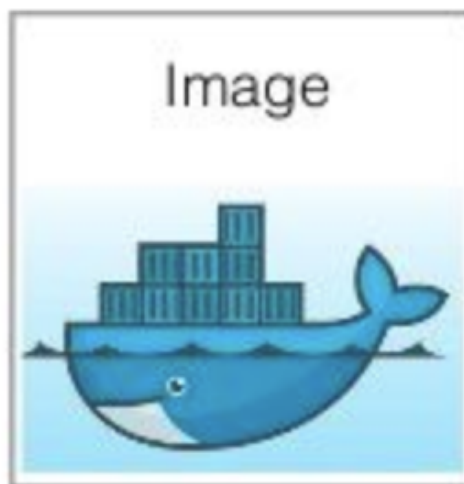


# Dockerfile

```
FROM ubuntu:14.04
MAINTAINER John Doe <john.doe@example.com>
RUN apt-get update && apt-get install -y python
RUN apt-get install -y python-dev python-pip
RUN pip install Flask==0.10.1
RUN mkdir /app
WORKDIR /app
COPY . /app
EXPOSE 5000
CMD ["python", "app.py"]
```

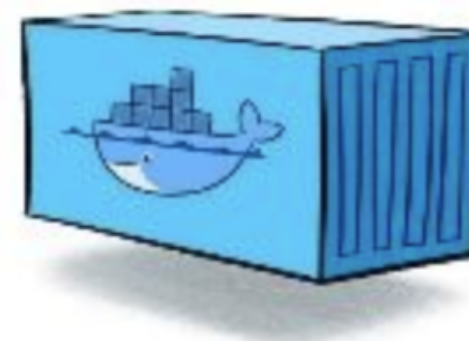
Dockerfile

build



Docker Image

run



Docker Container

Common **Dockerfile** instructions start with RUN, ENV, FROM, MAINTAINER, ADD, and CMD, among others.

**FROM** - Specifies the base image that the Dockerfile will use to build a new image.

**MAINTAINER** - Specifies the Dockerfile Author Name and his/her email.

**RUN** - Runs any UNIX command to build the image.

RUN <commands>

RUN ["executable", "params", "more params"]

***/bin/sh -c <commands>***

***The exec form is parsed as a JSON array***

**ENV** - Sets the environment variables. For this example : JAVA\_HOME

**CMD** - Provides the facility to run commands at the start of container. This can be overridden upon executing the docker run command.



**COPY** - It only lets you copy in a local file or directory from your host into the Docker image itself.

**ADD** - lets you do that too, but it also supports 2 other sources. First, you can use a URL instead of a local file / directory. Secondly, you can extract a tar file from the source directly into the destination..

**EXPOSE** - This instruction exposes specified port to the host machine.

**WORKDIR** - The WORKDIR instruction sets the working directory for any RUN, CMD, ENTRYPOINT, COPY and ADD instructions that follow it in the Dockerfile.

**ENTRYPOINT** - allows you to configure a container that will run as an executable.

**VOLUME** - creates a mount point with the specified name and marks it as holding externally mounted volumes from native host or other containers.

**ARG** - defines a variable that users can pass at build-time to the builder with the docker build command using the --build-arg <varname>=<value> flag.

