

Full Stack Developer Selection Test

Congratulations! You have been asked to develop a small application for FreshWorks Studio. We want to learn about how you think, communicate and code. Please read these instructions carefully and do your best.

The Assignment

A scientist is trying to understand how ducks are being fed in parks around the world. She wants to collect the following information:

- What time the ducks are fed
- What food the ducks are fed
- Where the ducks are fed
- How many ducks are fed
- What kind of food the ducks are fed
- How much food the ducks are fed
- Nice to have: the ability for a little old lady who feeds the ducks every day in the same way to set a repeating schedule so she doesn't have to use the application every day

The scientist would like to crowdsource this information by creating a web application where people can submit these data points. The scientist would like to be able to do reporting on the data for her PhD thesis.

Technology

You may use any language or framework you choose. We prefer that you install the final product on AWS (or another freely available cloud hosting solution such as Heroku).



Deliverables

- A link to the working application
- Access to your Git repository (please commit regularly - we find your commit history an interesting indicator as to how you like to work).
- A short written document outlining:
 - Your approach to the problem
 - Technologies chosen (and why)
 - A high-level component diagram
 - A database model diagram
 - Roughly how many hours you spent

Criteria

Since we are not expecting you to need to spend a large amount of time on this, we ask you to let us know how long you worked on it. We will take this into account when assessing the level of polish you were able to achieve.

We use a fairly wide range of technologies at FreshWorks. Our backend stack is often PostgreSQL, Mongo, or Parse, and our mid-tier is often NodeJS , Laravel or Python. For frontend we favor React and Angular. Having said that, we are more interested in what you can accomplish with the tools that you already know, so please work in your comfort zone and put your best foot forward.

We will be interested in things like (but not restricted to):

- Code organization and coding style
- Effective use of 3-tier architecture
- Demonstrate an ability to create and execute automated tests (unit and/or integration)
- Awareness of security concerns
- Ability to communicate technical information in written and verbal form

We'd like to see what you can accomplish in under 10 hours - please respect this time limit.

We ask that you please keep all information from this assignment confidential.