In order to validate my technical degree in Network and Telecommunications, we had to do a 10-week internship in order to implement what we learned during these last 2 years at the University Institutes of Technology of Créteil-Vitry. So I started by doing my research to find an internship in the field of Networks because it is in this field that I want to continue my studies after these two years. But unfortunately, finding an internship was very complicated because because of the corona health crisis, lot of companies are reticent to hire somebody or they can’t financially. I first tried to apply online, but it did not work so I even made the trip directly to the companies in order to apply or ask if they are recruiting interns but I had not had any feedback from these companies.

And finally, despite my research I could not find a company to host me for ten weeks. So I contacted Mr. Mohamed to ask him if it is possible to have substitute subjects in order to obtain my diploma.

And then Mr. Mohamed contacted us two weeks later in order to offer us several alternative subjects and that we had to choose the one that corresponded with us. So I chose to create BOT Discord and my tutor is Mr. Augustin. I decide to contact my tutor to find out what their expectations and instructions are. But my tutor informed me that this topic is no longer up to date and he offered me another topic, which is to write a practical work for next year's students on the topic of security.

The theme he proposed to me greatly appreciated, it is on the subject of safety because it is the field in which I will work later, after these two years because I will integrate the engineering school which is ESIEE PARIS for the formation of Networks and Security. So this project can allow me to discover the security side of IT that we weren't able to see during these last two years.

My tutor sends me the scenario he imagined and that we must set up. He divided the project into two parts and that we had to work in pairs each on his own. So the first part is for my comrade Diaby Mohamed and I had to do the second part of this project.

I have started to do my research even before starting my project because it is a theme that I do not master so I wanted to know and understand how the computer world works on the security side.

The Scenario that the tutor has set up is to set up a company with a web server and a computer where there is a workstation. The company is not well secured and therefore its confidential documents are hacked because of a flaw on the PHP page.

So we have several steps to follow and I also have to play the role of a hacker, because I have to hack documents in a different way for each step and show how I manage to recover the passwords of the PCs they are in. The corporate network.

In the first step the hacker has access to the company's web server because of a flaw so that is Mohamed Diaby's part. The hacked because of this flaw he finds the existence of another PC and its IP address. And in the next step I have to find the name of the user who is logged in and his password. And therefore me who plays the role of network administrator and the pirate. As a network administrator I create a user and I assign him a weak password which will allow the hacker to find the user his password thanks to a software.

And then the pirate recovers the files that I created before, they are confidential files of the company and with these documents the pirate can do blackmail. After having set up the requested scenario, I must write a clue report which will allow next year's student to do the practical work more easily.

The difficulties that I could meet during the realization of this project, it is that I had forgotten certain notion in the network and therefore I wasted a lot more time than expected because I had to review these notions and review my lessons. There are times I didn't have the motivation to work and move forward on the project because I was free to do this, subject and I could do it from home while if it was an internship I would have been surrounded by professionally and in business I would have had more motivation.

I also had difficulties with the software and the VMs that I was able to use because sometimes these software did not match or I had to restart so that I recommend certain part. I also had a problem with the internet because when I was working in the network was not always in good condition and I had a somewhat old PC which meant that it was running slowly.

To conclude this project allowed me to discover new thing on security software, it is something that can be useful in the training that I will follow and also in my future job. It also allowed me to review certain notions that I hadn't forgotten. This allowed me to feel more serene at the approach of the project I had to carry out. I am very happy to have contributed in a way to the future of the service and I hope to be able to carry out this kind of project more often.