https://medium.com/@airwavetechio/creating-a-helm-chart-cf040dd15d16

https://docs.bitnami.com/tutorials/create-your-first-helm-chart/

<https://medium.com/google-cloud/kubernetes-and-helm-create-your-own-helm-chart-5f54aed894c2>

<https://github.com/mavrick202/helmwebapp.git>

Use following Repo for the testing:

https://github.com/mavrick202/helm-mynginx.git

Adding a repo, download and installing chart:

helm repo add bitnami https://charts.bitnami.com/bitnami

helm repo add stable https://charts.helm.sh/stable

helm repo update

helm search repo jenkins

helm install bitnamijenkins bitnami/jenkins

helm list

helm uninstall bitnamijenkins

helm repo remove bitnami

helm repo list

helm repo remove jetstack stable bitnami

helm repo add bitnami <https://charts.bitnami.com/bitnami>

helm update

helm repo add bitnami https://charts.bitnami.com/bitnami

helm install my-release bitnami/mongodb

helm ls

helm uninstall my-release

Creating a helm chat and packaging:

helm create my-test-chart

helm package my-test-chart

helm create mynginx

helm install --dry-run mynginx/ --generate-name

root@ip-192-168-1-100:/# helm install mynginx/ --generate-name

NAME: mynginx-1611420045

LAST DEPLOYED: Sat Jan 23 16:40:46 2021

NAMESPACE: default

STATUS: deployed

REVISION: 1

TEST SUITE: None

helm repo add stable <https://charts.helm.sh/stable>

helm repo add bitnami https://charts.bitnami.com/bitnami

helm repo update

mkdir myhelmrepo

cd myhelmrepo

helm fetch stable/jenkins

helm fetch stable/spark

helm fetch stable/wordpress

helm repo index myhelmrepo

create github pages with mavrick202.github.io repo in your github account.

Copy the contexts in index.yaml file to the https://mavrick202.github.io

helm repo add peronal https://mavrick202.github.io

helm repo remove stable

helm repo update

helm search jenkins

helm search spark

helm search wordpress

helm repo add munnabhai https://charts.helm.sh/stable

helm repo update

helm search repo wordpress

helm install wordpress munnabhai/wordpress

helm uninstall wordpress

helm ls

helm delete wordpress

helm create demo

helm show values ./demo #Shows default values of the chart

helm install demo1 ./demo --set image.tag=latest --dry-run

helm install demo2 ./demo --set image.tag=latest --set service.type=NodePort --dry-run

helm install demo3

cd demo

ls -al

helm install demo ../demo --dry-run

helm upgrade testing1 nginx01/ --set image.repository=sreeharshav/testcontainer --set image.tag=v1

helm upgrade testing1 nginx01/ --set image.repository=sreeharshav/rollingupdate --set image.tag=v5

helm upgrade testing1 nginx01/ --set image.repository=sreeharshav/rollingupdate --set image.tag=v1

root@ip-172-19-1-176:/mycharts# helm ls

NAME NAMESPACE REVISION UPDATED STATUS CHART APP VERSION

testing1 default 4 2021-04-10 06:32:12.417118997 +0000 UTC deployed nginx01-0.1.0 1.16.0

root@ip-172-19-1-176:/mycharts# helm rollback testing1 3

Rollback was a success! Happy Helming!

Modifying Helm Charts:

If we are modifying few values for testing we can use the set option. This wont override the values.yaml

Using values.yaml file. The value are updated in the values.yaml and then applied. This is useful to track the changes in the values as we source control the values.yaml.

We can also fetch the chart, unpack it and updates the values as well for customise charts. We also need to change the Chart version number as well.

we can use following the current values of the chat using below command.

helm show values <chartname>

--set service.port=9000

--set replicaCount=3

--set image.repository=sreeharshav/testcontainer:v1

helm install testnginx1 mynginx --set service.port=9000 \

--set replicaCount=3 --set image.repository=sreeharshav/testcontainer:v1 \

--dry-run

helm install testnginx1 mynginx --set service.port=9000 \

--set replicaCount=6 --set image.repository=sreeharshav/testcontainer:v1 \

--dry-run

# helm create myfirstchart

# helm lint myfirstchart

# helm package myfirstchart

# helm install efs3 /home/ubuntu/efs-0.1.0.tgz --set fsid=fs-81a55d03

# helm list

# helm uninstall chart-testing

helm upgrade testingvalues mynginx/ --set service.nodeport="31111" --set image.name="sreeharshav/rollingupdate:v5"