Dockerfile Commands (Instructions)

FROM Specifies the base image to use. (Mandatory as the first instruction)

LABEL Adds metadata to the image (e.g., maintainer, version).

ENV Sets environment variables.

RUN Executes a command during image build (e.g., install packages).

CMD Sets the default command to run **when container starts** (overridden at runtime).

ENTRYPOINT Sets the main command to run — more strict than CMD.

COPY Copies files/folders from the host into the container.

ADD Like COPY, but also supports remote URLs and auto-extracts .tar files.

WORKDIR Sets the working directory for subsequent commands (RUN, CMD, etc.).

EXPOSE Documents the port the container listens on (does **not** publish it).

VOLUME Creates a mount point and marks it as a volume.

USER Sets the username or UID to run the container under.

ARG Defines build-time variables (used with --build-arg).

ONBUILD Sets a trigger instruction to run when the image is used as a base.

SHELL Overrides the default shell used for the RUN command.

HEALTHCHECK Defines a command to check container health status.

STOPSIGNAL Sets the system call signal to stop the container.