Security Team

Frederico Miguel Reis Sabino

Learnings Report

Abstract—Managing and interacting with big teams has its benefits and difficulties. It requires effort from each team member so the main goals are reached. We can also learn from past mistakes and share solutions from each other. Having a good organization and interaction vastly improves both ours and the team results. In the end, the main goal is to learn key security problems and how to solve them.

Index Terms—communication, team, difficulties, security, time management.

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1 INTRODUCTION

DEALING with a big team has its difficulties like scheduling meetings and competitions. It must be done in a way that the majority of its members can be present. It also requires a better organization from each member and a slice from his time. But having a bigger team also brings a better dynamic to the group and the competition. We teach and help each other so the learning process is easier and we share ideas for solving a specific problem (which is way easier than solving it by ourselves).

In this report I will explain the different difficulties that we had but also the main benefits that we can have by working as a team.

2 THE DIFFICULTIES

The main difficulty that I have encountered while doing this activity was the tight schedule that I had this semester. This semester I was enrolled in 6 courses all of them with projects to do. I also work at Direcção de Serviços de Informática (DSI) in Instituto Superior Técnico (IST) so I had even a tighter schedule to work in other activities. While in the previous semester I participated in most activities of the Security Team, this semester was much harder to do so,

- *Frederico Miguel Reis Sabino, nr. 73239,*
  E-mail: frederico.sabino@tecnico.ulisboa.pt, Instituto Superior Técnico, Universidade de Lisboa.

but I could participate in 2 major challenges that happened over 2 different weekends.

While it is possible to participate remotely in the challenges it is totally different when we are interacting with the team locally.

2.1 Time Management

One skill that I think I most improved on was time management. This semester I was dealing with different teams for the courses' projects, DSI and Security Team. Each team had different schedules and also different projects so managing the time time frame in order not to have conflicts with other projects was itself a very hard challenge.

Keeping all the projects running at a good pace required not only managing our own time but also investing in all the other members of the team. This investment is done by, for instance, keeping in mind their schedule and projects so we could work when all the team members are available.

Ultimately, having good communication skills with all the team members is very important because it also improves the way we manage our time.

2.2 Communication

Since scheduling with different team members is a great challenge, the need for good communication skills can ease greatly the difficulties associated with each project. What I consider that is one the most important factors

(1.0) Excellent	LEARNINGS						DOCUMENT						
(0.8) Very Good	Context×2	Skills×1	Reflect×4	Summ×.5	Concl×.5	SCORE	Struct ×.25	Ortog×.25	Exec×4	Form ×.25	Titles ×.5	File ×.5	SCORE
(0.6) Good	0.8	0.8	0.8	0.6	0.6		1.0	0.8	0.8	1.0	1.0	1.0	
(0.4) Fair													
(0.2) Weak													

in communication is clarification. After some possible discussion on a project every team member must be "on the same page" and know exactly what is there to do and the direction of the project. Nothing slows down more a team than poor communication: its members disperse, tasks are not accomplished and the overall project fails.

A division of the work to be done between the members helped a lot in all of these projects. In the case of the Security Team we had smaller teams that were responsible for a given task category (web, cypher, reverse, etc...). *redundant!*

Also, applying a good division of labor and maintaining an active communication within the team provides a great boost in achieving our goals and we should concern more with those than the technical skills that current members have.

3   THE TEAM

The initial members of the team were mainly from the computer science course. Since we have many students that are currently in their masters degree, there were also *erasmus* students so having team members with a different education background was also interesting.

Figure 1: The team in the Hack.lu competition

BT signs must be referenced in Text

As the team entered in more competitions, more and more members from other courses also joined the team. Since the challenges and tasks had a background theme associated with

it, many times we encountered references to fields not from Computer Science (like probabilistic mathematical models), and we had members from others courses that already knew about that specific concept and helped a lot in solving those challenges. So it was great learning concepts not entirely related to security along the way.

Figure 2: The team in the Hack.lu competition

All the members were really receptive and we exchanged information easily. We also have a Facebook group where we not only talked about the latest achievements but also about current security issues and topics on the news.

It was clearly that every member present was eager to learn *and active* in solving the challenges. And many of us contributed to our local repository of knowledge (in Dropbox).

4   ETHICS

Security and privacy is a big issue and a buzz-topic nowadays. Upon entering the team each member must sign a document that states that all the activities done and learned from the Security Team are so in a way that they *don't* impose any legal threat. The ultimate goal of the team is not break/"hack" any service that we want but create more secure solutions that have in mind the privacy of the end user.

avoid contractions!

Many confidential and private information is not properly secured as the user believes it is. Our job is to learn how we can improve already existing services as well as new ones and by

joining these competitions, we learn tools and exploits that are possible and may be currently in use!

5   CONCLUSION

At the end of the semester I can say that I have learned a lot with this team since October 2014 and met new people that were also very interested in security. The community around the challenges that we took was amazing (I also didn't realize that it was such a big and helpful community).

I can say that I have improved my time management and communication skills this semester while on the team and I hope that its main objectives, goals and ethics continue as great as they are now.

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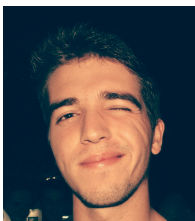
Me My name is Frederico Sabino and I am a master student at IST in Information Systems and Computer Engineering. I am also currently working at DSI and I am a member of STT.