DevOps Engineer - Day 0 Challenge The Challenge

The challenge is to build a simple key-value store and simple web dashboard to show the current values. We’re then looking for you to deploy this onto a small cloud machine that we have setup for you

What we provide:

We have provided access to a small web server running ubuntu 20 for you to test out your deployment. We have opened the firewall to accept connections on ports 80, 443 and 22 (for ssh access). Please send Sam your public ssh key on slack so he can add it to the authorized  
\_keys for the machine to give you access.

We have deliberately not provided any more resources as we want to see what tech choices you make in building out this application and deployment.

What functionality are we looking for:

* There should be simple CRUD REST interface allowing a user to store a new value, read it out, update it or delete the entry
* The UI should be a simple Table showing the current value of each key in the datastore. For the basic version there does not need to be any ability to edit the values via the UI.
* The app should be packaged into a portable container for easy deployment. We use docker internally, but you are welcome to use any container system you wish.
* The app should be deployed onto the web server that we have provided access too and this should be done in a way that could be easily repeated onto a second box. (We suggest using a tool like Ansible for this, but will leave the choice up to you).

Stretch Goals (If you have time):

* The UI could allow editing of values rather than simply displaying the list of keys
* How could you persist values in the key value store between restarts of the application?
* How could we monitor the application status? What happens to the logs when there are errors?

What we’ll be judging on

1. Functionality - Does it do what we described in the use cases? Does it follow good practices for API design?

2. Ease of Use - Is the deployment easy to manage and reuse across different machines?

3. Time Management - We are aware this project is maybe a bit more work than you have time for, so will be looking to see what you prioritize.

4.Code Organisation - Is the code organised well, easy to follow?