While researching about Docker I came across this Reddit post (https://www.reddit.com/r/docker/comments/7r7t6b/is_docker_possible_on_mobile/) on how to install anyfed (https://github.com/nmilosev/anyfed) in Termux (https://termux.com) on Android to run a Fedora Linux image as a chroot on an Android phone.

A similar project, TermuxAlpine (https://github.com/Hax4us/TermuxAlpine), runs Alpine Linux (https://alpinelinux.org) on Termux. One can then install the Docker client on Alpine and set it up to run images from a remote Docker engine via https or ssh.

For example, you can set up the remote Docker host at home, securing access with the instructions in the documentation for protecting the Docker daemon socket (https://docs.docker.com/engine/security/https/).

You can build and run Docker images, create data volumes, etc. Everything lives in the remote host, but it seems to work fine and you can run all kinds of things on your phone. For example, I have images for RStudio, and one with Ruby, Jekyll, and TeXLive for maintaining this website.

Follow for updates.

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