

Working in a startup called Dreemo

André Filipe Pereira Rodrigues

Activities Report

Abstract—This document describes the work I have done in a part-time job in a startup called Dreemo. Dreemo is a technological startup whose vision is to change the way people share their experiences.

At Dreemo, I was responsible for the development and management of the server side of the social network. Some of the tasks I had to perform were: implement new functionality, manage the servers where the application and the website were deployed, and others.

During my work at Dreemo, I also helped to create awareness of the company, and to make decisions that affected the product.

The objectives were met and the team was proud of my work. During the activity, Dreemo has participated in a few international competitions.

Index Terms—Dreemo, Technology, Social Network, Startup, Work, Developer, System Administrator

1 INTRODUCTION

THIS report documents the work I have performed in a startup called Dreemo. The activity started in July 2014 and ended in December 2014.

Dreemo is a startup whose vision is to change the way people share their experiences. In order to achieve this, the company is creating a social network designed from the ground up to allow people to share their experiences as easy as possible. Dreemo is located in Lisbon and was created in early 2014.

At Dreemo, I was responsible for managing the servers, for developing the server application, responsible for handling the requests from other applications (like smartphone applications), and I also had the opportunity to participate in other important matters, such as generation of new ideas; product development; customer acquisition; which conferences to attend, and others.

Working in a startup is a great experience. Have an idea and develop it, observing it become a product and to be used by other people is an amazing feeling. In my opinion, there are two advantages in working in a startup compared to other types of companies: the first one is that startups tend to be smaller companies, which leads to a more united team, and the second one is that any member in the team feels that he directly contributes to the product.

In this activity, there were several tools and services I had to learn how to use. Some of them were used to manage the software development (Trello¹, Slack²), others were required by the implementation of the server application (Play Framework³, Ebean⁴), and finally, others were required to manage the servers (Digital Ocean⁵, GoDaddy⁶).

While I was working at Dreemo, the team

- André Filipe Pereira Rodrigues, nr. 69879,
E-mail: andre.pereira.rodrigues@tecnico.ulisboa.pt,
Instituto Superior Técnico, Universidade de Lisboa.

Manuscript received January 3, 2015.

1. <https://trello.com/>
2. <https://slack.com/>
3. <https://www.playframework.com/>
4. <http://www.avaje.org/>
5. <https://www.digitalocean.com/>
6. <https://www.godaddy.com/>

Arraid using footnotes!
This should be in References

(1.0) Excelent (0.8) Very Good (0.6) Good (0.4) Fair (0.2) Weak	ACTIVITY					DOCUMENT						
	Objectives x2	Options x1	Execution x4	S+C x1	SCORE	Structure x0.25	Ortogr. x0.25	Gramm. x0.25	Format x0.25	Title x0.5	Filename x0.5	SCORE
	2	1	4	0.8	7.8	0.25	0.25	0.25	0.2	0.5	0.5	1.95

had the opportunity to participate in a few international competitions, such as: Intel Business Challenge Europe 2014, Web Summit, and The Big App Fund. Participating in such well known competitions added pressure to the team and delineated deadlines that had to be satisfied, otherwise the company would not have a product to show.

The rest of the report is organized as follows. In section 2 are presented the objectives of the activity. In section 3 are described the different type of tasks I had to perform. In section 4 are detailed which competitions the company participated while I was working there. Finally, section 5 concludes the report.

2 OBJECTIVES

In this section are explained the objectives of the activity.

When I applied to work at Dreemo, I applied to the Backend Developer position. The tasks to be performed by a developer with this role were:

- Develop new features in the server application.
- Manage the servers, such as: choose host providers, install software, configure software.
- Deploy the server application, which responds to the requests sent my client applications.

I would also have the opportunity to contribute in different matters, such as trying to acquire new customers, make comments about the product, and others.

3 TECHNICAL WORK

In this section are explained the different type of tasks I had to perform during the activity. The time the team spent doing each task is described in the correspondent section.

Some of the tasks I had to perform while working at Dreemo were: specification of the requirements, design of the architecture and the Application Programming Interface

(API), implementation of the solution based on the designs, and management of the system (servers, databases, and website). Some of these tasks happened at the same time, for example, the requirements changed while the solution was still being implemented. This was predicted and to counter it, the team used SCRUM, an agile software development methodology⁷, which consists of performing several iterations on the product, until it is considered to be ready.

3.1 Specification of the requirements

Duration: 2 weeks

The specification of the requirements was the first task I had to perform. This task was performed by all developers together, where we discussed what were the functional and non-functional requirements of the social network. Not every requirement was identified during the 2 week duration, but most of them were.

In this task, I did not have many difficulties contributing because I had already performed a similar task in a project in the BSc. degree.

3.2 Design of the Architecture Duration: 1 month

What Task?
 This task can be divided in two smaller tasks: the design of the architecture of the server application, and the design of the API, which would be used by all developers (both server-side and client-side).

In the first task, only the backend developers had to design the architecture for the server application that satisfied the specified requirements.

In the second task, all developers discussed and created the API that allowed client applications to communicate with the server application.

⁷. http://en.wikipedia.org/wiki/Agile_software_development

*Arrrid using footnotes!
 This should be in References*

3.3 Implementation of the solution Duration: 2 months

Implementing the solution consisted of deciding which tools were going to be used to implement the designed architecture, and then implementing it. The communication between the team members was very active. Communication was required to assess what was features were still missing, what problems had occurred, and what features should be implemented first.

During the development of the product, there as always a concern about the product quality. Implementing software that handles private user data needs to be tested and to be of high quality, otherwise the risk of leaking sensitive information is higher, and it is more difficult to find bugs in the code. In this case, the software also had to be extensible in order to allow new features to be implemented easily.

3.4 Management of the system

Managing the system (applications, databases, and servers) is a task that requires responsibility. A system administrator must be very careful when executing any operation that could affect the data. For example, when performing changes in the database, the previous data could not be erased, it had to be upgraded. At Dreemo, there were always backups of the database in different servers, and every change was tested in a development environment before it went to production.

It was the first time I had to contact a server provider (Infrastructure as a Service (IaaS)) to rent servers, and then deploy the applications there. This required research of finding existing server providers, and choosing the most adequate one. Some of the characteristics I looked for were: good user support, good hardware for low price. Digital Ocean was the server provider we ended up choosing.

4 COMPETITIONS

As I said before, when I was working at Dreemo, I had the opportunity to participate

with the other members in several international competitions. By this time, Dreemo had already won a national competition called *VII National Competition of Start Up Programme*⁸.

In this section are described the competitions Dreemo has participated, and a description of the team's performance in them.

The first competition was *Intel Business Challenge Europe 2014*, where Dreemo managed to get in the top 24⁹. After positioning in top 24, some team members had the opportunity to pitch to several investors in Vilnius, Lithuania. Unfortunately, Dreemo did not get in the top 5.

This was a major deadline in the development of the product, which required that the team had implemented most of the features.

The second competition we have participated was *The Big App Fund*, powered by Facebook¹⁰. Here, Dreemo managed to get in the top 50 of a total of 425 entries. As in the previous competition, only some team members had the opportunity to pitch in the Facebook Headquarters (HQ) in London, United Kingdom (UK). In figure 1 is shown the invitation to pitch in the event.

The last event was Web Summit¹¹. In this event, Dreemo had the opportunity to exhibit the product to thousands of potential users. The company's display can be seen in figure 2.

5 CONCLUSION

This was the first time I have worked in a startup. I have learned many things while performing this activity, and I recommend anyone who may be interested in starting a company in the future. In my opinion, in this job led me to experience new situations, and taught me how to approach them. It was a valuable experience

8. <http://japortugal.org/not%C3%ADcias/dreemo-vence-a-vii-competi%C3%A7%C3%A3o-nacional-do-start-up-programme-1903/>

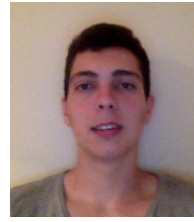
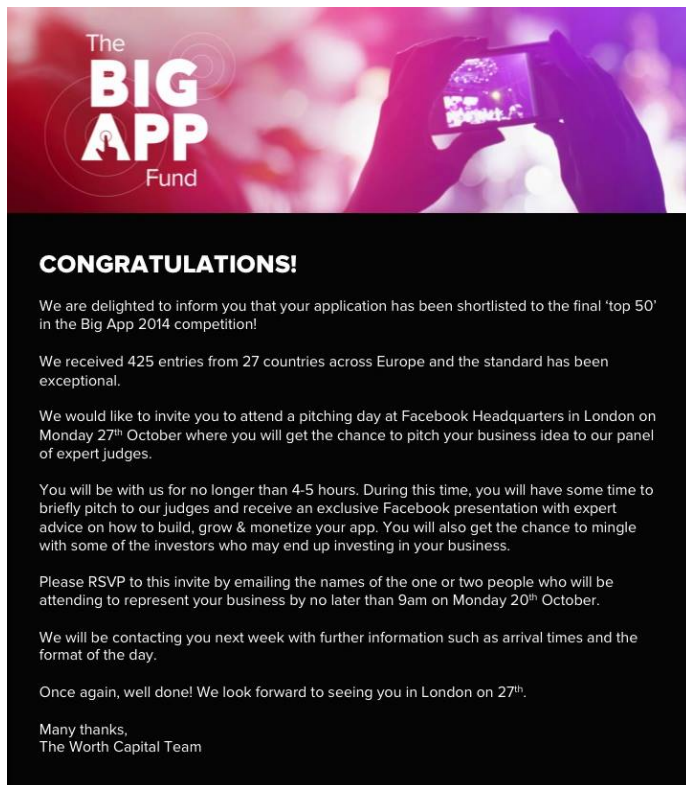
9. <http://www.intelchallenge.eu/news/More/82>

10. <https://www.facebook.com/>

11. <http://websummit.net/>

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

Arrival using footnotes! This should be in References



André Rodrigues is 22 years old and is in the last year (5th) of the Master's Degree in Computer Engineering at Instituto Superior Técnico (IST). He enjoys reading and to be up-to-date with the latest technologies and other related topics in Computer Science. Lately, he has been interested in the business world, specially in the startup world. After finishing his degree, he wants

to develop some of his ideas and maybe, some of them will lead to the creation of a startup.

Figure 1. Invitation for the pitching day in *The Big App Fund*.

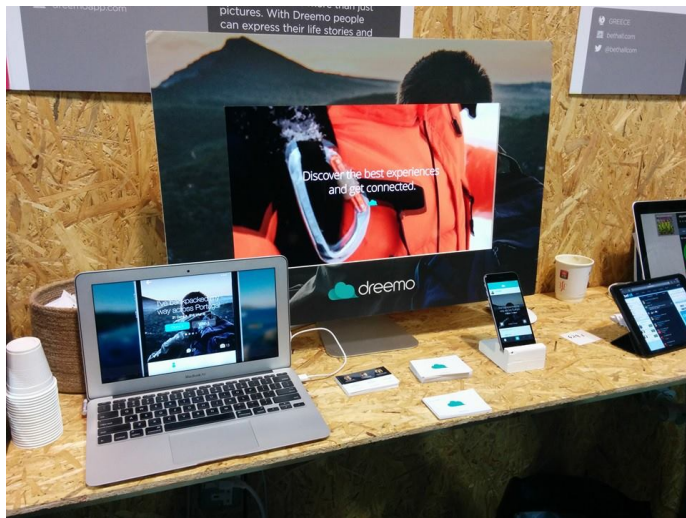


Figure 2. The display where people could get to know more about Dreemo and experiment the mobile application.

that has improved me as a person and as an employee.

APPENDIX

STATEMENTS OF EXECUTION

CERTIFICADO

Dezembro 2014



Eu, Francisco Seixas do Val Ferreira, certifico que o André Filipe Pereira Rodrigues, portador do Bilhete de Identidade nº 14182103, esteve a trabalhar na Dreemo **8 horas por semana** durante os meses de Julho de 2014 até Dezembro de 2014, com a função de Developer.

Francisco Val Ferreira (CEO),

Francisco Seixas do Val Ferreira
SIGN HERE

general@dreemoapp.com

+351 910 934 802

