

DP2 2023-2024
Analysis report

Acme Software Factory



Repository: <https://github.com/rafcasceb/Acme-SF-D02>

Student #4:

- Mellado Díaz, Luis luimeldia@alum.us.es

Other members:

- Flores de Francisco, Daniel danflode@alum.us.es
- Heras Pérez, Raúl rauherper@alum.us.es
- Vento Conesa, Adriana adrvencon@alum.us.es
- Castillo Cebolla, Rafael rafcasceb@alum.us.es

GROUP C1.049

Version 1.0
04-03-24

Content Table

Contenido

Student #4:.....	1
Other members:.....	1
GROUP C1.049.....	1
Version 1.0.....	1
Content Table.....	2
Executive summary	3
Revision Table	4
Introduction	5
Contents.....	6
Mandatory task D02-2:.....	6
Mandatory task D02-3:.....	7
Mandatory task D02-4:.....	7
Mandatory task D02-5:.....	7
Extra task D02-13:	8
Extra task D02-14:	8
Extra task D02-15:	8
Extra task D02-16:	8
Conclusions	9
Bibliography	10

Executive summary

This report will provide a description of the specific tasks that require further analysis. Please, note that the simpler requirements might not need a special treatment. On the other hand, the more complicated ones may need a deeper analysis to ensure clear understanding.

Please, take into account this document covers the individual requirements for Student #4 exclusively. The team requirements assigned to Student #4 are considered in the group analysis document.

Revision Table

Date	Version	Description of the changes	Sprint
04/03/2024	1.0	<ul style="list-style-type: none">• Executive summary• Introduction• Content• Conclusion• Bibliography	1

Introduction

For the second delivery Student #4 was expected to carry out four mandatory tasks and four optional assignments.

The mandatory tasks requested the creation of the new entities Sponsorship and Invoice, a Dashboard for Sponsors, and the production of sample data.

The supplementary assignments requested the addition of the role Sponsor, the production of a UML domain model and the redaction of this document and a planning and progress report.

In the document, we'll list the mandatory tasks first, then the optional ones. Each task will have a number, its official description, and a detailed analysis if needed, as mentioned in the Annexes document.

Contents

Mandatory task D02-2:

"The sponsorships are related to a project with the aim of achieving greater visibility in the market. The system must store the following data about them: a code (pattern "[A-Z]{1,3}-[0-9]{3}", not blank, unique), a moment (in the past), a duration (after the moment, at least one month long), an amount (positive), a type of sponsorship ("Financial", "In kind"), an optional contact email, and an optional link with further information."

Duration: The duration attribute was decomposed into a start date and an end date. See the complete analysis of requirement D02-S01-005 at

https://ev.us.es/webapps/discussionboard/do/message?action=list_messages&course_id= 85092 1&nav=discussion_board&conf_id= 405265 1&forum_id= 234042 1&message_id= 403018 1.

"Por lo tanto, mi recomendación es que implemente Ud. el "execution period" al que hace referencia la nueva redacción del requisito como dos atributos de tipo "Date" más un conjunto de restricciones apropiadas"

As you can see, the analysis is not about this requirement, however they share the same ambiguity about a period-like attribute. On top of that, it was confirmed with the professor in a follow up session that this is the proper treatment for duration.

Amount: Here we can notice an incompleteness. What are we counting with the attribute amount? After discussing in the forum, you can consult the analysis of D02-Student#4-002 at

https://ev.us.es/webapps/discussionboard/do/message?action=list_messages&course_id= 85092 1&nav=discussion_board&conf_id= 405265 1&forum_id= 234042 1&message_id= 403843 1

"En este caso en concreto, el atributo "amount" hace referencia a la cantidad de dinero"

"Como ya sabe, el framework proporciona un datatype denominado "Money" que está especialmente pensado para modelar estos datos."

Link: The doubt of if a string representing a link should have a character limit arise. The professor specified a 255 characters limit.

Finally, we could rewrite the requirement as:

"The sponsorships are related to a project with the aim of achieving greater visibility in the market. The system must store the following data about them: a code (pattern "[A-Z]{1,3}-[0-9]{3}", not blank, unique), a moment (in the past), a duration (after the moment, at least one month long), an amount of money to be paid (positive), a type of sponsorship ("Financial", "In kind"), an optional contact email, and an optional link (shorter than 255 characters) with further information."

Mandatory task D02-3:

“Each sponsorship is billed using invoices. The system must store the following data about them: a code (pattern “IN-[0-9]{4}-[0-9]{4}”, not blank, unique), a registration time (in the past), a due date (at least one month ahead the registration time), a quantity (positive not nought), the tax that it is applied (positive or nought), the total amount (calculated by adding together the quantity and the tax applied), and an optional link with further information.”

Quantity, Tax and Amount: As in the previous requirement, we cannot know what quantity is counting. We could assume it is money since later we must apply a tax to it. As for Tax, we had to consult if it was stored as money or as a percentage. See analysis of D02-Student#4-002 at https://ev.us.es/webapps/discussionboard/do/message?action=list_messages&course_id= 85092 1&av=discussion_board&conf_id= 405265 1&forum_id= 234042 1&message_id= 403843 1. The formula to compute Amount is also clarified.

Link: As stated before, links should have a 255 characters limit.

Finally, we could rewrite the requirement in the following way:

“Each sponsorship is billed using invoices. The system must store the following data about them: a code (pattern “IN-[0-9]{4}-[0-9]{4}”, not blank, unique), a registration time (in the past), a due date (at least one month ahead the registration time), a quantity (positive not nought), the tax that it is applied (positive or nought), the total amount (calculated by adding together the quantity and the tax applied), and an optional link (shorter than 255 characters) with further information. The sum of the amount of invoices (including taxes) must add up and never exceed the amount of money to be paid in the corresponding sponsorship.”

Mandatory task D02-4:

“The system must handle sponsor dashboards with the following data: total number of invoices with a tax less than or equal to 21.00%; total number of sponsorships with a link; average, deviation, minimum, and maximum amount of the sponsorships; average, deviation, minimum, and maximum quantity of the invoices.”

No in-depth analysis required. It was assumed that totals, minimum and maximum quantities were integer numbers, while statistic properties, like average or deviation, were clearly real numbers (Doubles).

Mandatory task D02-5:

“Produce assorted sample data to test your application informally. The data must include two sponsor accounts with credentials “sponsor1/ sponsor1” and “sponsor2/ sponsor2.”

No further analysis required.

Extra task D02-13:

“There is a new project-specific role called sponsor, which has the following profile data: name (not blank, shorter than 76 characters), a list of expected benefits (not blank, shorter than 101 characters), an optional web page with further information, and an optional email contact.”

No further analysis required. Just as a clarification, I would like to state that *list of expected benefits* is a String as clearly deductible by the shorter than 101 characters constraint. However, it is normal to think it might be a List type attribute (which is not the case).

Extra task D02-14:

“Produce a UML domain model.”

No further analysis required.

Extra task D02-15:

“Produce an analysis report.”

No further analysis required.

Extra task D02-16:

“Produce a planning and progress report.”

No further analysis required.

Conclusions

The requirements for delivery two had more depth than requirements for delivery number one. The identification of ambiguities, particularly regarding the handling of time periods and unspecified quantities, made necessary consulting the client and demanded analysis.

Bibliography

Intentionally blank.