

Integration and Formation of the New Member of RNL Administration

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What do?

Activities Report

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Abstract—In this activity, we went through the process of selecting a candidate for a new opening, followed by integrating the chosen candidate into the team and environment. We used various advertising techniques to spread awareness of the new opening, made a rigorous selection using tests and interviews, and helped the selected candidate integrate by providing him with documentation, tutorials, and personal formation.

Index Terms—(interview process, candidate selection, curriculum, questions, tutorials, formation).

what Team? Context!

1 INTRODUCTION

AFTER a member of the team left, we needed to fill his position with a new person. To do so, we went through the proper channels to open a new grant and call for student applications.

To be able to get the most adequate person for the job, we had to ensure that as many people as possible knew about the opening, prepare the interviews so as to know as much relevant data as possible about each candidate and accurately test them accurately and rigorously.

We then had to carefully select the candidate who seemed most suited for the position, based on the previous gathered data, and, finally, we had to provide the new member with as much useful information as possible to ensure he could start being productive as earlier as attainable.

2 SPREADING AWARENESS

To ensure that as many people as possible knew we were looking for a new member, we

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had to design and spread posters and flyers throughout the places most visible to possible candidates - we spread these through the Informatics Engineering Department's buildings, as Informatics Engineering Students have both the knowledge necessary and the interest for the position.

To enhance our visibility, we took advantage of the login screens of the computer labs, where we placed similar messages, as the people who regularly use the laboratory PCs are also potential candidates.

We also made public the information in social networking, using both our official page as well as appropriate groups with Informatics students.

3 CANDIDATE EVALUATION

With the above described advertising, we managed to peek the interest of five candidates within the two weeks we had to spread the word about the available grant. To decide who to add to our team, we used two methods of testing, already used in our standard selection process: we made a small and simple test, with very simple questions, which were made to extract candidates without any knowledge whatsoever in the area of system administration, and we interviewed for 15 to 20 minutes each of the remaining candidates, which we used to get to know the candidates better and

(1.0) Excellent	ACTIVITY					DOCUMENT								
(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	0.6	0.4	0.6	0.6	0.4		1.8	1.0	1.0	1.0	1.0	1.0		
(0.4) Fair														
(0.2) Weak														

know if he/she would be a suitable member for the team.

3.1 Tests

The tests were simple, composed of four sections, one for each specialization area - Linux, Windows, Networking and Hardware.

Each area then had two multiple choice questions, one question with a direct answer and one open-ended question where the candidate could develop and justify his answer. All of the questions had the same weight and to pass to the test it was required of the candidate to have at least two correct answers in each section.

The multiple choice questions were simple, made to be easy to get right. These were there to weed out any person who clearly did not know anything about the subjects at hand, as failing these questions would almost certainly lead to failing the test. The direct answer questions were very simple as well, with the same goals as the multiple choice questions. The question was used to ensure the multiple choice questions weren't filled randomly and that the candidate truly knew about the subject. The open ended question was used to see how much did the candidate know about the area. This question, which the candidates were free to develop on as much as they wanted, would allow us to see how comfortable the candidate was with the area and the degree of his/her knowledge about it.

3.2 Interview

With the results of the tests, we went on to do the interviews. We decided to focus the interviews in gathering more information about the candidates' knowledge, by asking about previous activities, curriculum and hobbies related to the area. We then also allocated a small amount of time at the end for another open-ended question, focused in inspecting the candidates' problem solving skills.

To gather topics to start the interview, we looked beforehand at each candidate's Curriculum Vitae (CV), looking at their work history, extracurricular activities and any mentioned skills.

During the interviews, using the topics extracted from the CV, we asked the candidates to extend on and describe what they did in their previous work places or activities, looking to see if the skills they obtained matched the ones we were looking for. We also asked the candidates to talk about the skills mentioned in the CV which were of our interest, looking to know how extended was their knowledge in the areas.

We then also asked about a few areas of expertise not mentioned in the CV, and about the candidates' hobbies, looking to see if there was anything worth of mention which they did not include in their CV.

With this component, we managed to get useful information on the extent of knowledge of all candidates, as well as getting a good idea of their abilities and strengths.

At the end of the interview, we invented a small question, the same question for all candidates, asking them about a tech related dilemma. We then instructed each candidate to think out loud and observed his/her method of problem solving. This allowed us to see how each candidate handles problems.

3.3 Selection Process

With the resulting information from both the tests and interviews, we had a good amount of data for the selection process. To prevent any biases, each member of the team started by grading each candidate individually from one to five in each area of specialization (Linux, Windows, Networking, Hardware, and Soft Skills). With an initial rating defined, we then discussed the ratings given with each other, and each revised our own ratings, with the feedback of the rest of the team. With the revised ratings, and the test grades converted to an one to five scale, we made an average of all of the results, and defined an order of preference based on the score of each candidate. In the end, there was a consensus within the team and we all agreed on whom was the better suited candidate for the job.

4 INTEGRATION

The integration of the new member was composed of 3 phases. Firstly, we started by intro-

ducing the new member to the team, showing him the channels of communication within, showing him how we get organized and how we work with each other. Then, we instructed him as much as possible on how the infrastructure worked, going from a high level of explaining how things are generally laid out and their purpose, down to a more detailed information of how those purposes were being met within the infrastructure. At last, we started giving the new member small and simple tasks and accompanied him through the completion of said tasks, providing as much information as required when any doubts or questions appeared.

4.1 Introduction to the Team

We started by preparing a small meeting with all members of the team. In this meeting, we introduced each other to the new member, and explained what each of us was doing within the team, as well as what he would be doing in the future.

We then started explaining to the new member how we communicate. We showed him the tools used to communicate and their tasks, giving the new member a small walk-through if he did not yet know of the tool.

4.2 Providing Information

With the new member capable of communicating with us with ease, we started informing him of the infrastructure in place. We guided him through the overall goal of our team, and explained why each section of the infrastructure drove us closer and closer to that said goal.

We then explained how each section works explaining what parts were focused on what tasks, as well as describing why those tasks were necessary.

4.3 Formation

Finally, we started assigning the new member with simple tasks, and scheduling time with him to accomplish them together with one of the existing members.

As the new member executed the task, the existing member would guide the new member

on how to do it, explain what was important and what was not, and give him an idea of some good practices to have in mind when executing the task.

5 CONCLUSION

As a result of our extensive work on selecting and integrating the new member, we now have someone in our team who is extremely capable, is prepared to start working on more complex tasks, is prepared to learn in more depth what he is doing, and has all the bases required to give constructive criticism and help further improve our infrastructure.

ACKNOWLEDGMENTS

We would like to thank Departamento de Engenharia Informática (DEI) for making the existence of our team possible, helping with all the associated bureaucracy and guiding us on the development of our services and infrastructure.

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Tomás Alexandre Diniz de Pinho Masters Student at IST, Systems Administrator at DEI.

APPENDIX

STATEMENTS OF EXECUTION



DIREÇÃO DE RECURSOS HUMANOS

DECLARAÇÃO

---- Nos termos do disposto nos nºs 4 e 5 do artigo 7.º da Lei n.º 40/2004, de 18 de agosto, alterada e republicada pelo Decreto-Lei n.º 202/2012 de 27 de agosto, diploma que aprova o Estatuto do Bolseiro de Investigação, e no Regulamento de Bolsas de Investigação do Instituto Superior Técnico, aprovado a 19 de outubro de 2011 pela Fundação para a Ciência e a Tecnologia, I. P., declara-se que, José Pedro de Almeida Arvela, é detentor(a) neste Instituto de uma bolsa de longa duração, na modalidade de BIIC, no âmbito do projecto e pelo período infra mencionado:-

Projeto / Centro Custo	Data – Início	Data - Fim	Professor Orientador
CG	01-09-2014	31-08-2015	Prof. David Manuel Martins de Matos

---- Mais se declara que o referido bolseiro auferiu, a quantia mensal de € 385 (trezentos e oitenta e cinco euros). -----

---- Instituto Superior Técnico, 20 de novembro de 2014. -----

PL
Direção de Recursos Humanos
Diretor

Miguel Coimbra
(Miguel Coimbra)

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Projeto / Centro Custo	Data – Início	Data - Fim	Professor Orientador
CG	01-11-2013	31-10-2015	Prof. David Manuel Martins de Matos

---- Mais se declara que o referido bolseiro aufera, a quantia mensal de € 385 (trezentos e oitenta e cinco euros). -----

---- Instituto Superior Técnico, 08 de dezembro de 2014. -----

 Direção de Recursos Humanos
Diretor


(Miguel Coimbra)