Docker Compose CLI Cheat sheet

docker-compose build

docker-compose build [options] [SERVICE...]

Use: Builds docker images for the listed services in compose file.

Flag: --no-cache avoids image cache while building the docker image.

docker-compose build --pull nginx-service

It will pull the latest version of nginx image and build the latest docker image for nginx-service.

docker-compose run

docker-compose run [options] SERVICE [COMMAND] [ARGS...]

Use: Runs a one-time command in a new container with same configurations of the mentioned service.

Flag: --entrypoint CMD overrides the entrypoint of the image.

docker-compose run ubuntu-service bash

It will run a bash session in a new container, with the same configurations of running ubuntu-service.

docker-compose ps

docker-compose ps [options] [SERVICE...]

Use: Lists out existing containers along with their properties.

Flag: -q / --quite shows only the list of container IDs.

docker-compose ps --all

It will display all running as well as stopped containers initiated by docker compose with containers' properties such as container IDs, default execution commands, state of container, etc.

docker-compose down

docker-compose down [options]

Use: Stops all running containers, images, volumes, networks initiated by docker-compose up command.

Flag: --remove-orphans removes containers for services not defined in compose file.

docker-compose down -v

It will remove both named volumes (mentioned in the compose file) and anonymous volumes attached to containers.

docker-compose kill

docker-compose kill [options] [SERVICE...]

Use: Forces running containers to stop with SIGKILL.

Flag: -s [SIGNAL_NAME] passes different types of signals to running containers.

docker-compose kill -s SIGTERM

It will send a termination signal to the all the compose initiated running containers.

docker-compose up

docker-compose up [options] [SERVICE...]

Use: Builds, (re)creates, starts, and attaches to containers for a service.

Flag: -d / --detach runs containers in detach mode.

docker-compose up -d

It will start containers in background and keeps them running.

docker-compose help

docker-compose help COMMAND

Use: Shows user instructions and details for a particular command.

docker-compose help up

It will show usage instruction and option details for up command.

docker-compose exec

docker-compose exec [options] SERVICE [COMMAND] [ARGS...]

Use: Runs new commands in a running service container with default pseudo-TTY allocation.

Flag: --privileged gives extended privileges to processes.

docker-compose exec ubuntu-service bash

It will run a new bash session in the default directory of the running ubuntu-service container.

docker-compose logs

docker-compose logs [options] [SERVICE...]

Use: Displays log output from services.

Flag: --tail="10" shows the last 10 lines of logs from each containers.

docker-compose logs -t >> compose-logs.txt

It will get logs of all compose initiated containers with their respective timestamps and save it to the "compose-logs.txt" file.

docker-compose rm

docker-compose rm [options] [SERVICE...]

Use: Removes all stopped containers for services.

Flag: -v removes any anonymous volume attached to the containers.

docker-compose rm --force

It will remove all the stopped service containers without asking for user's approval.