Tools and organization

IMT Atlantique
Bretagne - Pays de la Loire
École Mines-Télécom

Members of the group :
Clément LE GRUIEC
Nathan OLBORSKI
Hugo HOUILLON
Salma CHAHMI

Tutors :
Julien SAINT-MARTIN

Xavier LAGRANGE

1) The team

a) Members

The team is made up of members with different experiences. It should also be noted that the FIP/FISE split is balanced.

Name	Formation
Salma CHAHMI	FISE
Clément LE GRUIEC	FIP
Nathan OLBORSKI	FISE
Hugo HOUILLON	FIP

b) Skills

We all have a technical background that we can use in the project. Our skills are varied and complementary. This allows us to achieve a transversal increase in competence for all members.

Name	Main skills (related to the project)
Salma CHAHMI	HTML, Documentations
Clément LE GRUIEC	Network, python, docker
Nathan OLBORSKI	Flask, python
Hugo HOUILLON	HTML, SQL

2)The tool

a) Communication

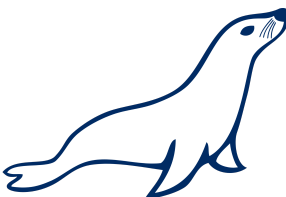| Application	Usage
Discord	We use discord for our remote meetings. It is also an ideal platform for communicating effectively between the different people in the group via text channels.

b) Documentation Editing

Application	Usage
Google Drive	We use Google Drive for its various collaborative tools like google doc or google sheet. We can all work on documents at the same time. It is also a secondary storage location (primary is gitlab).
visio	We use Visio in order to realize our different diagrams. We appreciate the diagrams because it allows a better understanding of the project.

c) Code versionning

Application	Usage
 Gitlab	We use gitlab to version our code and any other document related to the project. We also use the "issues" to track the different stages of the project. We are developing in branch-per-issue mode

d) Technical choice

Application	Usage
 MariaDB	MariaDB is our relational database engine. It's a fork of mysql. MariaDB is an improved (more efficient) version of MySql. We use a database to centralise the data collected by our sniffer agent and then be able to perform a posteriori processing and visualisation.
 Python	We chose to use python because it is a very efficient language in data processing. It's a language which is relatively simple and which is known by the members of the group. We use it to sniff traffic (with *pyshark*) and also for web visualization (with *flask*).

3) Organisation

We have chosen to do the background work outside the time slots indicated on the agenda. We used the planned slots to have a weekly meeting and to reflect about the technical and organizational aspects of our project. Our work is carried out in the form of iterations. We are in a kind of agile form where we are our own client.

Here is a simplified diagram of our organization :

| Autonomous development | → | Presentation of his work | → | Discussion about the work |

Feature under development

| Tests |

| Updating the code in gitlab dedicated branch | Feature completed | Merge in the main branch of the project | → | determining the next work |