

## Q58 - Asynchronous Processing in Servlets [3]

Considering the following asynchronous servlet code, choose which statements are true after a GET request is made:

```
package com.nullhaus;

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

@WebServlet(urlPatterns = "/foo/*", name = "NullServlet", asyncSupported = true)
public class NullServlet extends HttpServlet {
    public void doGet(HttpServletRequest req, HttpServletResponse resp) {

        final AsyncContext ac = req.startAsync();

        ac.start(new Runnable() {
            public void run() {
                ac.dispatch("/page.html");
                ac.complete();
            }
        });
    }
}
```

- a. This code compiles
- b. The content of "/page.html" will be served as a response
- c. A runtime exception will be thrown when accessing this servlet
- d. This code doesn't compile

[Hide answer](#)

**a, b, c**

**Reference:** pages 10 - 20, 2.3.3.3 "Asynchronous processing"

**Explanation:** The container will immediately dispatch the request to the given resource ("/page.html") and implicitly treat it like the `AsyncContext#complete()` method invocation.

The following `ac.complete()` invocation will result in a **runtime exception** -- `IllegalStateException` -- thrown, as the request has already been dispatched.