

[Back to all evaluation sheets](#)

**Points earned**

**0**

# Inception

You should evaluate **1** student in this team

## Introduction

Please follow the rules below:

- ✓ Remain polite, courteous, respectful, and constructive throughout the evaluation process. The well-being of the community depends on it.
- ✓ Identify with the student or group whose work is being evaluated the possible dysfunctions in their project. Take the time to discuss and debate the problems that may have been identified.
- ✓ You must consider that there might be some differences in how your peers might have understood the project's instructions and the scope of its functionalities. Always keep an open mind and grade them as honestly as possible. The pedagogy is useful only if the peer-evaluation is done seriously.

## Guidelines

Please follow the guidelines below:

- ✓ Only grade the work that was turned in to the Git repository of the evaluated student or group.
- ✓ Double-check that the Git repository belongs to the student or group. The project is the one expected. Also, check that 'git clone' is used to clone the repository.
- ✓ Check carefully that no malicious aliases were used to replace something that is not the content of the official repository.
- ✓ To avoid any surprises and if applicable, review together any scripts used to facilitate the grading (scripts for testing or automation).
- ✓ If you have not completed the assignment you are going to evaluate, you must read the entire subject prior to starting the evaluation process.
- ✓ Use the available flags to report an empty repository, a non-functioning program, a Norm error, cheating, and so forth. In these cases, the evaluation process ends and the final grade is 0, or -42 in the case of cheating. However, except for cheating, students are strongly encouraged to review together the work that was turned in, in order to identify any mistakes that shouldn't be repeated in the future.
- ✓ Remember that for the duration of the defense, no segfaults or other unexpected, premature, or uncontrolled terminations of the program will be tolerated, else the final grade is 0. Use the appropriate flag.
- ✓ You should never have to edit any file except the configuration file if it exists. If you want to edit a file, take the time to explain the reasons with the evaluated student and make sure both of you are okay with this.
- ✓ You must also verify the absence of memory leaks. Any memory allocated on the heap must be properly freed before the end of execution.
- ✓ You are allowed to use any of the different tools available on the computer, such as leaks, valgrind, or e\_fence. In case of memory leaks, tick the appropriate flag.

**Points earned****0**

## Attachments

Please download the attachments below:

 [subject.pdf](#)

**Points earned**

**0**

## Mandatory Part

### Preliminary tests

If cheating is suspected, the evaluation stops here. Use the "Cheat" flag to report it. Take this decision calmly, wisely, and please, use this button with caution.

- ✓ Any credentials, API keys, environment variables must be set inside a .env file during the evaluation. In case any credentials, API keys are available in the git repository and outside of the .env file created during the evaluation, the evaluation stop and the mark is 0.
- ✓ Defense can only happen if the evaluated student or group is present. This way everybody learns by sharing knowledge with each other.
- ✓ If no work has been submitted (or wrong files, wrong directory, or wrong filenames), the grade is 0, and the evaluation process ends.
- ✓ For this project, you have to clone their Git repository on their station.

Yes

No

## General instructions

General instructions

- ✓ For the entire evaluation process, if you don't know how to check a requirement, or verify anything, the evaluated student has to help you.
- ✓ Ensure that all the files required to configure the app are in a `srcs` folder. The `srcs` folder must be located at the root of the repository.
- ✓ Ensure that a `Makefile` is located at the root of the repository.
- ✓ Before starting the evaluation, run this command in the terminal:  

```
$(docker ps -qa); docker rm $(docker ps -qa); docker rmi -f $(docker images -qa); docker volume rm $(docker volume ls -q); docker network rm $(docker network ls -q) 2>/dev/null"
```
- ✓ Read the `docker-compose.yml` file. There mustn't be `'network: host'` in it or `'links:'`. Otherwise, the evaluation ends now.
- ✓ Read the `docker-compose.yml` file. There must be `'network(s)'` in it. Otherwise, the evaluation ends now.
- ✓ Examine the `Makefile` and all the scripts in which Docker is used. There mustn't be `'--link'` in any of them. Otherwise, the evaluation ends now.
- ✓ Examine the Dockerfiles. If you see `'tail -f'` or any command run in background in any of them in the `ENTRYPOINT` section, the evaluation ends now. Same thing if `'bash'` or `'sh'` are used but not for running a script (e.g, `'nginx & bash'` or `'bash'`).
- ✓ Examine the Dockerfiles. The containers must be built either from the penultimate stable version of Alpine or Debian.
- ✓ If the entrypoint is a script (e.g., `ENTRYPOINT ["sh", "my_entrypoint.sh"]`, `ENTRYPOINT ["bash", "my_entrypoint.sh"]`), ensure it runs no program in background (e.g, `'nginx & bash'`).
- ✓ Examine all the scripts in the repository. Ensure none of them runs an infinite loop. The following are a few examples of prohibited commands: `'sleep infinity'`, `'tail -f /dev/null'`, `'tail -f /dev/random'`
- ✓ Run the `Makefile`.

**Points earned****0**

Yes

No

## Mandatory part

**Points earned****0**

This project consists in setting up a small infrastructure services using docker compose. Ensure that all the following points are correct.

### Project overview

- ✓ The evaluated person has to explain to you in simple terms:
- ✓ How Docker and docker compose work
- ✓ The difference between a Docker image used with docker compose and without docker compose
- ✓ The benefit of Docker compared to VMs
- ✓ The pertinence of the directory structure required for this project (an example is provided in the subject's PDF file).

Yes

No

## Simple setup

### Simple setup

- ✓ Ensure that NGINX can be accessed by port 443 only. Once done, open the page.
- ✓ Ensure that a SSL/TLS certificate is used.
- ✓ Ensure that the WordPress website is properly installed and configured (you shouldn't see the WordPress Installation page). To access it, open

<https://login.42.fr> in your browser, where login is the login of the evaluated student. You shouldn't be able to access the site via

<http://login.42.fr>. If something doesn't work as expected, the evaluation process ends now.

**Points earned**

**0**

Yes

No

## Docker Basics

### Docker Basics

✓ Start by checking the Dockerfiles. There must be one Dockerfile per service. Ensure that the Dockerfiles are not empty files. If it's not the case or if a Dockerfile is missing, the evaluation process ends now.

✓ Make sure the evaluated student has written their own Dockerfiles and built their own Docker images. Indeed, it is forbidden to use ready-made ones or to use services such as DockerHub.

Ensure that every container is built from the penultimate stable version of Alpine/Debian. If a Dockerfile does not start with 'FROM alpine:X.X.X' or 'FROM debian:XXXXX', or any other local image, the evaluation process ends now.

✓ The Docker images must have the same name as their corresponding service. Otherwise, the evaluation process ends now.

✓ Ensure that the Makefile has set up all the services via docker compose. This means that the containers must have been built using docker compose and that no crash happened. Otherwise, the evaluation process ends.

Yes

No

## Docker Network

### Docker Network

**Points earned**

**0**

- ✓ Ensure that docker-network is used by checking the file. Then run the 'docker network ls' command to verify.
- ✓ The evaluated student has to give you a simple explanation of the network. If any of the above points is not correct, the evaluation process ends now.

Yes

No

## NGINX with SSL/TLS

### NGINX with SSL/TLS

- ✓ Ensure that there is a Dockerfile.
- ✓ Using the 'docker compose ps' command, ensure that the container was created (using the flag '-p' is authorized if necessary).
- ✓ Try to access the service via http (port 80) and verify that you cannot connect.
- ✓ Open <https://login.42.fr/> in your browser, where login is the login of the evaluated student. The displayed page must be the configured WordPress website (you shouldn't see the WordPress Installation page).
- ✓ The use of a TLS v1.2/v1.3 certificate is mandatory and must be demonstrated. The SSL/TLS certificate doesn't have to be recognized. A self-signed certificate warning may appear. If any of the above points is not clearly explained and correct, the evaluation process ends now.

Yes

No

## WordPress with php-fpm and its volume

**Points earned****0**

WordPress with php-fpm and its volume

- ✓ Ensure that there is a Dockerfile.
  - ✓ Ensure that there is no NGINX in the Dockerfile.
  - ✓ Using the 'docker compose ps' command, ensure that the container was created (using the flag '-p' is authorized if necessary).
  - ✓ Ensure that there is a Volume. To do so: Run the command 'docker volume ls' then 'docker volume inspect <volume name>'. Verify that the result in the standard output contains the path '/home/login/data/', where login is the login of the evaluated student.
- Ensure that you can add a comment using the available WordPress user.
- ✓ Sign in with the administrator account to access the Administration dashboard. The Admin username must not include 'admin' or 'Admin' (e.g., admin, administrator, Admin-login, admin-123, and so forth).
  - ✓ From the Administration dashboard, edit a page. Verify on the website that the page has been updated. If any of the above points is not correct, the evaluation process ends now.

Yes

No

## MariaDB and its volume

MariaDB and its volume



- ✓ Ensure that there is a Dockerfile.
- ✓ Ensure that there is no NGINX in the Dockerfile.
- ✓ Using the 'docker compose ps' command, ensure that the container is created (using the flag '-p' is authorized if necessary).
- ✓ Ensure that there is a Volume. To do so: Run the command 'docker volume inspect <volume name>'. Verify that the standard output contains the path '/home/login/data/', where login is the login of the evaluated student.
- ✓ The evaluated student must be able to explain you how to login into the database. Verify that the database is not empty. If any of the above points is not correct, the evaluation process ends now.

**Points earned**  
**0**

Yes

No

## Persistence!

Persistence!

- ✓ This part is pretty straightforward. You have to reboot the virtual machine. Once it has restarted, launch docker compose again. Then, verify that everything is functional, and that both WordPress and MariaDB are configured. The changes you made previously to the WordPress website should still be here. If any of the above points is not correct, the evaluation process ends now.

Yes

No

## Bonus Part

## Bonus

Evaluate the bonus part if, and only if, the mandatory part is perfectly done, and the error management handles unexpected cases. In case all the mandatory points were not passed during the evaluation, the bonus must be totally ignored.

**Points earned**  
**0**

Add 1 point per bonus authorized in the subject.

Verify and test the proper functioning and implementation of each extra service.

For the free choice service, the evaluated student has to give you a simple explanation about how it works and why they think it is useful.

Rate it from 0 (failed) through 5 (excellent)



0

1

2

3

4

5

## Ratings

✓ OK

☆ Outstanding

✖ Empty Work

💬 Incomplete Work

⚠ Cheat

💥 Crash

⚠ Concerning Situations

© 2024 42evals. All rights reserved

**Points earned**

**0**