Dockerfile Reference

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.dockerignore

Patterns for files and folders to ignore when using COPY or ADD operations in the dockerfile.

Instructions

FROM

Base image. It's the first line of file.

```
FROM python:3.7-alpine
```

LABEL

Adds metadata to images.

```
LABEL "com.example.vendor"="ACME Incorporated"
LABEL com.example.label-with-value="foo"
LABEL version="1.0"
LABEL description="This text illustrates \
that label-values can span multiple lines."
```

MAINTAINER is deprecated. Use LABEL instead.

```
LABEL   maintainer=   "email@mail.com"
```

RUN

Executes a command inside the container.

```
RUN apk add --no-cache gcc musl-dev linux-headers
```

WORKDIR

Set the working directory inside the container for any RUN, CMD, ENTRYPOINT, COPY, and ADD instructions that follow it in the Dockerfile. It will be created if does not exist.

If a relative path is provided, it will be relative to the path of the previous WORKDIR instruction.

```
WORKDIR /path/to/workdir
```

ENV

```
ENV <key>=<value>
```

Sets the variable "key" to the value "value". Will be overwritten when using the "-e" docker parameter.

ARG

Defines a variable that can be set when building the image.

```
ARG version
```

A default value can be set

```
ARG version=1.0.0
```

COPY

Copy files from a local filesystem to the image . It supports wildcards (? *).

```
ADD /my-folder/* /application/
```
```
ADD . .
```

The later copies from the current folder in the local filesystem to the current WORKDIR in the image.

ADD

Copy files from a local filesystem to the image. It supports wildcards (? *). The difference with COPY is that it uncompress tar.gz files and can be used to copy from external URLs.

```
COPY /my-folder/* /application/
```
```
COPY my_file.tgz .
```

The later copies the file from the current folder in the local filesystem to the current WORKDIR in the image and uncompress the file.

EXPOSE

The container will listen in the given port and protocol.

```
EXPOSE port
```
```
EXPOSE port/protocol
```

ENTRYPOINT

Defines a program to be executed when the container start and its parameters.

Can be overriden with the docker `--entrypoint` parameter.

Exec form (preferred)

```
ENTRYPOINT ["executable", "param1", "param2"]
```

Shell form:

```
ENTRYPOINT command param1 param2
```

CMD

Defines default commands and/or parameters for a container. If a dockerfile has multiple CMDs will only execute the last one.

Exec form: (preferred)

```
CMD ["executable","param1","param2"]
```

Shell form:

```
CMD command param1 param2
```

Can be used to pass default parameters to ENTRYPOINT.

```
CMD ["param1","param2"]
```

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