CLOUD COMPUTING
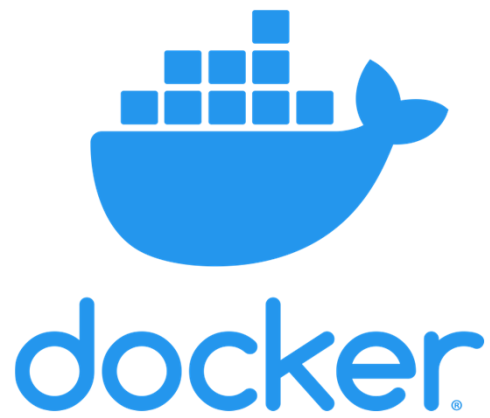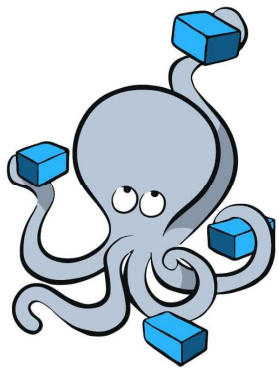
SARA CARPENE'
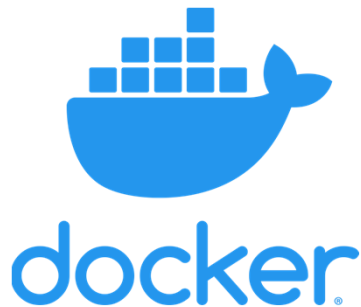
USED TOOLS

DOCKER

- Docker Compose allows developers to manage multiple containers as a single service

- 2 containers: mariadb and nextcloud

- docker-compose up

NEXTCLOUD

Nextcloud allows to automatically let users to register in the cloud service, sign up, log in, and log out.

All users have their private storage space, it's dimension can be set from admin's profile.

In their storage space users can upload, download and delete files.

From admin's profile users can be created and deleted, they can be organized in groups

NEXTCLOUD SECURITY

Server side encryption

Two factors authentication

Requirement for passwords

Minimal Length
Password Expiration Period
Password History:
Lockout Policy
Forbid Common Passwords

Enforce Upper and Lower Case Characters
Enforce Numeric Characters
Enforce Special Characters
Check Against Breached Passwords

NEXTCLOUD SCALABILITY

Horizontal scaling
- Cost can be mitigated by using pay-as-you-go models, such as those offered by Amazon AWS

Vertical scaling
- Generally expensive

Global scaling
- Decentralized model, commodity hardware are significantly cheaper than specialized petabyte servers

LOCUST

- Small dimension file

LOCUST

- Medium file

LOCUST

- Big file