IEFP Internship at Miniclip

Pedro Geraldes

Activities Report

Abstract—In this report I will describe my activities for the past 7 months, as an intern software developer, at Miniclip, and give a description of the most important events that happened during this time. Starting with the first few weeks at the job and the main adaptation problems, passing through the projects I have worked on, as well as the most important meetings and presentations, the main issues faced and how they were overcome. In the final part of the paper I will talk about my integration in the final development stage and release of a new mobile game called Dude Perfect 2, which I'm currently leading as the only developer involved.

Index Terms—Miniclip, Video Games, Mobile, Internship, Dude Perfect 2

✦

1 INTRODUCTION

ON November 11th 2014, I was accepted as an intern software developer at Miniclip[1], at the portuguese office at taguspark. Miniclip is a well known mobile and web game development company. After a long and difficult recruitment process, I was able to begin my first professional job experience, although I'm still finishing my thesis.

The recruitment process included two interviews and a group activity. In the first interview I was only asked to bring the curriculum (CV) and to talk about myself a little bit. Next, I was summoned to integrate a group activity along with other 14 candidates, most of them from Instituto Superior Técnico (IST). The meeting was in a room at Taguspark Núcleo Central. In the first half hour they divided the 15 candidates into groups of 3 and asked for us to create the biggest tower we could make with only 10 white paper sheets, some adhesive tape and a scissor. After that, in the final half hour, we took an individual written test that

consisted of some logic/math questions and another programming specific ones. Both those activities went great. Only several weeks after I was contacted by Miniclip to attend to a final interview. In this interview I talked to one of the lead developers of the company and I had to speak in English the whole time. After that, I received a phone call to confirm my acceptance at the company.

2 MINICLIP BACKGROUND SUMMARY

Miniclip started in 2001 as a online gaming website consisting mainly of flash based games to play directly in the browser. The company was one of the first to invest in this area, in a time where the internet was growing exponentially. The company headquarters is located in Switzerland, and they stayed focused on web based development until late 2008, when the mobile market started to became a serious deal. From that point onward, the company had to change their priorities and start creating games for mobile. This is were the Minicip PT offices come to the story. In 2010, they opened offices in Portugal with the goal of focusing in developing new mobile games for iOS and Android. Since then, their main titles for mobile have been created in Portugal, which is currently their biggest office. Within the most

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

important Miniclip mobile games, I have to highlight 8 ball pool[2], Soccer Stars[3],Plague[4] and Bike Rivals[5].

3 TEAM INTEGRATION

On my first day all interns were introduced to the company. I was conceded with a desk at the development team area, with a computer just for me. I had my first 1-on-1 (meeting with my line manager) on the first day where we talked about what I was going to do at the beginning. I was integrated in the "Android Ports and Other Games" team, but I was asked to begin with improving an important tool used to build games called Cocos Builder. I was introduced to the game development pipeline of the company by the lead developers, and to the scrum process by the scrum masters. In the first few weeks I was able to experience the whole job experience. I had to work from 9 a.m to 6 p.m. (the usual 8 hours).

4 MEETINGS

I had my first 1-on-1 on my first day like I said before. This is a meeting that I have until today, every week (most of the times on fridays). In this meeting my line manager talks to me and asks me how I am doing, how is my work, and tells me what is expected of me for the following weeks.

Also every week I have a meeting with all client developers. In this meeting we talk about all projects and we plan what we can do to improve our work. Some of the most important decisions are made during this meeting. We have an excel spreadsheet with the topics to be discussed in the meeting, proposed by all, so we can all vote on them.

For several times I had to talk about my work and explain what I do to everyone. I have created presentations, and had the opportunity

to finally feel the responsibility for my work in a completely different environment compared to college.

Apart from this meeting we also have a monthly update with all offices through skype. This is a meeting with more than 100 people, but only a few are allowed to talk, like the game producers, the CEO (Rob Small from London), or the people support team. During this meeting (which is approximately 1 hour) I can hear about all the projects that the company is working on, the financial status and profit of the different projects and several other important updates.

5 COCOS BUILDER

Cocos builder is a software tool used to create menus and levels for video games to be integrated integrated with Cocos2d[6] framework. Miniclip uses this technology to create their mobile games. My first task in the company was to improve this tool by changing its source code (since its open source) to add new features and correct bugs. At my side, in the computer next me was my "buddy", which is the name Miniclip use to define a person that is there to help new people in what they need. This person was also working on Cocos Builder before me. In the first few weeks I had to ask him a lot of questions about the code organization and all of the company way of work.

While working on this, I have learned to use the tools to track work like Jira (which is a scrum software that is used by all developers to create tasks and view the progress of sprints. In my case, in this first project, I wasn't integrated in the scrum process. This means I didn't had plannings, daily's and retrospectives. However, I used Jira to create my own tasks just to be easier to follow what I was doing. I worked in Cocos Builder tool for 1 month and a half. That allowed me to learn a lot from the people that work at Miniclip and how they do things.

Since this tool is used not only by developers but also by the art team, I had to talk with them and understand what they wanted for the tool to be easier to use. They were like one of

2. https://itunes.apple.com/us/app/8-ball-pool/id543186831

3. https://itunes.apple.com/us/app/soccer-stars/id826523703

4. https://itunes.apple.com/us/app/plague-inc./id525818839

5. https://itunes.apple.com/nz/app/bike-rivals/id794957821

6. http://cocos2d.spritebuilder.com/

the stakeholders of this project, as well as other developers. This was my first contact with a real client, although this client was inside the company.

6 SPRITE BUILDER

After working on Cocos Builder, I was asked by my manager to start the process of changing everything to the newer version of the tool. Sprite Builder was released as a Cocos Builder 2.0 that worked with the newest version of Cocos2d framework. My new goal was to transfer all the work done in Cocos Builder to Sprite Builder. During this time I had the opportunity to start a project from the scratch, since Cocos Builder changes were already in progress when I arrived. I was able to create a new repository for the company with the Sprite Builder source code, and had the autonomy to create and prioritize the tasks. Once again I had to talk with everyone that used Cocos Builder to understand what was the priority to be implemented in the new tool. I worked with Sprite Builder for two months. After the first two weeks, another intern joined me and helped me finishing the job. During the rest of the development we perform a lot of pair programming and had to divide a lot of tasks between us. Although this was not game development, it was a closer experience to working on a team, in a project outside IST.

7 DUDE PERFECT 2

After the work done in Sprite Builder, the tool was finally ready to be used by developers on February 2015. I can proudly say that most of the games created by Miniclip now use this tool, which I helped improve and reuse all the functionality developed for Cocos Builder.

I was then called by my line manager to a meeting to define my work for the rest of the internship. I had already expressed the desire to start working on games for the company, despite liking what I had done so far. I was then asked to integrate the development of a game, called Dude Perfect, which was already in development for 6 months. The game was developed by two Miniclip developers during this period and I was about to replace one of them which was called to integrate another project.

Just to create some context, Dude Perfect name comes from Dude Perfect brand, created by 5 friends in the United States. They started a Youtube channel[7] a few years ago, which is basically about trick shots with basketballs in the most different situations. They had a huge success in the last few years with more than 5 million subscribers. Because of that they were able to launch an iOS/Android game, but it was not a big hit. Because of that, they asked Miniclip to create a second game with more quality.

So, at this point I was able to begin working on a game for iOS. I was integrated in the scrum team. The team consisted of 2 client developers (including me), 1 server programmer, 4 artists and 1 producer. During this period I had planning meetings with the team and the scrum masters where we picked the most important tasks from the backlog (decided by the producer of the game) to add to the weekly sprint. We then divided the tasks between members of the team (including myself).

My work in the game included fixing bugs and improving the gameplay, adding features such as mini-games, adding sound effects created by the music producer, implementing achievements, as well as several other things.

For 4 months I had the experience of working on a real game created by a company like Miniclip. The game was submitted for soft launch on May 21th. Soft launch means the game was only released in some countries (in this case Canada and Portugal). This allowed us to understand the impact the game can have, and detect some major errors/bugs and problems with game, without taking the risk of this being visible to the whole world.

The global launch of the game was on June 4th. It is with great enthusiasm that I can say the game is now available world wide with my name on the credits, and that it reached number 1 on the "top new games" in the United States iOS App Store.

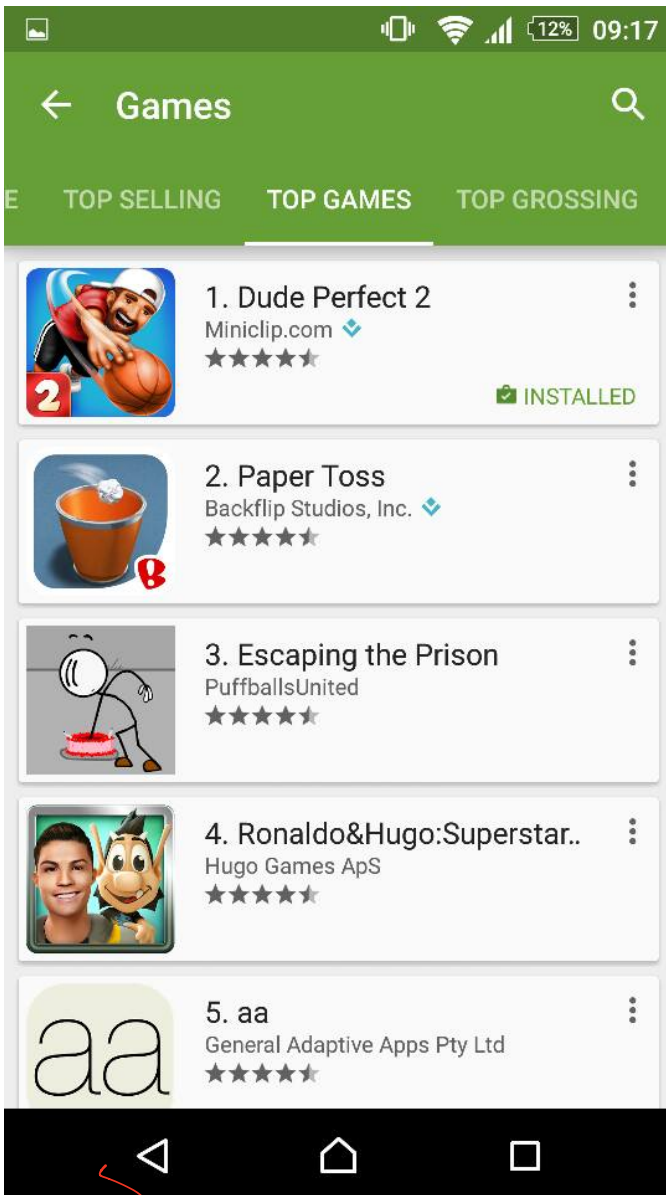After the global release, my college decided

7. https://www.youtube.com/user/corycotton

Figure 1. Android charts: Top New Games

Figures MUST be referenced in Text

to leave the company to embrace another project, and I was left as the technical owner of the game. Currently I am working alone on the multiplayer mode for the game. Every decision is done by me regarding programming, and I have total autonomy to decide how to do things. Since the global release I have already submitted an update to the iOS and Android stores all by myself.

8 CONCLUSION

It is worth mention that during my internship I was a part of several extra work activities such
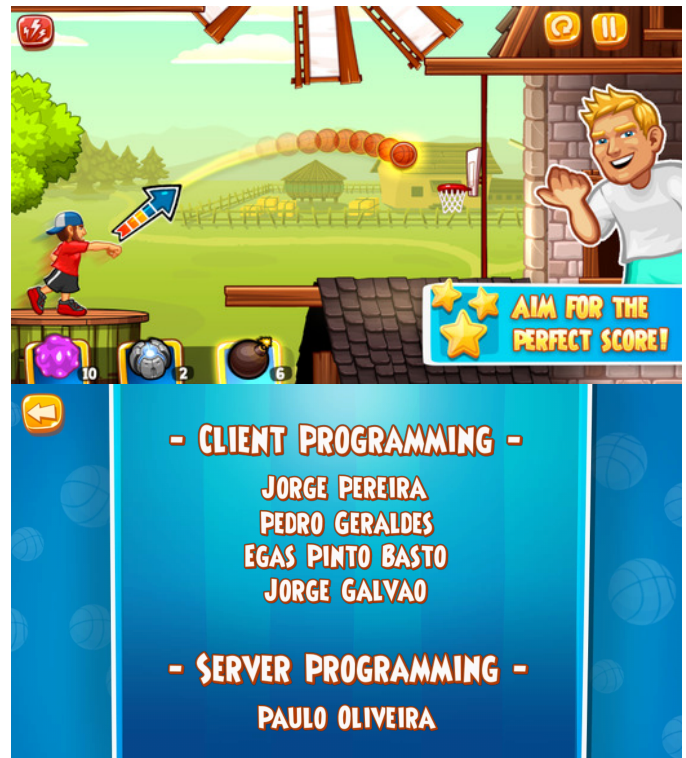

Figure 2. Gameplay and credits

as events created by Miniclip, which I decided not to extensively present in this report. As a conclusion, I have to say the work I have done for the past few months was very important for me. I have learned a lot, and as a result I have a product in the market with my name on it. Like I said before, this was my first professional experience, and with this experiences I think I ready to embrace any project in the future. I still haven't decided if I will stay at Miniclip after the end of the Internship (which will be in August), but even if I leave the company, I think it was a very important experience that will help me a lot in the future.

APPENDIX
STATEMENTS OF EXECUTION

Declaração

A **Miniclip Portugal Lda**, com sede no Tagus Park, Edifício Ciência II – Avenida Professor Doutor Aníbal Cavaco Silva, nº11 – 1ºC, 2740-120 Porto Salvo com o NIF 509371388 vem por este meio confirmar que o Sr. Pedro Filipe Cabrita Geraldes, com o NIF 261640097 se encontra a realizar um Estágio Profissional do IEFP desde 11 de Novembro de 2014.

Sem outro assunto de momento.

Porto Salvo,

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