Customer Account API

As part of an imaginary application, SuperMega Bank have built a Flask API to serve customer and account data to a web front end.

With the hard development work done, and supporting testing provided, our intrepid project team need to deploy their application so that the web team can continue with their work applying whichever web framework is the flavour of the day.

Task

Put simply, deploy the API application in a manner that you consider production ready.

Run > Terminal

Python Environment:

```
mkdir -p ~/.venv/megabank_api
python3 -m venv ~/.venv/megabank_api
source ~/.venv/megabank_api/bin/activate
python3 -m pip install -r requirements.txt
```

To run the application:

```
cd system-engineer
python3 -m megabank_rest_api
```

To execute the tests:

```
cd system-engineer
python3 -m test
```

To hit one of the endpoints:

```
curl http://localhost:5000/customers -v
```

Implementation

The only pre-requisite of your submission is that the application runs as provided.

You should supply your answer to us in the form of a Git repository. If you'd like to keep it in a private repo on GitHub, that's fine; just add us as collaborators. Or you can send us a blob of your code; use git bundle.

Your repo should include a README.md containing any instructions that are required to run up the application.

Points of consideration are:

Outside of including the Python runtime to support the application, there are

no limitations on what value-adds you bake into the running host. Show us what you've got.

- Work with an operating system that you're most comfortable with
- Ensure that you also consider non-functional requirements
- We prefer something that we can clone from your Github repo and run for ourselves.
- Accordingly, we don't want or need access to your AWS/Azure/DigitalOcean/ whatever VPC. There's nothing stopping you using these for yourself for the purposes of building out your submission, but PLEASE make sure that your submission does not include access keys or credentials.

Expectations

The whole idea is to have some fun with this. It really shouldn't take more than about 4 hours of your time. If you don't think you can finish in a couple evenings, pare the scope back, and do a good job of the part you choose to do. Feel free to contact us if you have any points you'd like to clarify.

This is not a development exercise, so being a Python developer isn't important. What we're looking for is demonstration of the depth and breath of what you consider when building systems to support running an application, and an insight into your Swiss Army knife of tools that you make use of.

Having had a go your submission is then the starting point for the next conversation we'll have together. Engineering is about responsibility for choices and technical elegance in the face of feasibility constraints. We want you to talk about which parts of the problem you chose to do and why, identify areas where what you did do might have fallen short, and where you'd go next from here.

Look forward to talking with you about your code. Good luck!

Engineering
Analytics & Information
Commonwealth Bank