

Spring Security 5 - a quick introduction

1. These sequence of steps will give you a quick introduction on how to create a new Spring Boot web application and apply Spring security with default HTTP Basic Authentication to it.
2. Create a new Spring Web application project, named eLibrary, using Spring Boot and Spring Initializr and select/include only the web and thymeleaf dependencies (Recall/See how to accomplish this, from the tutorial in Lab6 - *eLibrary - My first Spring Boot application*).
3. Open the pom.xml file and add the following additional dependency, to provide support for using layout feature through the thymeleaf-layout-dialect:

```
<dependency>
    <groupId>nz.net.ultraq.thymeleaf</groupId>
    <artifactId>thymeleaf-layout-dialect</artifactId>
    <scope>provided</scope>
</dependency>
```
4. Prepare your static content/pages, and organize them in a sensible folder structure, so that Spring Security configuration can later be applied to the website, easily and in an orderly way by using wildcards in the urls.
5. Run the webapp, note that there is no security enabled.
6. Next, to add Spring Security, simply add the following dependency into your pom.xml:

```
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-security</artifactId>
</dependency>
```
7. Re-run the webapp; look through the console log messages and notice that default password that has been generated exist. Copy it.
8. Open the webapp in a browser, notice that a Login screen appears, showing that Spring security is now enabled. And its default configuration is for Basic authentication.
9. Enter the Username as: **user** and paste in the generated password, to login.
10. To temporarily disable Spring security, two options are - 1) comment out the Spring Security dependency in the pom.xml OR 2) add the argument to the @SpringBootApplication annotation to the webapp's main startup class to have it become - @SpringBootApplication(exclude={SecurityAutoConfiguration.class})
11. To customize/replace the default username (**user**) and the generated password, simply add the following 2 properties to the application.properties file:

```
spring.security.user.name=elib-user
spring.security.user.password=test123
```

12. To find out more on Spring 5 Security visit the Spring site at <http://spring.io>