<https://medium.com/capital-one-tech/multi-stage-builds-and-dockerfile-b5866d9e2f84>

<https://www.fl0.com/blog/the-perfect-multi-stage-dockerfile-for-node-js-apps>

Advantages:

1. Multi-stage builds allow you to separate build, test, and run time environments needing separate Dockerfiles. We can avoid multiple dockerfiles using multi-stage builds.
2. Another added benefit of Multi-stage builds are the ability to run steps/stage in parallel.
3. This will decrease the size of the final image significantly as not extra layers are added.

FROM node:latest as builder

WORKDIR /usr/src/app

COPY package\* ./

COPY src/ src/

RUN ["npm", "install"]#

FROM node:latest as linting

WORKDIR /usr/src/app

COPY --from=builder /usr/src/app/ .

RUN ["npm", "lint"]# Lints Code

FROM newmitch/sonar-scanner:latest as sonarqube

COPY --from=builder /usr/src/app/src /root/src# Gets Sonarqube Scanner from Dockerhub and runs it

FROM node:latest as unit-tests

WORKDIR /usr/src/app

COPY --from=builder /usr/src/app/ .

RUN ["npm", "test"]#Runs Unit Tests

FROM node:latest as access-tests

WORKDIR /usr/src/app

COPY --from=builder /usr/src/app/ .

RUN ["npm", "access-tests"]# Runs Accessibility Tests

FROM node:latest as serve

WORKDIR /usr/src/app

COPY --from=builder /usr/src/app/dest ./

COPY --from=builder /usr/src/app/package\* ./

RUN ["npm", "start"]

