In order to assess your programming skills and web technology knowledge, we ask you to provide the following:

A.   A multi-threaded (e.g. file-based) web server with thread-pooling implemented in Java.
Extension: Add proper HTTP/1.1 keep-alive behavior to your implementation based on the http-client's capabilities exposed through its request headers.

B.   A JavaScript application simulating house automation: pressing a button on a control panel would visually turn on a light, change the temperature or close the curtains. Some constraints:

•   the application must use jQuery

•   the components must have HTTP based "server" interaction (use a static file for simplicity, data persistence is not required). For example, the heating component retrieves the current temperature from the server and also sends the desired one back to the server.
•   the solution has to be extensible and documented, so that we can develop our own components that react to events

The application will be executed on a plain HTTP server with no possibility to run code server side and is being viewed in 2 major browsers of your choice.

General rules

The extension is optional unless requested (see below).
Please note that Adobe has considerable experience with publicly available examples as we have been using this assessment for many years. We realize that many implementations exist on the Internet and are very familiar with them.
We will not hold copying existing source code against you since in real-life leveraging existing code may, at times, be the best and quickest way to get a good result. Be aware though that not all publicly available solutions are of good code quality and we will consider your choice as part of the assessment.
We will also not hold it against you if you choose to write the entire example from scratch.
If you do decide to copy code from third party resources, please consider the following when submitting your code:

•   Declare which parts of the sample is your own code
•   Reference all copied code and where you took it from: do not remove copyrights or comments. Any violation of copyrights or obfuscation tactics will reflect negatively on your assessment.
•   If after reviewing your example we do not feel we have enough of your own code to evaluate, we may ask you to add the extension.

Please provide us with a link from where we can download your solutions (you may for example use https://sendnow.acrobat.com/). For technical reasons we cannot accept email attachments.

Silvia Paulet
Adobe Systems
Romania
psilviam@adobe.com;
031 41 33716