

# Online Course: Introduction to Software Development on SAP HANA

Mafalda Sousa Rosado

(Learning report)

**Abstract**—The constantly need to update skills and accompany companies evolution force workers to look for the best option to do it. SAP offers openSAP platform where several courses can be found to increase or consolidate knowledge. This report will cover the importance of education in enterprises, the new model to learn online and the most important skills to be successful in this new model.

**Index Terms**—Advanced Business Application Programming (ABAP), Systems, Applications and Products (SAP), High-Performance Analytic Appliance (HANA), online course, self-organization.

## 1 INTRODUCTION

FOR a developer the knowledge of new trends and features of the technology that his been working with is very important. More and more changes appeared in the market with a overwhelming speed in the last years and the effort necessary for not becoming out-dated is huge. Online courses are taking an important role because they give the students/workers the possibility to organize their life's differently, taking advantage of calmer periods to acquire this knowledge, which is not possible when talking about classroom courses where the schedule is fixed.

In this report we are going to explain some topics related with education, online vs onsite courses and provide some tips on the best way to proceed when taking an online course and the different type of self-organization needed for it. Also, we are going to explain openSAP mechanism to learn and why it is such a great platform for someone who wants to enter SAP world thanks to the network that we can create.

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## 2 THE IMPORTANCE OF EDUCATION IN THE CORPORATE WORLD

One of the topics mainly discussed by the employees of any company is the lack of training, that most of the times is announced on the interview phase. All companies make promises to their employees about training whether function related, languages or soft-skills (e.g. communication or writing), but the major number do not meet this expectations. This is a very interesting issue, since companies on the hiring process give a great value on trainings and certifications obtained by the candidates. And why is that? Because it shows not only that he has knowledge in that areas, but also that he makes an extra effort to constantly add value to himself as a professional.

Fortunately the minds are changing and some companies already support trainings or even college education to their employees. However, these changes are not still widely seen and so each individual must be responsible for this pursuit that brings to him some important skills, like:

- Knowledge: no one should have any doubts about the importance of consolidate the knowledge over the years and to be in the pole position when concerns innovation;
- Motivation: learn how to motivate our-

(1.0) Excelent	LEARNING					DOCUMENT						
	CONTEXT x2	SKILLS x1	REFLECT x4	S+C x1	SCORE	Structure x0.25	Ortogr. x0.25	Gramm. x0.25	Format x0.25	Title x0.5	Filename x0.5	SCORE
(0.8) Very Good												
(0.6) Good												
(0.4) Fair												
(0.2) Weak												
	1.4	0.7	2.8	0.4	5.3	0.15	0.15	0.15	0.2	0.5	0.5	165

selves is very important, we should not expect that our manager/company be the only source of motivation they will only give some guidelines, our path should be discovered by us and they value that;

- **Organization:** it is usual to see workers saying "Enjoy your student life while it lasts" and what is the reason behind it? Well when students look at workers they imagine a life with a more or less fixed schedule and a payment for their work, but what if a worker wants to participate in a course or improve his education going back to university? Well in that case organization skills are indispensable to balance work, education and social life enjoying and achieving our goals in each one of them;
- **Network:** one of the most important and discussed topics in enterprises is networks. With the expansion of technologies the goal moved from knowing all of them to being good in a group of them and to know who can help us in the other ones. When taking a course, as secondary goal, we should try to build a new network of people to whom go to when we want to discuss a doubt or even recommend us if we want to change project/job.

### 3 ONLINE COURSES VS ONSITE COURSES

With the years passing by online courses platforms have evolve and it is expected that this evolution continues. These courses allow individuals to learn without having to travel or to be restricted to a schedule, they also bring some disadvantages since face-to-face contact as proven to be an asset and the interaction with other students is also very important, my experience tells me that not every students can adapt to online courses due to the organization needed to be successful. However one of the greatest advantages about these courses is the possibility to participate in courses given by specialists with an area of expertise. Most of them are very busy persons that do not have the time to go country by country explaining their knowledge to other individuals, but this

kind of courses offers the possibility to record their classes and put it online for all people, no matter the country, that want to acquire their knowledge.

Most people tends to procrastinate and usually that leads to deadline miss in this kind of methodology, on the other side in the traditional approach it is mandatory to assist classes and to attend exams in a given date and time, this reduces the risk of not completing the course and decreases the organization responsibility since in this case is only needed to study because the rest has a fixed schedule that is not possible to miss. However for someone who has a busy work and/or familiar life the traditional model makes almost impossible to attend onsite courses. Technology innovation made possible to record classes and create discussion forums to help students to pursuit their education whenever they can, for instance when they wait the deploy of an application in work or wait the food to cook at home.

One concern brought by online courses is their reliability, since tests are taken online and for that reason students have access to class materials while making the test, but nowadays even in universities we already see some classes that allow students to bring their own material to tests, since if they do not know the contents and where to look for the information they will not have the time to complete the exam.

Another interesting concept that I was pleased to observe and enjoy in the last semester when making *Análise Complexa e Equações Diferenciais* (ACED) course was the combination of online and onsite materials. The professor still gave theoretical and practical classrooms and the mandatory evaluations must be done onsite, nevertheless the professor took time to record himself explaining the subjects and then put them online to anyone who wanted to remember or in my case for those who cannot assist due to professional reasons. Without the classes the effort needed to accompany the classes would be greater and more certain I would not had that time, resulting in possible fail on the exam.

This kind of initiatives, online courses or a mix between them, are also very important in University, with the Economy Crisis the number

of working students have increased and the drop-outs numbers are becoming greater. In my opinion, these models can help the fight against these numbers, giving more support for those who want to continue studying but cannot afford the effort to work and then follow in home the classes they missed. It is clear that on professor's side this will bring them much more work, but this work can be availed in the future semesters and class graduated increased percentage and good evaluations by the students bring some personal and professional satisfaction and recognition.

#### 4 OPENSAP

The courses offered by openSAP are structure has follow: class videos given by specialists, for each video a self-test to verify the knowledge (not graduated), a graduated homework in the end of each unit is presented and in the end of all units an exam that worth 50 percent of the final grade. This type of organization allowed me to take half an hour of my day to obtain the certification needed for my grown. Of course some unexpected events occurred during these six weeks, some workloads and also ACED studied did not allowed me to stick to this plan, but changing the plan to weekend or lunch time made possible to participate on the course. This scheduled changed is only possible due to the format presented, otherwise I would be missing the opportunity to acquire this knowledge.

openSAP also offers a forum in each course where attendants can put their doubts or concerns, anyone can answer them and the professors are also very participative, answering to all doubts and giving some important advices on how to apply some features. This kind of interaction is incredible and can be leverage with the construction of a network that can be use for future help to any student. After some months of the end of this course SAP had an event and the professor have send an email for those who will attend to the event to meet, proving that the importance of this courses are not only the acquisition of knowledge but also the construction of a network.

Another important feature of this platform is

the ability to use the iPad application to follow the course, which draw the discomfort of turning on the computer to do it and simplifying the process to progress while waiting for a doctor appointment or the bus.

Is it different to participate in an online course with or without certification? Well the adhesion of a certificated course is higher than the others, in my opinion the reason behind it is the motivational one. When taking an online course students must motivate themselves to take it, the non-existent schedule, the possibility to try to do the homework's without seeing the videos can lead to de-organization and de-motivation and in my opinion the certificate can help in this matters.

#### 5 CONCLUSION

Wrapping up, this particular course given by great expertises in this field is a major asset in my curriculum, and also gave me the opportunity to establish contact with several people in my professional area. This kind of courses give me the opportunity to acquire more knowledge, that in a different format would not be possible, because my time is already divided between work and University. Also the combination between traditional and online methods are a great idea, because it joins the best in these two worlds, by one side we have access to the materials and can utilize them whenever we have time and on the other side give us the guaranty of an exam without copying the answers.

#### ACKNOWLEDGMENTS

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#### REFERENCES

- not cited anywhere in the text!*
- [1] T. Jung and G. Nolan, *Introduction to Software Development on SAP HANA*, <https://open.sap.com/course/hana1-1> [Online; accessed 2014-07-01], 2013.

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

## APPENDIX

### STATEMENTS OF EXECUTION



## Confirmation of Participation

### Mafalda Sousa Rosado

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Date of birth: September 27, 1986  
e-mail: mafalda.rosado@sap.com

has participated in the following openSAP course:

### Introduction to Software Development on SAP HANA

Instructor: Thomas Jung

This six-week online course covered the following topics:

- Developing Applications for SAP HANA
- Database Tasks, Loading, and Modeling
- SQLScript Basics
- Exposing and Consuming Data with OData
- Exposing and Consuming Data with Server-Side JavaScript
- SAP HANA Advanced Development Options

openSAP is SAP's platform for open online courses. It supports you in acquiring knowledge on key topics for success in the SAP ecosystem.

Walldorf, December 2013

openSAP



# Record of Achievement

## Mafalda Sousa Rosado

Date of birth: September 27, 1986  
e-mail: mafalda.rosado@sap.com

has successfully completed the following openSAP course:

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Instructor: Thomas Jung

This six-week online course covered the following topics:

- Developing Applications for SAP HANA
- Database Tasks, Loading, and Modeling
- SQLScript Basics
- Exposing and Consuming Data with OData
- Exposing and Consuming Data with Server-Side JavaScript
- SAP HANA Advanced Development Options

Maximum score possible for this course: 300 points.

The candidate scored 294.3 points (98.1 %) by working on weekly assignments and taking a final exam.

The candidate belongs to the top 20 % of the course participants.

Dr. Bernd Welz  
Executive Vice President  
SAP Solution and Knowledge Packaging

Thomas Jung  
Instructor

Walldorf, December 2013

openSAP is SAP's platform for open online courses. It supports you in acquiring knowledge on key topics for success in the SAP ecosystem.

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