

Q56 - Asynchronous Processing in Servlets

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")
public class NullServlet extends HttpServlet {
    public void doGet(HttpServletRequest req, HttpServletResponse resp) {
        System.out.println("I'm inside!");

        final AsyncContext ac = req.startAsync();

        ac.start(new Runnable() {
            public void run() {
                System.out.println("*** I'm an async thread!");
                ac.complete();
            }
        });

        System.out.println("I'm leaving! Bye!");
    }
}
```

- a. This code compiles and runs fine
- b. The modifier "final" in final AsyncContext ac = req.startAsync(); is not necessary and can be safely removed
- c. The guaranteed order of texts printed in the console/log file is: I'm inside!, *** I'm an async thread!, I'm leaving! Bye!
- d. There is no HttpServletRequest#startAsync() method - there is only a HttpServletRequest#startAsync(ServletRequest, ServletResponse) method
- e. A runtime exception will be thrown when accessing this servlet
- f. This code doesn't compile

Hide answer

e

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

Explanation: To use the Asynchronous Servlets features, the servlet **must** support this type of processing either by defining `asyncSupported = true` attribute of the `@WebServlet`, or by `<async-supported>true</async-supported>` element in the DD.