

Q32 - Annotation and Declarative Servlets Definition

Considering the following Servlet code and the Deployment Descriptor snippet, choose the statements which are true:

```
package com.nullhaus;

import javax.servlet.annotation.*;
import javax.servlet.http.*;

@WebServlet(urlPatterns={"/foo/*"}, name="NullHaus1")
public class NullHausServlet extends HttpServlet {
}

<servlet>
  <servlet-class>com.nullhaus.NullHausServlet</servlet-class>
  <servlet-name>NullHaus1</servlet-name>
</servlet>

<servlet-mapping>
  <servlet-name>NullHaus1</servlet-name>
  <url-pattern>/baz/*</url-pattern>
</servlet-mapping>
```

- a. There will be exactly one instance of the `NullHausServlet`
- b. There will be exactly two instances of the `NullHausServlet`
- c. There will be at least one instances of the `NullHausServlet`
- d. There will be at least two instances of the `NullHausServlet`
- e. The `NullHausServlet` will be accessible only from `/foo/*` url
- f. The `NullHausServlet` will be accessible only from `/baz/*` url
- g. The `NullHausServlet` will be accessible from `/foo/` and `/baz/` urls
- h. There will be a runtime exception thrown and NullHaus1 servlet will not be operational

Hide answer

c, f

Reference: page 62, 8.1.1 "@WebServlet" and page 81, 8.2.3 "Assembling the descriptor from web.xml, web-fragment.xml and annotations"

Explanation: When the same servlet class is defined in the DD with the same name, the container **is not required to create a new instance of the servlet class**, however the exact number of servlet instances is unpredictable and it's **container-dependent**.

If the url-pattern is defined in both: the DD and the annotations, the DD takes precedence.