

Step 1 - Script

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>

Step 2 - Dockerized App

Lets Improve our original script and convert it to REST application (same or different language) •

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

Step 3 - K8s

These steps can be accomplished on Kind/minikube locally

- Create folder called yamls
- Please provide Deployment.yaml , Service.yaml , Ingress.yaml for your application
- Update README.md on how to deploy the manifests to kubernetes and how to get the endpoints

Step 4 - Helm

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

Step 5 - Github Actions

- Create a workflow that will initiate small kubernetes cluster on Github Actions Runner
 - 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
- the workflow once and he will check the action workflow output .