Remember that the quality of the defenses, hence the quality of the of the school on the labor market depends on you. The remote defences during the Covid crisis allows more flexibility so you can progress into your curriculum, but also brings more risks of cheat, injustice, laziness, that will harm everyone's skills development. We do count on your maturity and wisdom during these remote defenses for the benefits of the entire community.

SCALE FOR PROJECT FT_SERVICES (/PROJECTS/FT_SERVICES)

You should evaluate 1 student in this team

[?]

Git repository

[?]

---

Introduction

Please respect the following rules:

- Remain polite, courteous, respectful and constructive
throughout the evaluation process. The well-being of the community
depends on it.

- Identify with the person (or the group) evaluated the eventual
dysfunctions of the work. Take the time to discuss
and debate the problems you have identified.

- You must consider that there might be some difference in how your
peers might have understood the project's instructions and the
scope of its functionalities. Always keep an open mind and grade
him/her as honestly as possible. The pedagogy is valid only and
only if peer-evaluation is conducted seriously.

Guidelines
- Only grade the work that is in the student or group's
GiT repository.

- Double-check that the GiT repository belongs to the student
or the group. Ensure that the work is for the relevant project
and also check that "git clone" is used in an empty folder.

- Check carefully that no malicious aliases was used to fool you
and make you evaluate something other than the content of the
official repository.

- To avoid any surprises, carefully check that both the evaluatingand the evaluated students have reviewed the possible scripts used to facilitate the grading.

- If the evaluating student has not completed that particularproject yet, it is mandatory for this student to read the entire subject prior to starting the defence.

- Use the flags available on this scale to signal an empty repository, non-functioning program, a norm error, cheating etc. In these cases, the grading is over and the final grade is 0 (or -42 in case of cheating). However, with the exception of cheating, you are encouraged to continue to discuss your work (even if you have not finished it) in order to identify any issues that may have caused this failure and avoid repeating the same mistake in the future.

Attachments

subject.pdf (https://cdn.intra.42.fr/pdf/pdf/11460/en.subject.pdf)

Preliminaries

If cheating is suspected, the evaluation stops here. Use the "Cheat" flag of the scale. Please do this calmly, wisely and with caution.

Simple preliminaries

- Defense can only happen if the student being evaluated is present. This way everybody progresses: byexchanging ideas and sharing knowledge with each other.
- Nothing submitted (or wrong file or directory): 0, the evaluation is over.
- As soon as you come accross an exercise that isn't fully functional, the evaluation stops. The following exerciseswon't be evaluated.
- In order to grade your peer, you have to clone their git repository on their station.

Yes   No

General instructions

General instructions

- Check if all the necessary configuration files of your application are in the folder srcs.
- Check if the setup.sh file is at the root of the repository.
- Execute "setup.sh"

Yes   No

Mandatory part

This project consist of clusturing an application and deploying it with Kubernetes. Check if all the next points are respected. At the first error, you stop the correction and put a zero.

Services environment

- Verify if the application is deployed with all containers only with "setup.sh" script.
- Check using the dashboard if the evaluated has all the different containers.
They are nginx, ftps, wordpress, mysql, grafana and influxDB.
These containers must have the same name. If this is not the case or if a container is missing, the correction stops.
- Check if all containers are build with Alpine Linux. If not, the correction stops here.
- Also, check that each container has its Dockerfile, which was built using setup.sh.
The evaluated have to build himself the images that he will use. It is forbidden to take already build images or use services like DockerHub.

If one is missing, or if one does not start with "FROM: alpine" or any other local image, the correction stops here.

Yes   No

Expose it !

- Check that redirections to your services are done with a Load Balancer.
To do that use "kubectl get services":
ftps, grafana, nginx & wordpress must be "LoadBalancer" type and EXTERNAL-IP field cannot be 127.0.0.1 or end with .0 or .255. influxdb & mysql must be "ClusterIP" type.
Other entry can appear, but none must be "NodePort" type.
Every EXTERNAL-IP must be unique.
Also, check that "setup.sh" file don't use any "kubectl port-forward" command.

Yes   No

Nginx

- Try to access http (port 80) and verify that you are automatically redirected to https (port 443).
Then, execute the command "curl -I http://IP" and check if return code is a
"301 Moved Permanently" and the "Location" line is the same IP but in
https.
Page displayed does not matter, as long it's not a web error (404, 503 etc).
SSL certificate are not necessarily recognized, certificate error on https is normal.
If one point listed previously differ, the correction stops.

Yes   No

FTP(s) server

- Check if the FTPS server is listening on port 21. Make sure it is a FTPS server (s for secure) and not a basic FTP server.

If the FTPS server does not work as it should, the correction stops
here. - Check if you can upload and download files without any
errors.

Yes   No

Hello Word(Press), MySQL and PhpMyAdmin

- Check if the WordPress website works under port 5050 on his IP. Connect to it using the administrator
  account,check if several users is present, after leave a comment under post. Make sure your comment is
  added to the database entries.
For that, you can access PhpMyAdmin interface, must be under port 5000 on his IP and check the database
("wp_comments" table).
The database must persist in case failure.
To test this, you can remove the MySQL container with the Kubernetes dashboard.
It must recreate itself automatically, after check if your comment is still in the
database. If something does not work as expected, the correction stops here.

Yes   No

Grafana and InfluxDB

- Check if grafana is running under port 3000 on his IP. Connect to the interface.
You have to check if grafana is monitoring all containers. To do that search for the dashboard
list, click on the dashboards one by one.
Like MySQL database, after deleting the InfluxDB container, check that the data prior to deletion is still
present in Grafana.
If something does not work as expected, the correction stops here.

Yes   No

Hello SSH

- Check if you have SSH access to the Nginx server with the same IP as http & https.If not, the correction
  stops here.

Yes   No

Persistence!

- Check that in the event of a crash/shutdown of one of the services, the associated container
  relaunchescorrectly.
To do this, use "kubectl exec deploy/SERVICE -- pkill APP" (replacing SERVICE and APP of course).
Stop web containers (usually nginx or php-fpm APP) and stop grafana APP for this same container.
Stop the ftps server (usually vsftpd APP).
Stop mysqld and influxd APP for corresponding databases (recheck if the data persists).
Stop the ssh server on the Nginx container (sshd APP).
If a container hasn't relaunched after several minutes, if the MySQL or InfluxDB data is
lost or if a service has restarted badly (in particular ftps), the correction stops here.

Ratings

Don't forget to check the flag corresponding to the defense

☑ Ok   ☑ Outstanding project

☑ Empty work   ☑ No author file   W Invalid compilation   ☑ Norme   ☑ Cheat   ⌐ Crash

☑ Leaks   ▌ Forbidden function

Conclusion

Leave a comment on this evaluation

Finish evaluation