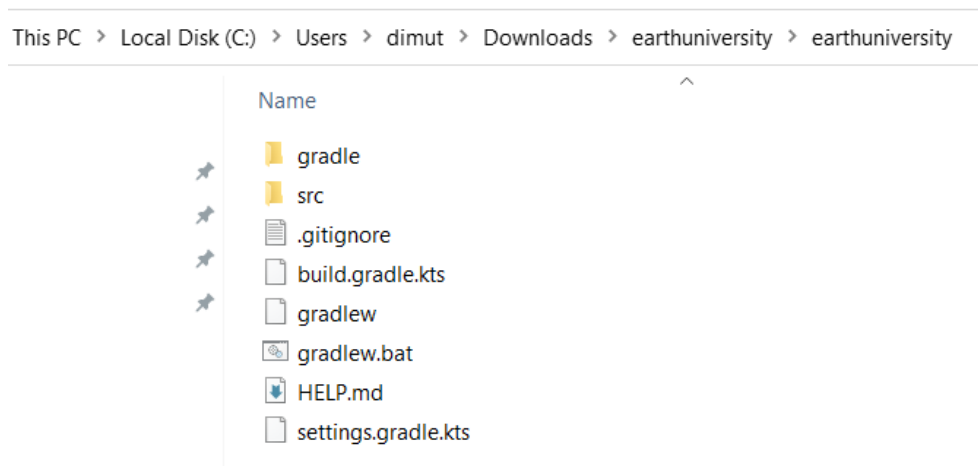
EXPLORE CTRL + SPACE

SHARE...

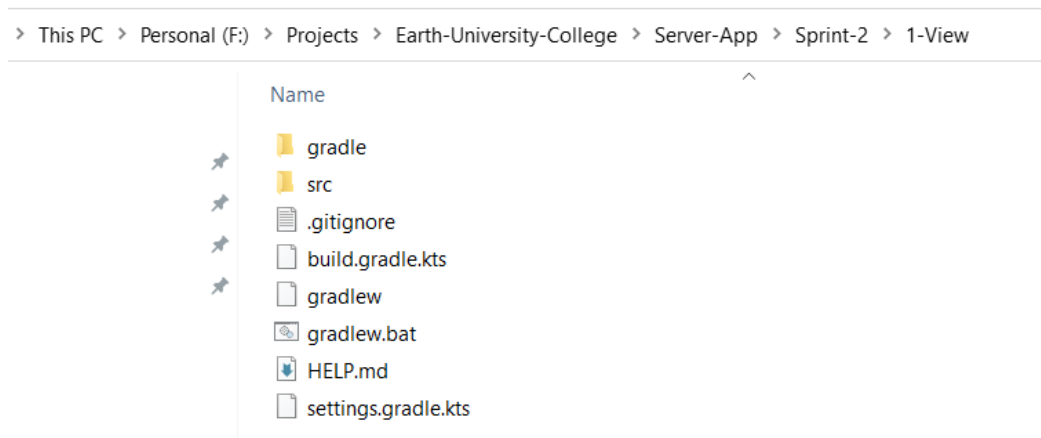
(2) Click On “Generate” Button



(3) Extract the Zip File and Copy the Content

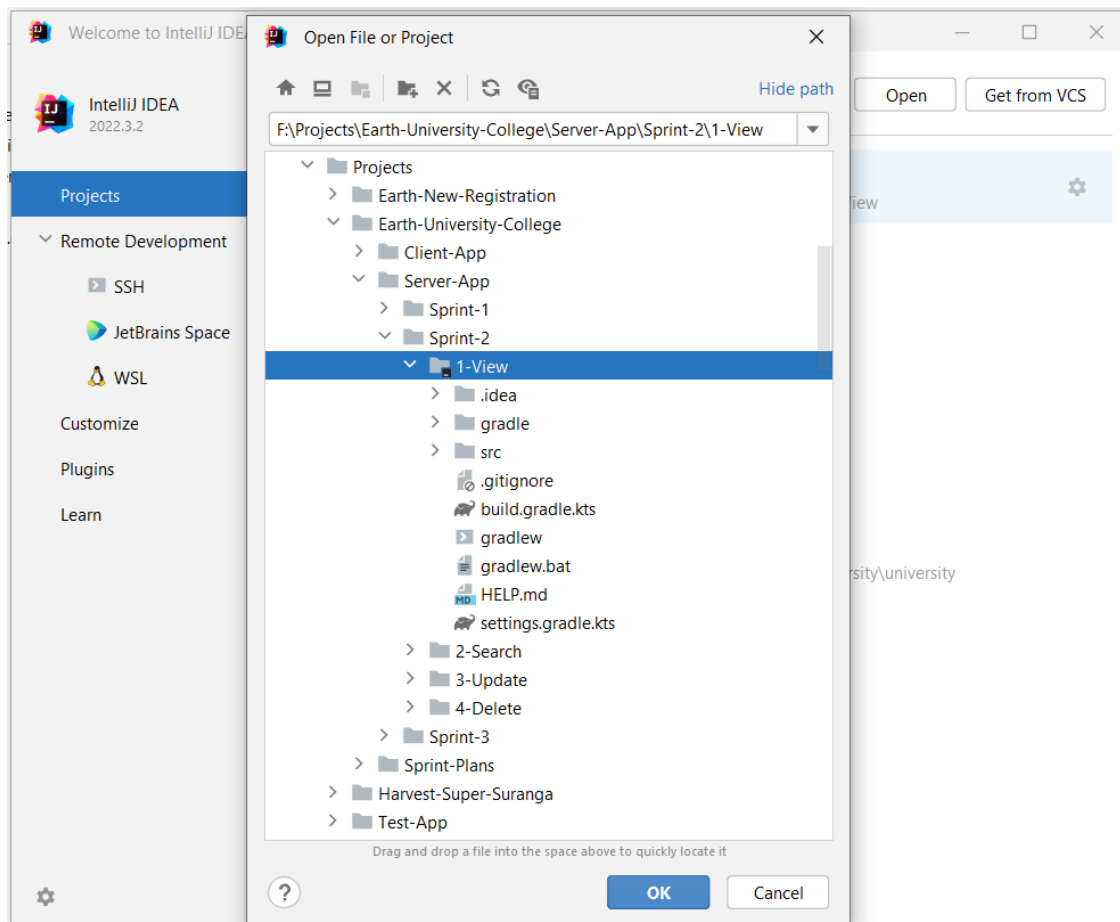


(4) Paste them in the “Server-App/Sprint-2/1-View”

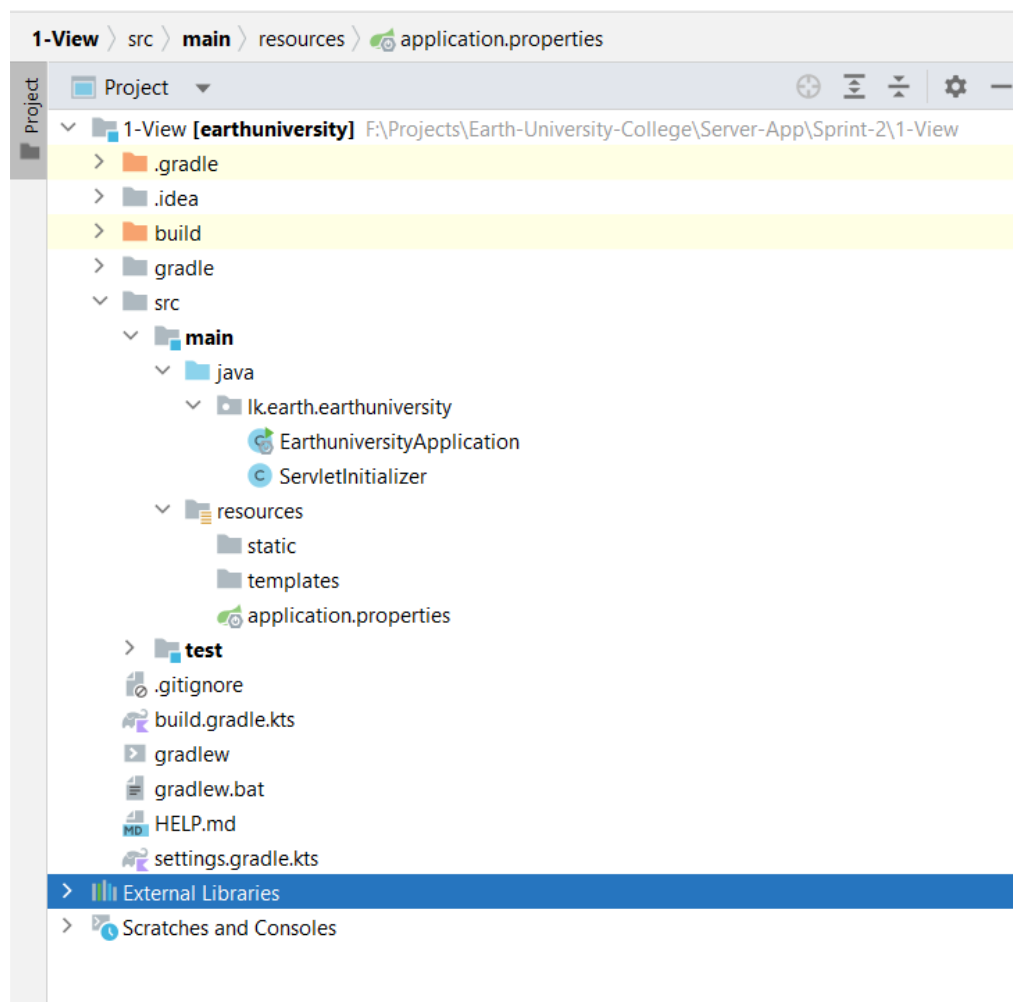


(5) Open the Project with IntelliJ-IDEA and Let IDEA to install Gradle and download Spring Framework and its dependencies

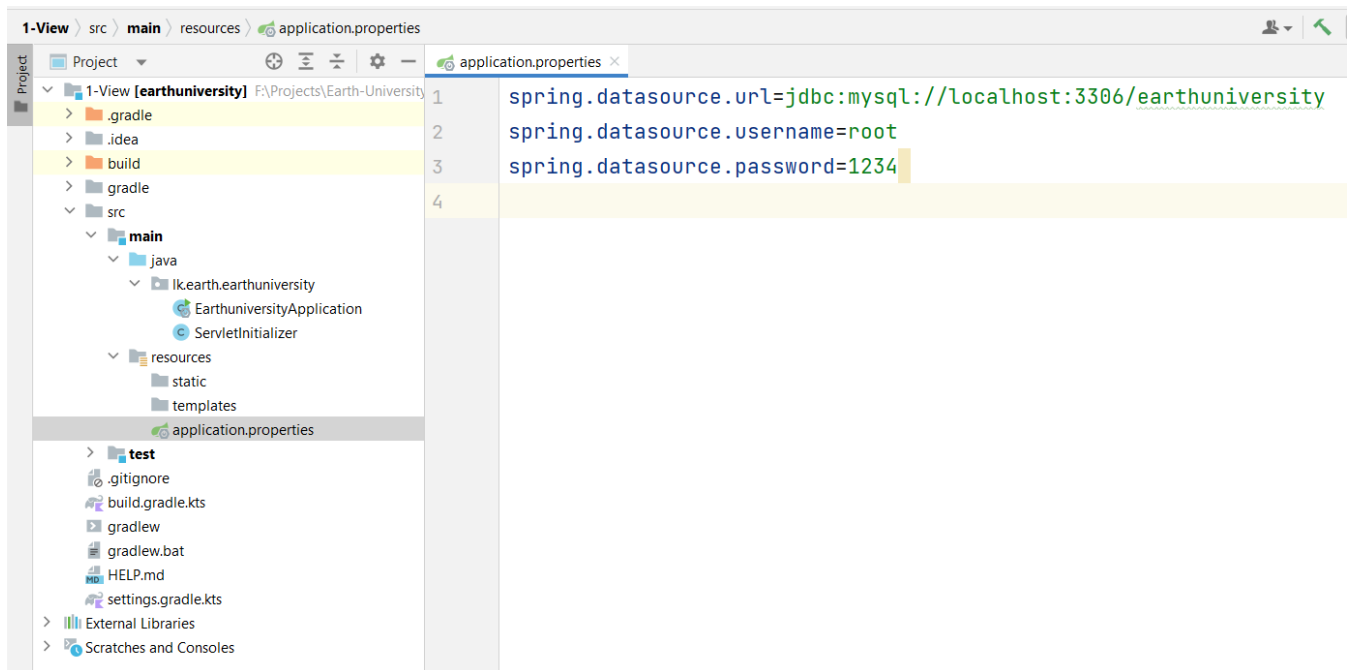
- (a) Download Gradle
- (b) Download Spring Libraries along with other dependent libraries
- (c) Indexing Files of the Project for managing them efficiently



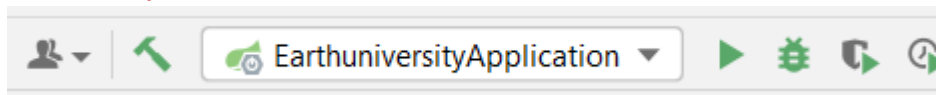
(6) Observe the following Files and Folders



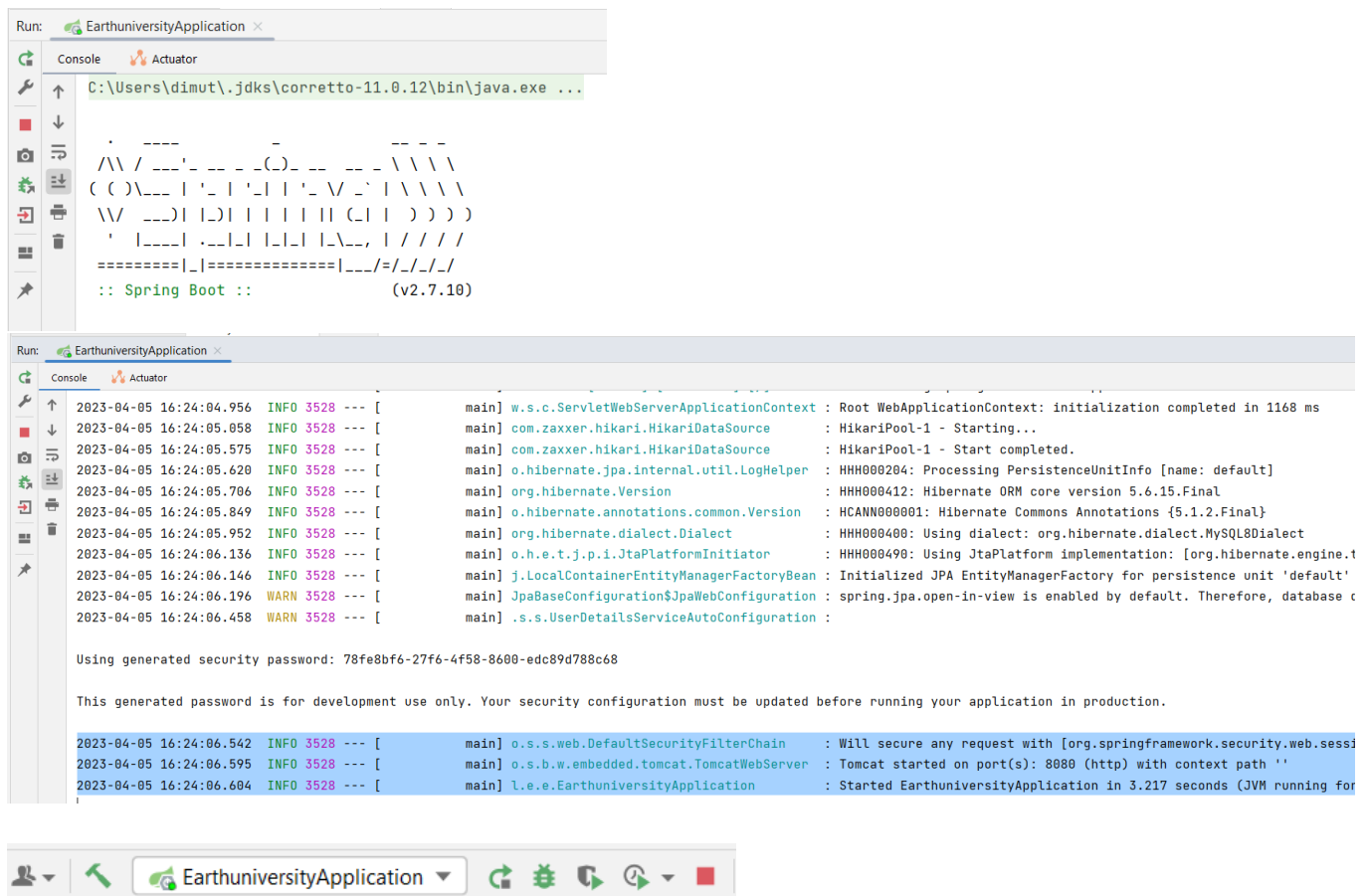
(7) Add Database Connection Details to be used by Spring-Data/Hibernate and MySQL-Connector



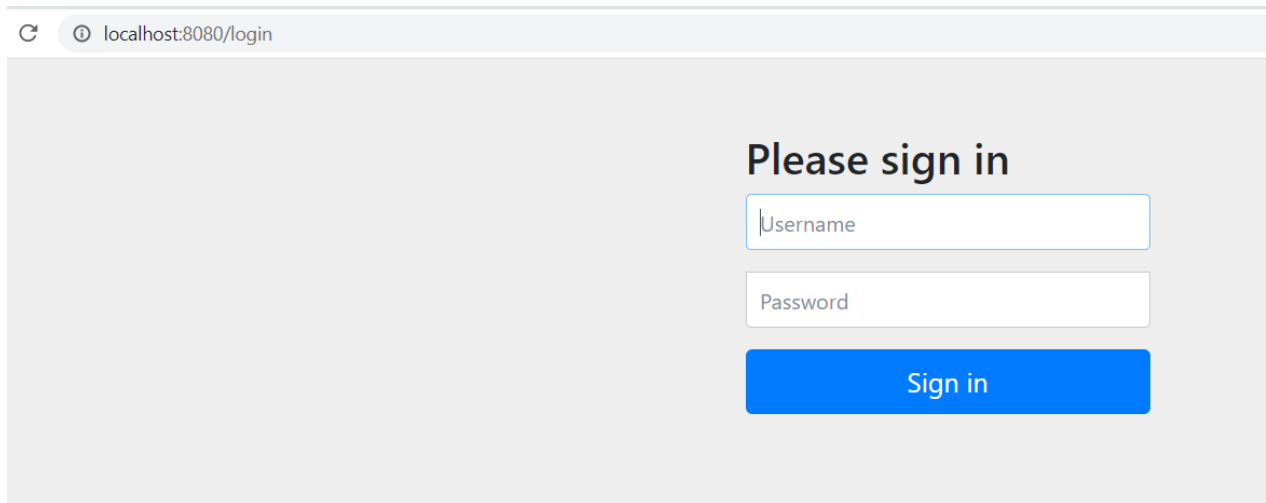
(8) Run the Project



- (a) Compile and Build the Project
- (b) Run the Spring-Boot to auto configure the configuration files
- (c) Startup Virtual HTTP-Server at port 8080
- (d) Deploy the Project into the Virtual Server



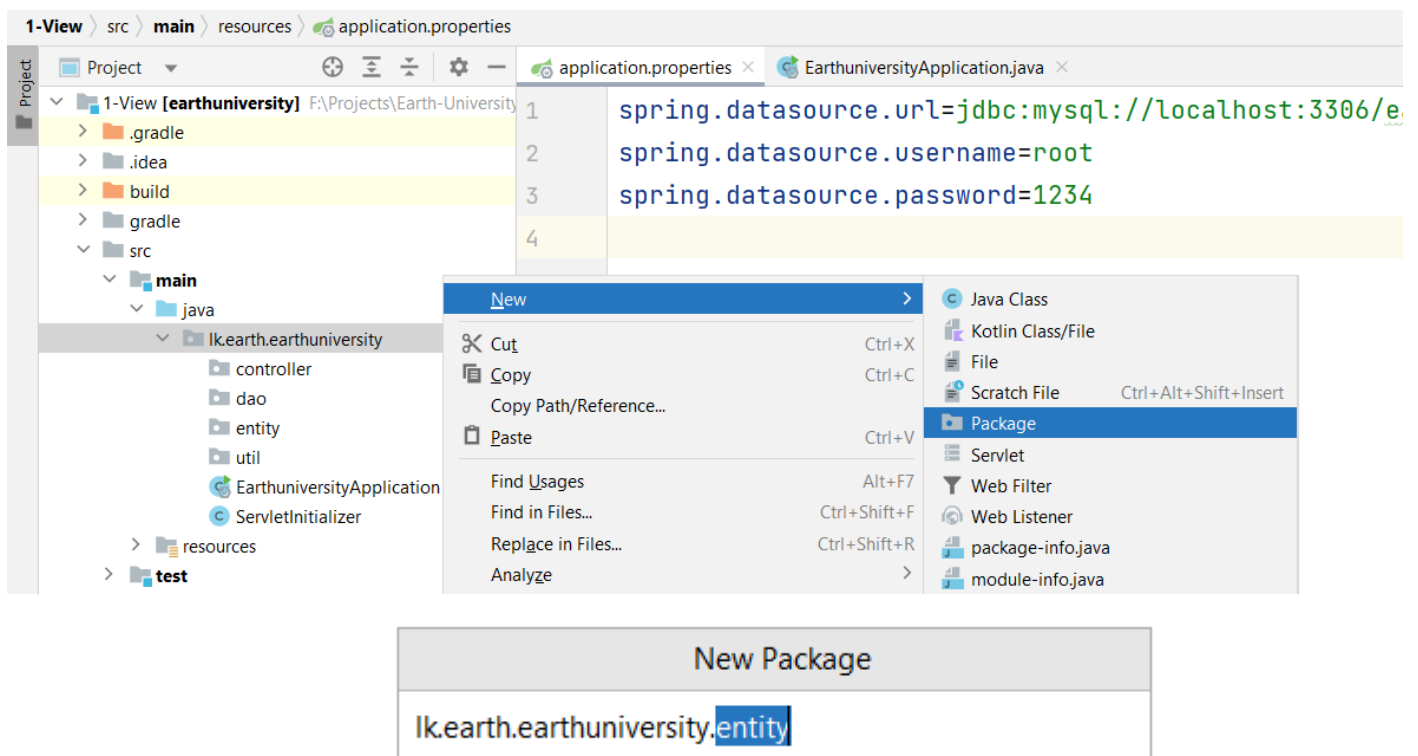
- (9) Access the default Login Page created by Spring-Security → “localhost:8080/employees”
→ All Server request will be redirected to login by the Spring Security Framework



localhost:8080/login

Please sign in

- (10) Create Folder Architecture as Follows



1-View > src > main > resources > application.properties

Project

- 1-View [earthuniversity] F:\Projects\Earth-University
 - .gradle
 - .idea
 - build
 - gradle
 - src
 - main
 - java
 - lkearth.earthuniversity
 - controller
 - dao
 - entity
 - util
 - EarthuniversityApplication
 - ServletInitializer
 - resources
 - test

application.properties

```
1 spring.datasource.url=jdbc:mysql://localhost:3306/e
2 spring.datasource.username=root
3 spring.datasource.password=1234
4
```

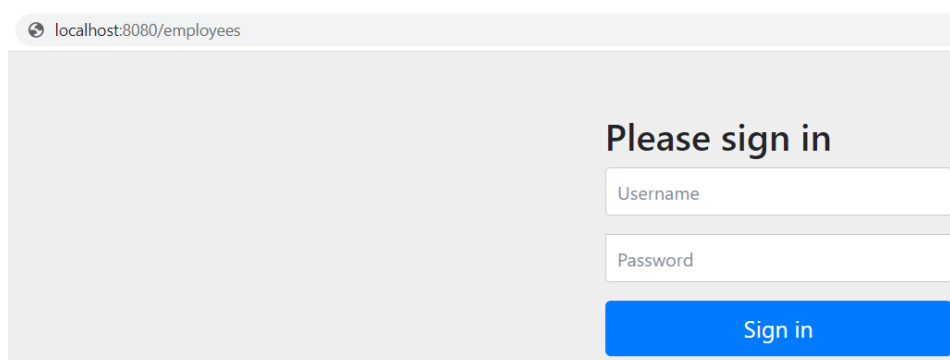
New

- Java Class
- Kotlin Class/File
- File
- Scratch File Ctrl+Alt+Shift+Insert
- Package
- Servlet
- Web Filter
- Web Listener
- package-info.java
- module-info.java

New Package

lkearth.earthuniversity.entity

- (11) Disable Security Auto Configuration when the Project Initialized by the Spring Boot

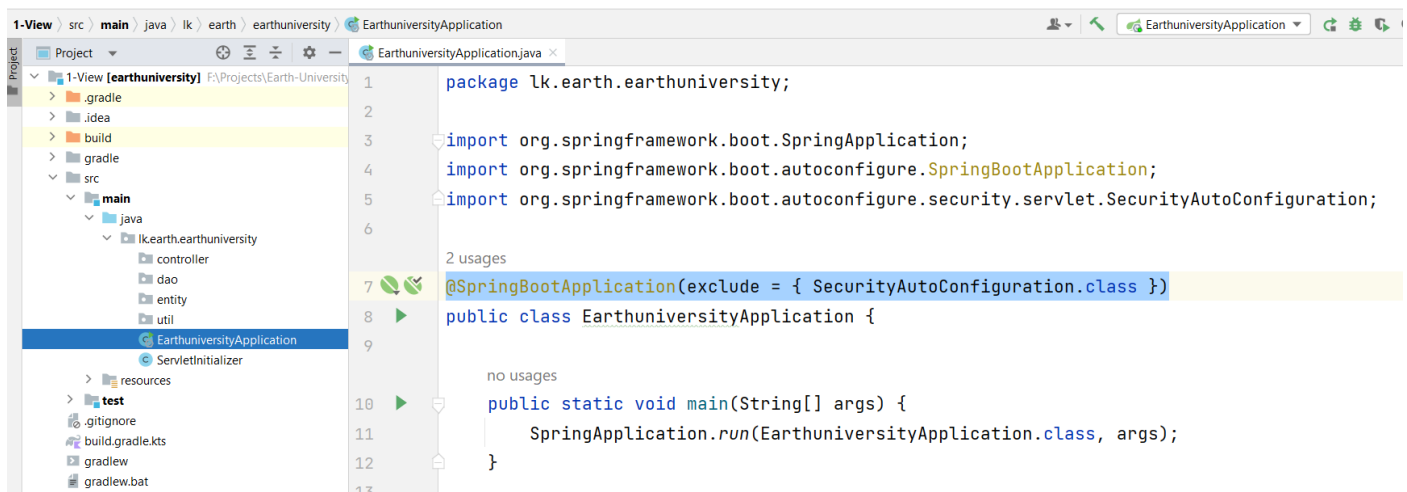


localhost:8080/employees

Please sign in

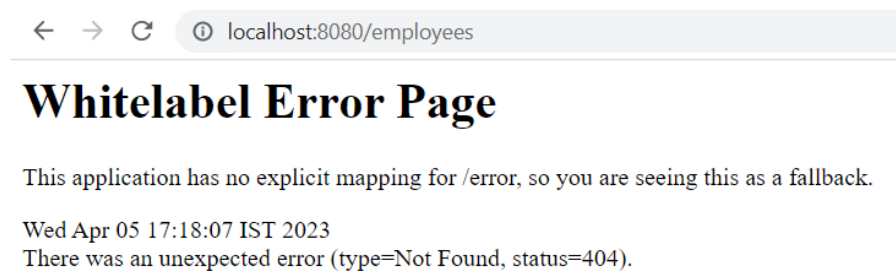
When access /employees, but, request will be auto directed to login

(12) Instruct the Spring-Boot to exclude the Spring Security Auto Configuration until we create manual Configuration Class as we need.



```
1 package lk.earth.earthuniversity;
2
3 import org.springframework.boot.SpringApplication;
4 import org.springframework.boot.autoconfigure.SpringBootApplication;
5 import org.springframework.boot.autoconfigure.security.servlet.SecurityAutoConfiguration;
6
7 @SpringBootApplication(exclude = { SecurityAutoConfiguration.class })
8 public class EarthuniversityApplication {
9
10     public static void main(String[] args) {
11         SpringApplication.run(EarthuniversityApplication.class, args);
12     }
13 }
```

Then, Access the “localhost/employees”
This time the request will be not be auto directed to login



Department of Information Technology
Earth University College