Spring Professional Exam Tutorial v5.0

Question 13

Question 13 - What is a fat jar? How is it different from the original jar?

Fat jar, also called "executable jar", is a jar that contains compiled code for your application and also all dependencies. Spring Boot uses nested jars approach, that means that fat jar contains all dependencies as nested jars. This differs from other approach, which is uber jar that packs all dependencies into single jar archive. Uber jar approach is problematic because it is hard to see application dependencies and also causes issues when same filename in the same context is used in different jars.

Fat jar is often called "executable jar" because Spring Boot will generate `MANIFEST.MF` file which contains `Main-Class` and `Start-Class` entries together with `JarLauncher` code. This manifest together with launcher code will be used to execute standalone jar.

To create fat jar in your project, you need to use `spring-boot-maven-plugin`.
Executing application is as simple as executing one command:
```
java -jar spring-boot-application-1.0-SNAPSHOT.jar
```

The differences in comparison to original jar are following:
▶ Original jar does not contain all dependencies
▶ Original jar is not executable by default