

Errata

Hi guys, I am really thankful to all of you that have bought the book and have contributed to finding mistakes in it and in the code. Because of you, I have taken another careful look at the book questions and answers and decided this errata was needed.

B.1 Book corrections

Chapter 1: Introduction

The section **About the Spring Web Certification Exam** needs an update. Starting with January 2017 the exam is taken directly from home and the voucher is valid only three months. *(Submitted by Vittorio Marino)*

Chapter 2: Spring Bean LifeCycle and Configuration

In the section **Bean Naming section** there is a huge error in the samples for `@AliasFor`. It was implied there that the `value` attribute of the `@Repository` can be aliased. At the time when the book was written, Spring 4.2 was under development and more information about the limits of the `@AliasFor` were published later on. Because autowiring by type was used, the tests still passed thus hiding the erroneous implementation. So there is a code sample and some text there which are erroneous, and should be skipped altogether.

! The original (erroneous) section is this:

And even more can be done. Aliases for meta-annotation attributes can be declared. Let's say that we do not like the `value` attribute name of the `@Repository` annotation and we want in our application to make it more obvious that the `@Repository` annotation can be used to set the id of a bean, by adding an `id` attribute that will be an alias for the `value` attribute. The only conditions for this to work are that the annotation declaring the alias has to be annotated with the meta-annotation, and the `annotation` attribute must reference the meta-annotation.

```
package com.ps.sample;
import org.springframework.core.annotation.AliasFor;

@Repository
public @interface MyRepoCfg {

    @AliasFor(annotation = Repository.class, attribute = "value")
    String id() default "";
}
```

Thus, the repository beans can be declared as depicted in the following code snippet:

```
...
import com.ps.MyRepoCfg;
...

//JdbcRequestRepo. java bean definition
@MyRepoCfg(id = "requestRepo")
public class JdbcRequestRepo extends JdbcAbstractRepo<Request>
    implements RequestRepo{
```

```
...
}
```

! And in future editions of the book, will be replaced with this:

And even more can be done. Aliases for meta-annotation attributes can be declared. Let's say that we do not like the `lTout` attribute name of the `@DsCfg` annotation and we just want to refer to it differently. The only conditions for this to work are that the annotation declaring the alias has to be annotated with the meta-annotation, and the annotation attribute must reference the meta-annotation.

```
package com.ps;

import org.springframework.core.annotation.AliasFor;

@DsCfg
public @interface MyDsCfg {

    @AliasFor(annotation = DsCfg.class, attribute = "lTout")
    int timeout() default 200;
}
```

Thus, we can now apply the new annotation on the repository beans, that can be declared as depicted in the following code snippet:

```
...
import com.ps.MyDsCfg;
...

//JdbcRequestRepo. java bean definition
@MyDsCfg(timeout = 2400)
@Repository
public class JdbcRequestRepo extends JdbcAbstractRepo<Request>
    implements RequestRepo{
    ...
}
```

! `@AliasFor` cannot be used on any stereotype annotations. The reason is that the special handling of these value attributes was in place years before `@AliasFor` was invented. Consequently, due to backward compatibility issues it is simply not possible to use `@AliasFor` with such value attributes. When writing code to do just so (aliasing value attributes in stereotype annotations), no compile errors will be shown to you, and the code might even run, but any argument provided for the alias will be ignored. the same goes for the `@Qualifier` annotation as well.

This information about the `@AliasFor` annotation can be found here: <https://github.com/spring-projects/spring-framework/wiki/Spring-Annotation-Programming-Model#1-can-aliasfor-be-used-with-the-value-attributes-for-component-and-qualifier>¹

The sources have also been updated on the raw repository: <https://github.com/iuliana/pet-sitter>

¹The URL does not fit the page, but for electronic use the clickable URL is this: [FAQ @AliasFor](#)

Chapter 4: Aspect Oriented Programming with Spring

In the quiz section, **Question 5, answer D** there is a small typo.

Original: `execution(* update(Logn,...))`

Correct: `execution(* update(Long,...))`

Appendix A

In the Appendix A, the quiz solution section for Chapter 2, at editing, the numbering of the answers was misplaced, so the number of the questions and the answers, do not fit. There are also small errors in the answers to questions 4 and 8. The full list of answers with proper numbering and corrections is depicted below:

Quiz Solution for Chapter 2

1. **Answer:** A, B, C

2. **Answer:** B

3. **Answer:** A, B,D (C, Interface-based injection is not supported in Spring. D, field-based injection is supported by annotating fields with `@Autowired`, `@Value` or related annotations; JSR-250 `@Resource`, JSR-330 `@Inject`.²)

4. **Answer:**

Original: *Answer: A, B, C (As stated in Chapter 2)*

Correct: **A** (`ClassPathXmlApplicationContext` is a simple convenience `ApplicationContext` implementation that can be used to load the definitions from the given XML files and automatically refreshing the context.)

5. **Answer:** B (Only `@Component` is contained in the `org.springframework.stereotype` package)

6. **Answer:** A

7. **Answer:** C

8. **Answer:**

Original: *Answer: A,B,C*

Correct: **A, B.**

C is not a good answer, because of the `p:petitBean` definition. The `quizBean` has a dependency on the `petitBean` bean, thus a reference to it is needed. The equivalent bean definition, that would have made the original answer correct is:

```
<bean id="quizBean" class="QuizBean"
      init-method="initMethod" p:petitBean-ref="petitBean" />
```

9. **Answer:** B (`CommonAnnotationBeanPostProcessor` modifies beans)

10. **Answer:** C

11. **Answer:** B

12. **Answer:** A

²Spring Framework Reference: <http://docs.spring.io/spring/docs/4.2.3.RELEASE/spring-framework-reference/htmlsingle/#beans-annotation-config>

Sample Exam

Question 1 has a (*choose one*) after the question content, which is confusing as the answer is made of more than one option. (*Submitted by Tibor Kalman*)

Original: Which of the following affirmations is false? (choose one)

Correct: Which of the following affirmations is false? Question 3 has an incorrect numbering of the answers.

Original:

Are the following two bean declaration equivalent?

A. (1)

```
<bean id="someBean" p:someValue-ref="someOtherBean" />
```

(2)

```
@Component("someBean")
public class SomeBean {
    private SomeBean someValue;

    @Autowired
    @Qualifier("someOtherBean")
    public setSomeValue(SomeBean arg){
        this.someValue = arg;
    }
}
```

yes

B. no

C. the second is not a valid bean definition

Correct: Are the following two bean declarations equivalent?

(1)

```
<bean id="someBean" p:someValue-ref="someOtherBean" />
```

(2)

```
@Component("someBean")
public class SomeBean {
    private SomeBean someValue;

    @Autowired
    @Qualifier("someOtherBean")
    public setSomeValue(SomeBean arg){
        this.someValue = arg;
    }
}
```

A. yes

B. no

C. the second is not a valid bean definition

Sample exam, Answers

In the Answers section, the answer for question 30 is wrong.

Original: 30. A

Correct: 30. B

B.2 Code updates and observations

In the 1.4.1 version of the Gretty plugin the `port` property was renamed to `httpPort`. Thus, old Gradle configurations like the one depicted below will cause a build failure.

```
gretty {  
    port = 8080  
    contextPath = '/mvc-layout'  
}
```

The configuration must be corrected and the `port` property must be replaced with `httpPort`

```
gretty {  
    httpPort = 8080  
    contextPath = '/mvc-layout'  
}
```

In case you want more information, or keep track of the issue I created related to this, take a look on the Gretty plugin GitHub page: <https://github.com/akhikh1/gretty>