

DevOps Engineer Home Exercise

Write a script in any language you like, which does the following:

1. Query "Rick and Morty" API and look for all characters that meets the following conditions:
 - a. Species is "Human"
 - b. Status is "Alive"
 - c. Origin is "Earth"
2. Make a list of the results that will include:
 - a. Name.
 - b. Location.
 - c. Image link.
3. Write the results to a csv file.

For example:

Name,Location,Image

Rick Sanchez,Earth,<https://rickandmortyapi.com/api/character/avatar/1.jpeg>

API Docs can be found here:

<https://rickandmortyapi.com/documentation/#rest>

Please provide a Github repo repository with your solution.

Give Read access to chene@elementor.com

Bonus Points:

1. Dockerizing as Service BONUS Points

- Create REST API endpoints to fetch the data collected above and return JSON as response.
- Please provide /healthcheck REST API endpoint
- Create Dockerfile that will run your application
- Update README.md file that's explains how to build and run your Docker Image
- Update README.md with the REST API endpoints you created and how to fetch data

1. Kubernetes BONUS Points (Can accomplished with minikube/microk8s locally)

- Create folder called yaml
- Please provide Deployment.yaml , Service.yaml , Ingress.yaml
- Update README.md on how to deploy the manifests to kubernetes

1. Helm Chart Deployment BONUS Points

- Create Helm folder
- Create Helm chart with proper resources and values.yaml
- Update README.md on how to deploy the Helm chart

1. Github actions workflow(pipeline) BONUS Points

- Create a workflow that will initiate small kubernetes cluster on Github Actions Runner
- Create the Docker image from Dockerfile
- Deploy the application to the local cluster created
- Run some tests to your application endpoints
- Update README.md with explanation about the workflow & jobs & steps
- Considering chene@elementor.com will have read access to your repository please run the workflow once and he will check the action workflow output .