

DevOps/SRE Take Home Test

Background & Context

The aim of this lab is to test your knowledge on building containers with input variables which could be used at build/run time. The codebase used for this test is in NextJS; you will not be expected to write any code but it is important to understand how environment variables work in NextJS

To start please get a copy of the codebase by cloning this git repo:

<https://github.com/MasterVentures/takehome-devops-sre-test>

The codebase contains a README.md with instructions on how to run the application. Your first task is to get the application running locally. Once you are successful you should see the image below on <http://localhost:3000>



Welcome to Simple Application

Task

You will be expected to build a Dockerfile for local development and production use. These two Dockerfiles should be different and configured to match their use cases.

- a) Your local Dockerfile must meet the following criteria:
 - Create a file called **Dockerfile.dev** for local builds
 - Use an appropriate lightweight base image from node
 - Create a working directory named **/app**

- Accept an environment variable called `NEXT_PUBLIC_APP_VERSION`
 - Install node dependencies and run a local development environment
- b) Your local Dockerfile will be used to build the docker container using a **docker compose** file. This YAML file must meet the following criteria:
- Create a file called `docker-compose.yml`
 - Build a running container using your `Dockerfile.dev`
 - Map host port to container port, both should be on port `3000`
 - Mount any volumes required to run the application locally
 - Inject the environment variable required `NEXT_PUBLIC_APP_VERSION`
- c) Your **production** Dockerfile must be built with the following criteria:
- Production file should be called `Dockerfile`
 - Use an appropriate lightweight base image from node
 - Create a working directory named `/app`
 - Remove any redundant files/folders/caches
 - Accept an environment variable called `NEXT_PUBLIC_APP_VERSION`
 - Do not use a `.env` file
 - Install node dependencies for production
 - Run container as non-root user
 - Optimized run steps on the final Dockerfile for step caching
 - Minimized Docker image to a total size < **400MB**

Expected Results

Your running container should always show the value of the `NEXT_PUBLIC_APP_VERSION` on the browser as shown in the image below:



Welcome to **Simple Application v1.2.2**