

T7 - MSc Pool

T-POO-700

devOps

Project



1.1





devOps

binary name: theme03.zip **delivery method**: Moodle

language: YAML, configuration files



• The totality of your source files, except all useless files (binary, temp files, obj files,...), must be included in your delivery.

Now is the time to implement continuous integration and automated deployment of your application. You will gain in speed, safety and reliability.

You must respect three points:

- your application must work in **Docker** containers.
 It is therefore necessary to set up a microservices architecture. So you need several containers :
 - one for the front
 - one for the back
 - one for the bdd.



Think about the persistence of the data for the database.

2. your application must be hosted on a server available on the internet.



You have the choice of the host; head toward free solutions. You can also host your server yourself as long as it is available online.

3. When you modify your repository, pipelines must be run to compile and test your project, build your Docker image(s), and deploy this new version automatically to your server.



Several solutions are available like Travis CI or Azure Pipelines.

These requirements are relatively basic but to go further, you can look at **Kubernetes** or monitoring tools like **Kibana** with Elasticsearch or **Grafana** with InfluxDB.

In addition, for large projects with many collaborators over the long term, it is also worthwhile to look at **SonarQube**.

