Recruitment Exercise – Software Engineer – April 2015

Background

As part of the recruitment process for the Software Engineer role at APNIC you are invited to complete the below exercise. Please can you complete the below exercise and submit to hr@apnic.net by 09:00 (GMT +10) on Friday 1 May. If you have any questions in relation to the exercise or unable to complete by the due date please email hr@apnic.net.

Exercise

Write an HTTP server in Java, executable from the command line, which accepts a port number argument. It should bind to the specified port, processing HTTP GET requests relative to the directory in which it is executed. If the GET request maps to a directory, the server should return an HTML response containing the contents of that directory, including links to the individual directory entries. If the GET request maps to a file, it should return the contents of that file.

Requests using other HTTP methods, and requests for files/directories that don't exist or can't be accessed by the user executing the server, should be handled appropriately. It is not necessary to handle multiple clients at once, though.

The server must use Java 1.7, and may not rely on libraries that are not part of the core Java distribution. However, third-party libraries may be used in tests, and a third-party build tool may also be used.

Instructions on building and running tests for the server, as well as an explanation of its design and notes on possible future improvements, should be included in a README file in the root of the submission archive.

The exercise is intended to gauge your ability to write and structure an application. If a submission is based too heavily on publicly available code, it will be rejected.