

1. Create a helm chart that deploys the following:

A kubernetes Deployment named **myweb**

- which creates pods configured as such:

- a main container named '**httpd**' based on **httpd** image

 - note: default html documents path is /usr/local/apache2/htdocs

 - with resource requests: cpu: 100m, memory: 50M

 - with resource limits : cpu: 200m, memory: 100M

- an *initContainer* named '**generator**' based on **alpine**

 - that runs "echo '<html> Welcome to Kubernetes </html>' > index.html"

 - so that this index.html is seen in default html doc path of the '**httpd**' container

File sharing will be done with the help of a volume named '**docroot**'

- Expose the **myweb** deployment on port 80 and verify by accessing it with curl.
2. Commit the resulting Helm chart to a github repository
 3. In the same github repo - create a Github actions workflow that:
 - a. Spins up a tiny [k3d/k3s](#) cluster
 - b. Deploys the helm chart as a release to the cluster
 - c. Verifies that the deployment exposes the "Welcome to Kubernetes" message.
 - i. Exits with an appropriate status code if the message isn't displayed.
 - d. Spins down the cluster
 4. Add a README.md file describing the solution.

Send me the URL of the github repo.