

## Q14 - Number of Filter Instances [5]

Consider the following Deployment Descriptor code snippet:

```
<filter>
  <filter-name>NullFilter 1</filter-name>
  <filter-class>com.nullhaus.NullFilter</filter-class>
</filter>
```

and the following Filter code:

```
package com.nullhaus;

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

@WebFilter(urlPatterns = {"//*"}, filterName="NullFilter 1")
public class NullFilter implements Filter {
    // necessary methods goes here
}
```

Knowing that above DD snippet is the only filter-related part, how many filter instances will be created by the Servlet container?

- a. 1
- b. 2
- c. Deployment Descriptor is invalid and the runtime exception will be thrown

Hide answer

a

**Explanation:** If the `@WebFilter` name is specified, and it's the same as the DD one, the exception **will not be thrown** and the container will initialize only one instance of the filter. Moreover, the values specified in the annotation **will be added to the attributes defined in the DD**. From the logical point of view, there is only one Filter named "MyFilter 1" with url-patterns `"//*"`.