Technical Test v3

Test 1

For these tests please create a Github or Gitlab repository where we can review your source code and any configuration required for your project to execute. Please make sure the repository is public so it's viewable.

The following test will require you to do the following:

- Create a simple application which has a single "/version" endpoint.
- Containerise your application as a single deployable artifact, encapsulating all dependencies.
- Create a CI pipeline for your application

The application can be written in any programming language. We'd recommend using one the following: NodeJS or GoLang.

Please indicate your preferred programming language.

The application should be a simple, small, operable web-style API or service provider. It should implement the following:

- An endpoint which returns basic information about your application in JSON format which is dynamically generated; The following is expected:
  - Applications Version.
  - Last Commit SHA.
  - Description. (This can be hard-coded)

API Example Response

```
"myapplication": [
  {
    "version": "1.0",
    "lastcommitsha": "abc57858585",
    "description" : "pre-interview technical test"
  }
]
```

The application should have a CI pipeline that is executed when new code is committed and pushed, this pipeline should be comprehensive and cover aspects such as quality, and security; Travis or similar, for example.

Other things to consider as additions:

- Create unit tests and/or a test suite that validates your code.
- Describe or demonstrate any risks associated with your application/deployment.
- Describe your approach to versioning your application/deployment.
- Write a clear and understandable `README` which explains your application and its deployment steps.

The application code should be within a Github or Gitlab repository where we can review your source code and any configuration required for your project to execute. Please make sure the repository is public so it's viewable.

Test 2

To complete this test you will be required to do the following:

- Create the Kubernetes manifests required for your application to be deployable on Kubernetes – e.g. Deployment and Service.
- Create a script to deploy the application into a Kubernetes cluster in a namespace called "technical-test" using the manifests created.

Through this test, we want to evaluate your understanding and knowledge of Kubernetes and your ability to create a simple deployment. Your goal is to use the application you've created in the previous test and create a script to deploy into a Kubernetes cluster.

It is recommended that you test your application against a running Kubernetes install. If you have access to an existing Kubernetes cluster, you can use that, or you can run your own Kubernetes on your desktop or laptop using "Docker Desktop" (available for Mac and Windows).

However, it is not required to show the application deployed into a Kubernetes cluster as part of this test, although your submission will be tested locally to validate what has been completed.

Some additional things to consider:

- Everything as Code
- Optimised for efficiency and simplicity
- Elasticity / Scalability
- Clear and understandable README

Not all items that will be evaluated are explicitly mentioned within the requirements of these tests. Each test is an opportunity to display your level of understanding and demonstrate your maturity within these technologies or techniques.