

: Mazalov

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Support of after school activities for children and/or teenagers in need

Alexey Mazalov

Activities Report

Abstract—The report describes the "Support of after school activities for children and/or teenagers in need" activity that consisted in helping children from unhappy families know more about the Ubuntu Operating System (OS). The realization of the activity confronted with some delays but still the children learnt some new facts about the said OS as well as improved their slides design skills. The activity is to be continued in the next term.

Index Terms—Children, "Tercena", studies, informatics, Ubuntu, Libre Office Impress.

1 INTRODUCTION

THIS report describes the institutional activity I was engaged in within the Independent Studies III course.

Upon getting to know the essence of the task offered I got really excited about such a good chance to broaden my horizons. One has to note that doing a master course at Instituto Superior Técnico (IST) requires permanent concentration and hard work so that such a deep immersion into the studies may sometimes impede the all-round development of students' personal inclinations.

Having faced the task of choosing an activity to practise I decided to dedicate myself to helping children in need at the "Tercena" institution – an opportunity promoted by the representatives of the "ENTRAJUDA - Bolsa do Voluntariado" foundation. The reasons for my opting for this particular activity as well as the landmarks in the course of the activity are covered below in detail.

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- Alexey Mazalov, nr. 80462,
E-mail: a_a_mazalov@mail.ru, Instituto Superior Técnico,
Universidade de Lisboa.

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2 CHOOSING THE ACTIVITY

2.1 Motivation

While choosing the activity several goals were pursued. Firstly, I wanted to develop my soft skills with the help of the Independent Studies course. Secondly, I had a notion (and the course coordinator also encouraged us to perceive it in that way) that the work done within the course was supposed to be something useful, kind and emotionally gratifying. Thirdly, getting some experience on working in a field related to my specialty though not directly, was an adventure for me too.

It was due to my wish to develop my soft skills that I decided against getting involved in an activity requiring participating in an IT project implementation as a programmer. Besides, I looked on the matter as a possibility to try myself as a teacher taking into account my bent for teaching and working with children. Here it might be opportune to remark that I have spent approximately 15 years of my life studying and, therefore, must have developed an intuitive grasp of how teaching process is carried out. Moreover, I realized that taking care of children in need might be a piece of work for a noble cause. The activity chosen could help me achieve the third goal as stated above for it was quite obvious that persons responsible for recruiting volunteers would want me to be in charge of something they were sure

I was good at. These areas include informatics, mathematics and the English language.

Doing a master course in Informatics Systems and Computing Engineering at IST implies good skills at dealing with elementary informatics problems. For the same reason, I thought I would be the right person to help the children in their studies in mathematics. Finally, it is a well-known fact that in order to participate in international students mobility programmes a fluent level of English is indispensable.

2.2 Communicating with the Promoters

Upon realizing I was interested in getting involved in this particular activity, my next step was to get in touch with its promoters. According to the rules announced on the day of the presentation, the students willing to participate in helping children in need had to attend an interview with the institution's representatives and also receive instructions from them.

In the course of doing so, several difficulties were encountered. They were primarily due to the fact that initially the "Tercena" foundation working with children was not in direct contact with the course Professor and the tutors. Instead, the "ENTRAJUDA-Bolsa do Voluntariado" charity foundation served as a mediator between the course representatives and various nonprofit organizations involved in specific charity activities. It is quite comprehensible that the process of collecting the volunteers' applications, preprocessing and dispatching them to respective subordinate foundations proved to be time-consuming. Hence, for me it was hard to establish a fruitful contact with "Tercena" in due time.

Upon getting feedback from both of the charity institutions and obtaining immediate contact with "Tercena", it was necessary to clarify the field I would be working in and what exactly my work would consist in. Being driven by the passion for teaching mentioned above, I offered my cooperation in helping the children with their school studies. I also noted that in accordance with my background (both academical and personal) I could be of help in the spheres of informatics, mathematics and English.

Ms Rita Rapaz, the person responsible for communicating with the volunteers from the side of the "Tercena" institution, upon hearing me out, replied that she considered all my ideas appropriate. She admitted that the children sheltered at "Tercena", having come from unhappy families, sometimes confront with difficulties in all the three disciplines I had shown myself ready to help them with. She also noted that in the course of lessons of English or mathematics it is important that these lessons take place on a regular basis, i.e. without intervals. Thus, getting started with helping children with English or mathematics would be possible only after the vacations. On the contrary, a lesson of informatics might be a good idea anytime since the children to succeed in their school studies need practical skills rather than fundamental knowledge.

3 THE COURSE OF THE ACTIVITY

3.1 Further Contacts with the "Tercena" Representatives

Ms Rita Rapaz informed me that the OS installed on the computers children operate at Tercena are all UNIX-based (namely with OS Ubuntu). Meanwhile, the computers used at school are run by a member of the Windows OS family. According to Ms Rita Rapaz's point of view, this fact presented a lot of difficulties to the children. Therefore, some instruction on working with the "Ubuntu" operating system had to be provided.

Knowing that it was necessary to determine more precisely the subject matter I was going to tackle. During my next talk with the "Tercena" foundation representative I wanted to clear the doubts concerning the number of children present, their initial level of competence as well as their sphere of interest (whether they would prefer to gain some additional knowledge concerning the UNIX file system organization, working in the terminal or getting to know more about the text processor, electronic tables management system or the tool for creating and managing electronic slides).

According to the representative of "Tercena", the number of children attending the lessons would be around 7-8. The children had a low

initial level of competence in operating the “Libre Office Impress” tool which is part of the Ubuntu standard applications pack and is used for slides design. They also had a poor notion of what free software is and its advantages over its proprietary counterparts. Conversely, they did not encounter many difficulties in working with the “Libre Office Calc” and the “Libre Office Writer” tools. Ms Rita Rapaz also advised me not to tackle the subject of the UNIX file system organization neither that of working in the terminal due to the fact that these are more complicated matters hardly suitable for persons not willing to dedicate themselves to IT in their future lives. Thus, during my first lesson I had to dwell on working in the “Libre Office Impress” tool as well as on general aspects of free software and the Ubuntu OS which is a typical example of it. My interlocutor also pointed out that according to her experience obtained during working with children the time assigned to the two later subjects should be minimized taking into account the children’s age and emotional disposition.

During the conversation Ms Rita Rapaz also emphasized that it was necessary to use the Portuguese language to communicate with the children as they were likely to experience difficulties in understanding any other foreign language.

Due to time limitations and other reasons beyond my control (for example the fact that gathering all the children showing interest in one place at a time is not an easy job), I had to follow the directions of Ms Rita Rapaz and restrict the number of lessons to one having a duration of an hour and a half.

3.2 Working out the Programme of Studies

As described above, the programme had to include two parts: the theoretical and the practical one. In the theoretical part I decided to dwell on the concept of free software, the differences existing between the philosophies of free and proprietary software [1]. I also found it interesting and useful to speak about the history of free software, its founding fathers and outstanding personalities. My intention was also to present the friendliness and usability

of Ubuntu in contrast to some other UNIX varieties.

The second part of the program (the practical part) was about making the children acquire basic skills of slides design with the help of the “Libre Office Impress” tool [2], [3]. The teaching methodology used was based on learning by induction principle [4]. Being guided by the said principle I meant to teach the pupils consequently to introduce text, to apply different styles to the text, to add animation effects and to manipulate Font Work Graphical Text Art objects. After that I planned to switch to adding and scaling images and using different slides design templates. Finally, I would touch the topic of slides transitions and creating hyperlinks both within the presentation and outer links (to other presentations or the Internet).

Some effort was also taken to learn the Portuguese equivalents to the terms used in the sphere of IT. Rehearsing the phrases constituting the backbone of the lesson also took time.

3.3 During the lesson

Generally speaking, the children produced a favorable overall impression on me. I appreciated their self-control and high level of attention focusing. They also showed their excitement by the opportunity of communicating with a student coming from abroad.

When presenting the theoretical part I was inspired by their true interest in spite of the discussed matters be somewhat “academic”. The questions asked during the break proved it. Some of them, for example the question about the source of income of the free software community members and activists were by all means relevant.

As it came to the practical part, however, I noticed that some of my pupils appeared to be a little distracted. This was due to the fact that though they had certain difficulties with the “Libre Office Impress” tool, the majority of them had already gained practical skills while doing their home tasks. After a small break, the pupils managed to restore the desired level of attention focusing and watched the rest of the presentation with rapt attention and repeated the procedures I was teaching them.

Sometimes, thanks to the friendly user interface provided by the software tool and their vivid mind the children managed to accomplish the tasks before I could finish my explanation.

At the end of the lesson and during the break, I asked the children about their academic achievements and the difficulties they faced during their school studies. It turned out that their major difficulties did not concern informatics but mostly mathematics and English. After the end of the lesson I reported that to the children's mentors and got their prior authorization to start helping the children improve their performance in the mentioned subjects. However, these plans are to be fulfilled in the next term only.

4 CONCLUSION

In the course of the realization of the activity various stages were passed. They included communicating with the Independent Studies course tutors, activity promoters and charity foundation's representatives, getting prepared for the lesson and, finally, the act of interaction with the children. Getting through each of these stages gave me new experience and for sure contributed a lot to the enrichment of my soft skills. The issue of my personal development is covered in detail in the Learning report.

In this paper, however, I would like to draw a brief conclusion of how extracurricular lessons of informatics should be conducted based on my experience obtained. Taking into account the wide spread of IT nowadays, no traditional lessons of practical work with most of modern software tools are required for most students. The role of the teacher in this case should be limited to working out a more or less comprehensive guide for the learners to follow. In that way pupils are likely to detect the gaps in their knowledge and report the fact to the teacher. The presence of a teacher capable of settling the pupils' doubts is, thus, crucial.

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Finally, I express many thanks to my professor responsible for the course for his understanding of the problem I faced due to the delay in getting into the activity and considering my case to be exceptional.

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