## PS-3 Technical Solution

Aim: To create a docker-containing web application that displays the date and time from the server and to host it over the internet.

## Steps Followed:

- 1. Initially the go lang program is developed and tested.
- 2. Further a new docker image that runs on Alpine and is installed with Go-lang and the app is executed.
- 3. The image is now run in a container.
- 4. Next the program runs on port 8080 which is exposed to the container and the same will be used for the machine that runs the application.
- 5. Once the running of the docker is tested the image is now pushed to the repository.
- 6. The repository image is as follows:

**Docker Image** 

- 7. For running the docker over the internet a Kubernetes cluster is created in GCP and while creating the cluster the uploaded image is selected fore deployment.
- 8. The number of replicas is set to 2 by editing the yaml file for cluster creation.
- 9. For hosting the web app over the internet a Compute instance is created and the docker image is run in the instance.

Endpoint of application: <a href="http://34.170.29.221/">http://34.170.29.221/</a>