

Professional Internship at Codacy

Rafael Cortês

(Learning report)

Abstract—This report is a collection of my learning experiences during an internship at Codacy. It's both a description and a reflection on a new reality of, almost daily learnings, that allowed me to develop new competences, that would be otherwise impossible to acquire in academia. This internship has provided me a professional context that allowed me to see first hand what it takes to be a Software Engineer and even provided the experience of working abroad. Though it provided me a lot of opportunities, it also required from me a lot of effort, dedication and responsibility. In a nutshell, this internship provided me a way to see a what my life can be within a year, after graduation.

Index Terms—internship, startup, entrepreneurship, software engineering, remoting, responsibility.

1 INTRODUCTION

IN this report I describe the learnings acquired in the Portfólio Pessoal IV activity during which I integrated the Codacy Team, in the ambit of a professional internship. Most of the learnings are directly related to the activities detailed in the Activity Report, the remaining are a result from a reflection on newly discovered aspects of professional life.

This way, I start by detailing in Section 2 which were the motivations to take this internship, exposing the original objectives. Next, in Sections 3 and 4, I'll explain what I learned in Codacy, concerning work paradigms and organisational culture. In Section 5, I'll expose a reflection on team work and responsibility. Finally, in Section 6, I'll present the final conclusions. I've chosen to focus on these topics as they're the ones I think may be most valuable soft-skills I acquired, though there could be many more.

2 MOTIVATION

I've always been a knowledge driven person, and lately I felt eager to apply what I learnt at

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Instituto Superior Técnico (IST) to real world problems. Though I had taken summer internships before, I had never had a real work experience, similar to a proper job. I'm nearing the end of my studies so I wanted to see to what it's like to be a Software Engineer, to start creating a network of contacts for opportunities when I complete my degree and, if possible, gather information on what to do for my master thesis.

Also, in previous years, I felt that I had too much free time in the period between projects deliveries and exams, and I hate having free time and not know what to do with myself. Usually, I used that time to perfect and fine-tune the projects, to do things the weren't graded like creating automated test batteries, improving the projects' overhaul architecture or uniforming the coding style.

Then, I found Codacy. Codacy is a portuguese startup that provides code quality monitoring as a service. The first person I met was the CEO, Jaime Jorge, a former IST graduate that turned his master thesis project in a startup. He was looking for more engineers for his team and proposed me, and my colleague Rodrigo, a paid internship. We both didn't want to quit college, but we definitely wanted to seize the opportunity, so we proposed that the internship was part-time, allowing us to

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continue attending classes.

3 REMOTING AND WORKING ABROAD

Even though Codacy's office is in downtown Lisbon, not all members work there. At a certain point we were working with another developer from London and a designer from Aveiro. Conversely, I've traveled a week to London for work.

3.1 Remoting

At first I thought that working with the absent team members would be just as if they were in the office. We were already using an online tool to list and assign task to each member of the team. Still, it was hard, because eventually we fixed things as we found them, without reporting them in the task manager, because it would take longer to report the issue than actually fixing it. It was starting to get hard to know what was going on and I no longer could trust that other people would keep the task manager up to date. To avoid doing duplicate, before starting a task I had to skim the latest code checkins to see if the task that I was about to start had already been done. Despite having daily video calls, I found it hard to explain ideas or complex algorithm through them. It's much easier to just sit by someones' side and scribble something on a piece of paper when explaining something that involves multiple concepts. Also, pair programming when implementing a particular difficult feature or debugging an issue, becomes much harder.

Working with the designer required an even greater effort. Codacy's user interface and user experience depend on some particular technological and programming concepts that are very different from standard web applications, which become nearly impossible to explain to a designer with no programming background, over a video call. After a while I started to think that the team members working remotely just weren't as dedicated and as hard working as everyone else. I couldn't see them working, I couldn't know what they were doing and I couldn't know if they were doing an inadequate work or if I just couldn't communicate what I wanted from them.

Fortunately, I got the chance to experience the converse situation. Like described in the Activity Report, we've traveled to London for work. During our stay there, I realised how hard it was to keep up with everyone else's work. I usually took me about an hour every morning just to catch up with the previous day work. Another thing I realised that was affecting me and making me work slower was the lack of support: I couldn't just turn my chair and clear a doubt with someone. I had to ping them on instant messaging and schedule a video call. It not only took me time but it could also annoy my team mates. That way, when working remotely, one starts to work more autonomously thus being more prone to missing the intended requirements. Though I pretty much loved London, I was glad to be back working with the rest of the team.

3.2 Working abroad

When the opportunity to work abroad posed itself, I had a hard time explaining my parents why a simple internship could require me to go to England and skip an entire week of classes. They weren't happy, but eventually settled. Family aside, I as well was surprised that Codacy trusted and valued me enough to send me there.

The most unexpected thing about the trip to London was the amount of portuguese I found working there, most of them former IST students, were driven there not by unemployment but because of better opportunities. Some of them working on their own startups, because they we're only able to find investment in England. I realised that even though IT is a sector where there're plenty opportunities, that I can consider emigration as a viable option for my professional future.

4 RECRUITING

Late in the activity, the team decided to hire another engineer and everyone pitched in to help prepare the interviews. I'd recently been on the other side of the table, being interviewed. At the time, the interview seemed very casual, very brief and not too technical at all. Later,

whilst preparing the interviews, I found out that the least important thing to evaluate in a face to face meeting are the technical skills. Though technical skills are tested, the main purpose of these meetings is to get to know the candidate and figure out if he's going to be a good fit in the team. I was surprised that it was more important to be accepted by the team rather than exhibiting exceptional technical skills. I never would have thought that at the time of my interview. But it makes sense: after all a good developer can, with time, grow into a great developer; a great but contentious developer is unlikely to change its personality and learn to be a team player.

Obviously I can't infer that this is what happens in other companies, but it made realised that a resume isn't everything and that in an interview everything might be evaluated, particularly the thing we expect the least.

5 RESPONSIBILITY

One learning I take from this internship might not be as obvious or technical as all the others, but is possibly the most important: the ability to acquire new knowledge is more important than any previously acquired ability. By being given the liberty to work on any task, from the ones available, comes the responsibility of doing them, and doing the properly. At first it was difficult to me to accept this reality. I got assigned to my first task with faith that I wouldn't screw it up. Being this my first time working other than for IST project's, I can said that I was fairly nervous. With a couple of mistakes every now and then, I've managed to get aquatinted to the tools and standards of the team. In the first few weeks I had some fear of expressing to my opinion and doubts about the correctness of the code I produced, however, with time and increased practice, I realised the freedom I was given was an incentive for learning and that, it was okay to make mistakes. I came to appreciate the respect and confidence that was laid on me. Ever since day one I was treated like a rightful member of the team. I fell that my ideas or opinions we're always taken seriously, I got asked for help or to give opinions all the time.

6 CONCLUSION

With this activity I could discover entrepreneurship, demystify much of the vocabulary of this world and enjoy daily the sheer determination necessary to be an entrepreneur. When working in a startup, we are reminded every day of the importance of addressing new challenges and the importance of learning from them.

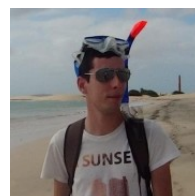
As a programmer, I have grown immensely. Given the many new concepts and tools that I used, that I would have never known or used if not for this opportunity. Simultaneously, also took many other roles beyond the scope of software engineering, such as customer management, planning or preparation of presentations which are skills that I believe strengthen my professional resume.

Finally, I have learned a lot for my future. This experience allowed me to make a more conscious choice when making a decision on the theme of my master's thesis. It was an experience that allowed me to apply academic knowledge acquired over the three years of the course, develop professional resume, and also adjust behaviours and personal goals.

ACKNOWLEDGMENTS

I'd like to thank the CEO of Codacy, Jaime Jorge, for the opportunity, as well as every other team member for receiving me so well and making me feel part of it.

In this type of document (technical), the conclusion should start with a summary of the subject addressed and then should highlight the results.



Rafael Cortês My name is Rafael Cortês. I live in Lisboa, Portugal. I'm in the first year of my Degree (MSc) in Information Systems and Computer Engineering at Instituto Superior Técnico.

APPENDIX

STATEMENT OF EXECUTION

COMPROVATIVO

Venho por este meio comprovar que o aluno 69801, Rafael Vassalo Cortês realizou um estágio profissional nas funções de Software Engineer na empresa Codacy entre 13-Set-2013 e 10-Fev-2014, tendo em média trabalhado 10 horas por semana durante a duração do estágio. No âmbito do estágio foram desenvolvidas várias actividades relacionadas com o desenvolvimento de software tais como planeamento, programação e manutenção, entre outras.

SIGN HERE



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