DOCKER

Dockerfile Instructions

➤ Docker file Instructions are used to Create the Docker Images.

➤ FROM: The FROM instruction initializes a new build stage and sets the *Base Image* for subsequent instructions.

➤ A valid Dockerfile must start with a FROM instruction.

➤ Base Image can be any valid image.

➤ Format:
FROM <image>[:<tag>]

➤ LABEL : LABEL added to image to organize images by project, record licensing information.

➤ For each label, add a line beginning with LABEL and with one or more key-value pairs.

➤ LABEL com.example.version="0.0.1-beta"

➤ LABEL vendor1="ACME Incorporated"

➤ RUN : RUN instruction will execute any commands in a new layer on top of the current image and commit the results.

➤ The resulting committed image will be used for the next step in the Dockerfile.

➤ FROM ubuntu:14.04

➤ RUN apt-get update

➤ RUN apt-get install -y curl

➤ CMD : CMD instruction should be used to run the software contained by your image, along with any arguments.

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

➤ There can only be one CMD instruction in a Dockerfile. If you list more than one CMD then only the last CMD will take effect.

➤ The main purpose of a CMD is to provide defaults for an executing container.

➤ EXPOSE : EXPOSE instruction indicates the ports on which a container listens for connections.

➤ EXPOSE <port>

➤ ENV : ENV instruction sets the environment variable <Key> to the value <value>.

➤ To make new software easier to run, you can use ENV to update the PATH environment variable for the software your container installs.
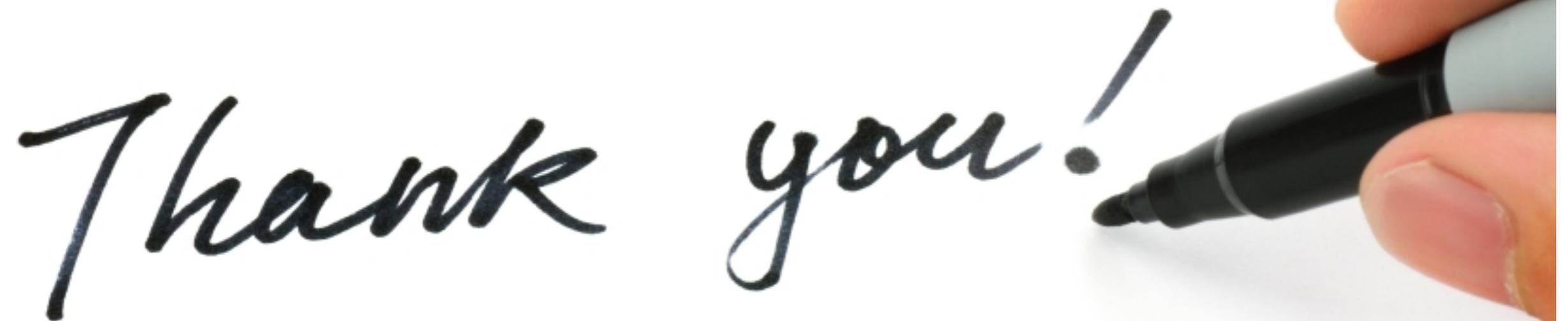
➤ ENV PATH /usr/local/nginx/bin:$PATH

➤ ADD : ADD instruction copies new files, directories or remote file URLs from <src> and adds them to the filesystem of the image at the path <dest>.

➤ ADD hom* /mydir/   # adds all files starting with "hom"

➤ VOLUME : VOLUME instruction should be used to expose any database storage area, configuration storage, or files/folders created by your docker container.

➤ WORKDIR : WORKDIR instruction sets the working directory for any RUN, CMD, ADD instructions that follow it in the Dockerfile.

See you in next lecture …