**Dockerfile Cheat-Sheet**

**Examples:**

* + **ADD rootfs.tar.bz2 /**

Extracts the contents from rootfs.tar.bz2 into the / directory of the image

* + **ADD** <http://sap.com/file> **/**

Downloads a file from sap.com and places it into the / directory of the image

**ADD**

* + Adds a file to an image, like COPY but with a little more magic
  + Will extract compressed archives into the image
  + Can download files from an URL
  + Only extracting OR downloading, not both

**Examples:**

* + **COPY default.conf /etc/nginx**

Copies the file default.conf from the build context into the image at /etc/nginx/default.conf

**COPY**

* + Copies a file from the build-context to the image
  + Does not copy files inside the image (look at RUN for that)

**Examples:**

* + **LABEL maintainer=Homer Simpson**

Adds the maintainer to the meta-data of the image

**LABEL**

* + Sets meta-data of an image
  + Labels are key-value pairs

**Examples:**

* + **ENV http\_proxy http://proxy:8080**

Persists the HTTP proxy in the image

**ENV**

* + Sets an environment variable
  + Environment variable gets persisted in image
  + Also present during build process after having been defined

**Examples:**

* + **FROM debian:jessie**

will pull a Debian image from Docker Hub and use it as base image

* + **FROM scratch**

will start with an empty image

**FROM**

* + first line in a Dockerfile
  + specifies which image to build upon / to extend
  + special case: **FROM scratch** starts from scratch without any previous image

**Examples:**

* + **ENTRYPOINT /usr/bin/nginx**

Starts nginx directly without help of a shell

**ENTRYPOINT**

* + Sets the program to be run immediately when a container is started
  + CMD is an argument to ENTRYPOINT
  + Cannot be overridden

**Examples:**

* + **CMD /bin/helloworld**

Runs a hello-world program when the container is started

* + **CMD ["nginx","-c","daemon off"]**

Starts the nginx binary with the arguments "-c" and "daemon off"

**CMD**

* + Specifies the command that will run when a container is created from an image
  + Command binary and a shell must be present within your image
  + Can be overridden when a container is started

**EXPOSE**

* + Exposes a network port
  + Exposed ports are saved in the metadata of the image
  + Exposed ports can automatically be mapped by Docker

**Examples:**

* + **EXPOSE 443**

Will expose port 443 in your image so that ‘docker -P’ can automatically map it

**RUN**

* + Runs the specified command in the image
  + Command binary and a shell must be present within your image

**Examples:**

* + **RUN apt-get update**

Runs the Debian package manager to build its package cache inside the image

* + **RUN cp /etc/hosts /tmp**

Copies the file /etc/hosts into the /tmp directory within the image