Lab 2.1
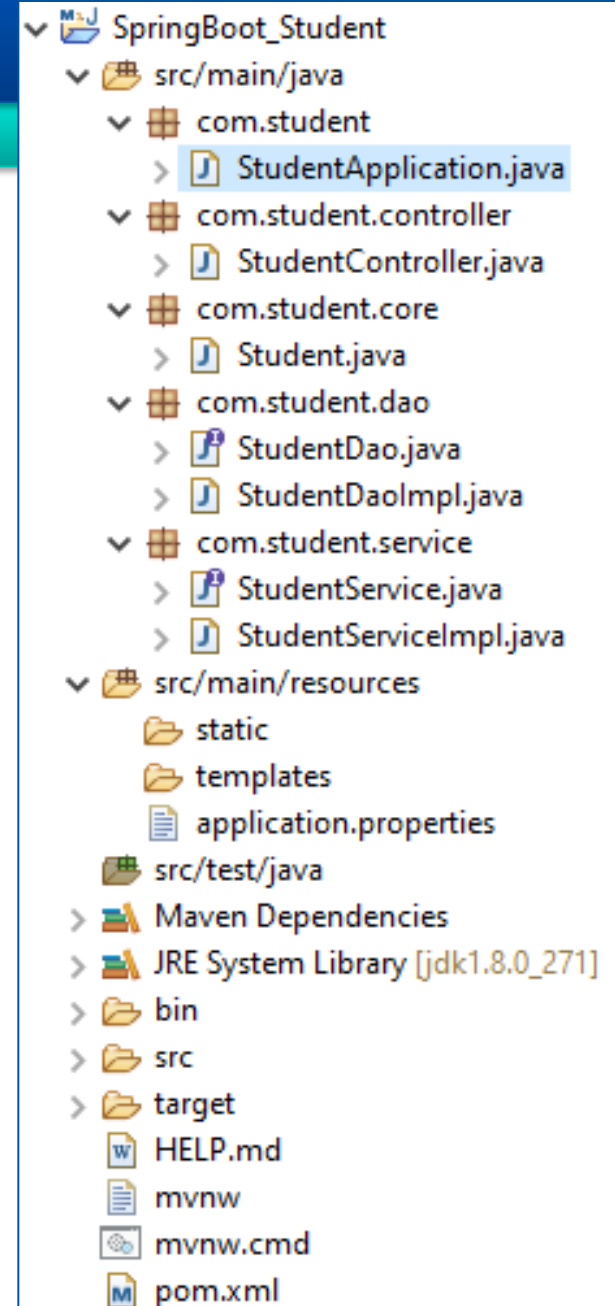
- Your lab setup directory will have a Spring Boot starter project that we will use throughout the labs in this course, open it up as a maven project in your IDE

- It will have the structure as shown opposite. Familiarize yourself with the location for;
  - application.properties
  - Maven pom – by looking in the pom.xml, you will see the Spring Starter dependencies that will drag into our project the required Spring artifacts
  - The Application runnable class (StudentApplication)

- In the class StudentApplication, annotate the class with;

```
@SpringBootApplication
@RequestMapping("/")
@RestController
```



```
SpringBoot_Student
  src/main/java
    com.student
      StudentApplication.java
    com.student.controller
      StudentController.java
    com.student.core
      Student.java
    com.student.dao
      StudentDao.java
      StudentDaoImpl.java
    com.student.service
      StudentService.java
      StudentServiceImpl.java
  src/main/resources
    static
    templates
    application.properties
  src/test/java
  Maven Dependencies
  JRE System Library [jdk1.8.0_271]
  bin
  src
  target
  HELP.md
  mvnw
  mvnw.cmd
  pom.xml
```
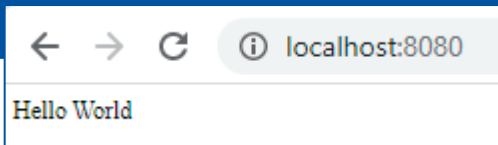
Lab 2.1

Spring Boot

The @RestController and @RequetsMapping effectively expose the class as a Spring Controller, an endpoint that the built in DispatcherServlet will delegate to based off a path, in this case the root context or "/"

The class has one method annotated with @GetMapping and returns a String, this implies that the method is triggered by an HTTP Get Request to the root context and writes a String to the Response Output stream. We will cover this all later, for now we want to launch the application and see a result

Launch the Spring boot Application by running the StudentApplication main method as a Java Application. Take a look at the console to verify that it has created the WebApplicationContext and launched the embedded Tomcat server

In a browser navigate to localhost:8080

```
Initializing Spring embedded WebApplicationContext
Root WebApplicationContext: initialization completed in 2630 ms
Initializing ExecutorService 'applicationTaskExecutor'
Tomcat started on port(s): 8080 (http) with context path ''
Started StudentApplication in 4.682 seconds (JVM running for 5.537)
Initializing Spring DispatcherServlet 'dispatcherServlet'
Initializing Servlet 'dispatcherServlet'
Completed initialization in 1 ms
```

← → C ⓘ localhost:8080

Hello World