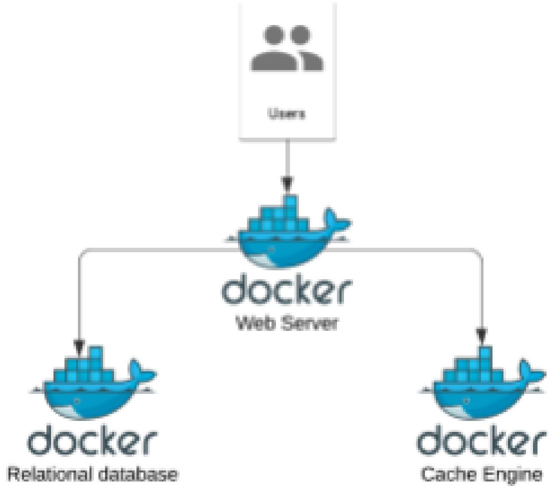
Docker - Final Project

For this course's final assignment we will be recreating the following application infrastructure in a local environment using Docker and docker-compose



Requirements

- Docker
- Docker-compose
- Github Account
- DockerHub Account

Setup

The three container environment has to be created using docker-compose.

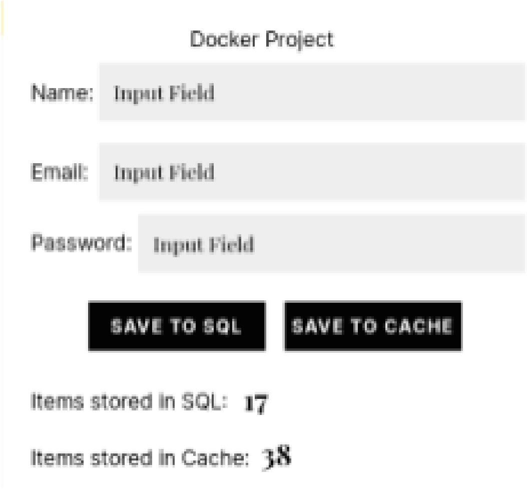
Web Server

Pick any web development framework you like that is able to do the following:

1. Read and write users to a relational database
2. Read and write users to a cache engine (i.e Redis)

Remember this is a docker project not a programming project so feel free to keep it simple.

Here is a mockup of the web server's UI:



Items stored in SQL: 17

Items stored in Cache: 38

Database credentials for the relational database should be provided to this container via docker secrets. (https://docs.docker.com/compose/compose-file/compose-file-v3/#secrets)

Relational Database

Pick any relational database engine you prefer (MySQL, PSQL, MariaDB, etc). The database container settings should be set on the docker-compose file via environment variables. You don't need to create a Dockerfile for this, you can simply use a publicly provided base image.

Cache Engine

Pick between Redis and Memcached, whichever you prefer or whichever is easier to work with with the web development framework you chose. You don't need to create a Dockerfile for this, you can simply use a publicly provided base image.

Deliverables

- Link to the Github Repository of your project (Provide a README.md file with instructions to launch it and project description)
- Push the App docker image to a DockerHub public Repository and send me the link (https://hub.docker.com/r/<username>/<repo_name>)