



BLUE LABEL
DISTRIBUTION



Introduction

Job interviews can be stressful. The interviewer might be busy and rushed for time. The interviewee might be nervous and anxious. In order to better appreciate your skills and knowledge and to give you an opportunity to impress us, we would like to set a small assignment for you.

Please note if you would like to test if the server is up and running you can only do a telnet request. Ping request will not work.

“Spec”

Please write a Java program that shows that you understand the following instructions:

There is already a server at IP address 196.37.22.179 listening on port 9011. **You do not have to write the server portion of this demo** Your program must create a socket connection to the IP address and port mentioned above. **Remember, Blue Label has already written the server portion of this demo.**

Send the following XML message to the socket, **Please note there is no security, no certificates, just a plain TCP/IP connection. The request message is formatted below. Please include a README.txt file where you saved what you have received from the server. Without this file, your assignment will not be evaluated.**

```
<request>
  <EventType>Authentication</EventType>
  <event>
    <UserPin>12345</UserPin>
    <DeviceId>12345</DeviceId>
    <DeviceSer>ABCDE</DeviceSer>
    <DeviceVer>ABCDE</DeviceVer>
    <TransType>Users</TransType>
  </event>
</request>
```

Display the message that you receive back from the server

These are the absolute minimum requirements for this demonstration. You are free, however, to embellish this demonstration to showcase your best skills. You may wish to do this as a web application. You may wish to demonstrate your knowledge of XML utilities. You may wish to demonstrate your knowledge of security systems. You may wish to do this as an Android app communicating with a remote server. We hope that your code is commented and that if you use utilities which are freely available on the web, that you also document that fact.

Housekeeping

Please write up a short description of your solution to the problem posted in Section 2 above. Again, this documentation provides you an opportunity to show us your language skills. The attached Declaration of Originality must be included in your documentation. We will expect you to demonstrate your solution if you are selected for an interview

Declaration of Originality

Blue Label places great emphasis on honesty and integrity. Please affirm that the attached work is your own work. Whilst you are free to use utilities which may be available on the web, use of those utilities must be clearly documented.

I, Jean-Pierre Erasmus, affirm that the attached work is my own work except where documented internally where necessary.

Jean-Pierre Erasmus (Name printed)

(Signed)

18/04/2017 (Date)