

1. Create a Dockerfile that packages:
  1. An index.html file that outputs current date and time using JavaScript
  2. Nginx web server that serves that file so that:
    1. Nginx execution is the default process for the resulting Docker image
  3. The init process of the resulting container has to run as non-root user
  4. (Bonus level) Use vanilla alpine as your base image
2. Build the image and push it to Docker Hub
3. Prepare deployment code (Helm, Kustomize, plain YAML or Terraform) to deploy your image to K8s.
  1. Expose the process as a Kubernetes service
  2. In K8s network the service should listen on port 80
  3. You can use <https://labs.play-with-k8s.com/> for testing
4. Write a test script (in bash or in Python) to check that our container works as expected:
  1. that the web page is served correctly
  2. what is getting returned is a date
  3. (Bonus) - check that the date is correct
5. Create a github repository that holds:
  1. The index.html file
  2. The Dockerfile
  3. K8s deployment in whatever format you chose
  4. The test script
  5. a [README.md](#) that explains how to build, push, deploy and test the resulting application