

YellowDog Quality Assurance Engineer Candidate Assessment

Hello.

At YellowDog we hire bright, highly skilled and motivated technologists who want to work on some of the most pressing technical challenges facing our industry today.

We ask candidates for our technology roles to complete a short competency-based exercise. It helps us to better understand both skill levels and ability to cope with open ended requirements. There is no 'right' answer to this challenge. Please read the instructions closely. In places they are intentionally ambiguous. We wouldn't want you to spend more than 8 hours on this, but you might do it in a much shorter time too. We will be assessing it based on:

- 1) Understanding of the core requirements: Did you grasp what we were trying to achieve? How did you manage ambiguity?
- 2) Clarity of the solution: Can other people understand how you achieved a solution?
- 3) Performance: What bugs did you find? Did you produce an efficient solution?

Assessment

Step 1 - Configuration

Deploy and run the YellowDog Contacts application and familiarise yourself with it.

Step 2 - Quality Assurance

The YellowDog Contacts application was built to fulfil the following requirements:

A user must be able to:

- Create new contacts
- Update a specified contact
- Delete a specified contact
- See all of their existing contacts
- See a specific contact

A contact has the following information:

- A first and last name
- Optionally, a home address
- Optionally, a work address

An address has the following information:

- A type (work or home)
- Optionally, a house number
- A street address, city and postcode.

All requests should take no longer than 200ms.

Write a test suite in the tools and languages of your choice to assure the quality of the application. Tests should be Repeatable, Automated, Resilient to implementation changes, Validate requirements, and able to identify bugs that have been placed in the system (or bugs we don't know about).

Short Report

Please report back with 1-2 pages which:

- 1) Clarify any assumptions you made whilst building the solution above.
- 2) Explain any questions would you have asked if you'd had the opportunity.
- 3) Explain where else issues could arise with this application and how to mitigate.
- 4) Explain how you would automate this process and integrate in to a release process.
- 5) Describe how you would extend this solution to also address information security.

Submission

Please submit your test suite and output from it along with your report. Your submission should be as a single zip file sent to alan.parry@yellowdog.co, or a web link where we can retrieve it easily.