INDIVIDUAL ANALYSIS REPORT

Group C1.04.05
14/03/2023

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1.   Executive summary

This report summarizes the analysis needed for the first deliverable for Daniel Gallardo Martos' work.

2.   Revision table

No	Date	Description
1.0	14/03/2023	Initial draft of the document.

3.   Introduction

The analysis of the requirements is essential in any project to match the needs of the client and understand the domain accurately. The documents you provided us already give a detailed expression of what the requirements could be and what must be fully met. If any of those requirements require additional analysis, it will be documented in these analysis reports throughout the different deliverables of the project.

4.   Contents

For this deliverable, an analysis and modeling of the requirements and data to save at the database.

4.1. Requirements

In this section I will explain my decisions on the requirements. I had to make a decision, it's pros and cons, only if they proceed.

Requirement 4:
"There is a new project-specific role called student, which has the following profile data: statement (not blank, shorter than 76 characters), list of strong features (not blank, shorter than 101 characters), list of weak features (not blank, shorter than 101 characters), and an optional link with further information."

Decision:
The following decision refers to the "strong" and "weak" features properties. Among creating two more entities, and saving this fields as a string with some kind of separator, the best option is to save it as a string (simply because we do not need to save any other kind of information about this field)
For the delimiter of these fields, "\r\n" or ";" were being thought of, and ended up using the dot and comma character. After analyzing the possibilities of separation, I decided to use ";".

Lecture validation:
https://ev.us.es/webapps/discussionboard/do/message?action=list_messages&course_id=_63009_1&nav=discussion_board&conf_id=_303964_1&forum_id=_206215_1&message_id=_356955_1

Requirement 5:

"*An enrolment is a registration of a student in a course. The system must store the following data about them: a code (pattern "[A-Z]{1,3}[0-9][0-9]{3}", not blank, unique), a motivation (not blank, shorter than 76 characters), some goals (not blank, shorter than 101 characters), and a work time (in hours, computed from the corresponding activities).*"

Decisions:

For this requirement I had to make 3 different decisions. Only 2 are developed because the decision on the goals property is identical to the one explained in the decision of requirement 4 on the features.

Decision 1:

First of all, about the code of each enrolment, I realized that there could be an error in the regular expression "[A-Z]{1,3}[0-9][0-9]{3}" and after reviewing the forum I realized that indeed it was and that the client actually wanted the following pattern "[A-Z]{1,3}[0-9]{3}". Finally I put the following pattern "[A-Z]{1,3}\d{3}" which is the same.

Lecture validation:

https://ev.us.es/webapps/discussionboard/do/message?action=list_messages&course_id=_63009_1&conf_id=_303964_1&forum_id=_206215_1&message_id=_357975_1&nav=discussion_board

Decision 2:

The following decision refers to the workTime property. The requirement says that time is expressed in hours, but never takes minutes into account due to times other than exact hours. After analyzing the possibilities and consulting the forum where an identical topic had already been discussed, I decided to represent this property as a double with 3 integers and 2 fractional digits where the fractional part represents the minutes in percentage.

Lecture validation (the following discussion validates an identical property on the lecture entity):
https://ev.us.es/webapps/discussionboard/do/message?action=list_messages&course_id=_63009_1&nav=discussion_board&conf_id=_303964_1&forum_id=_206215_1&message_id=_357850_1

Requirement 6:

"Every enrolment has a workbook that is composed of activities. The system must store the following data about them: a title (not blank, shorter than 76 characters), an abstract (not blank, shorter than 101 characters), an indication on whether it can be considered a theory activity or a hands-on activity, a time period (either in the past or the future), and an optional link with further information."
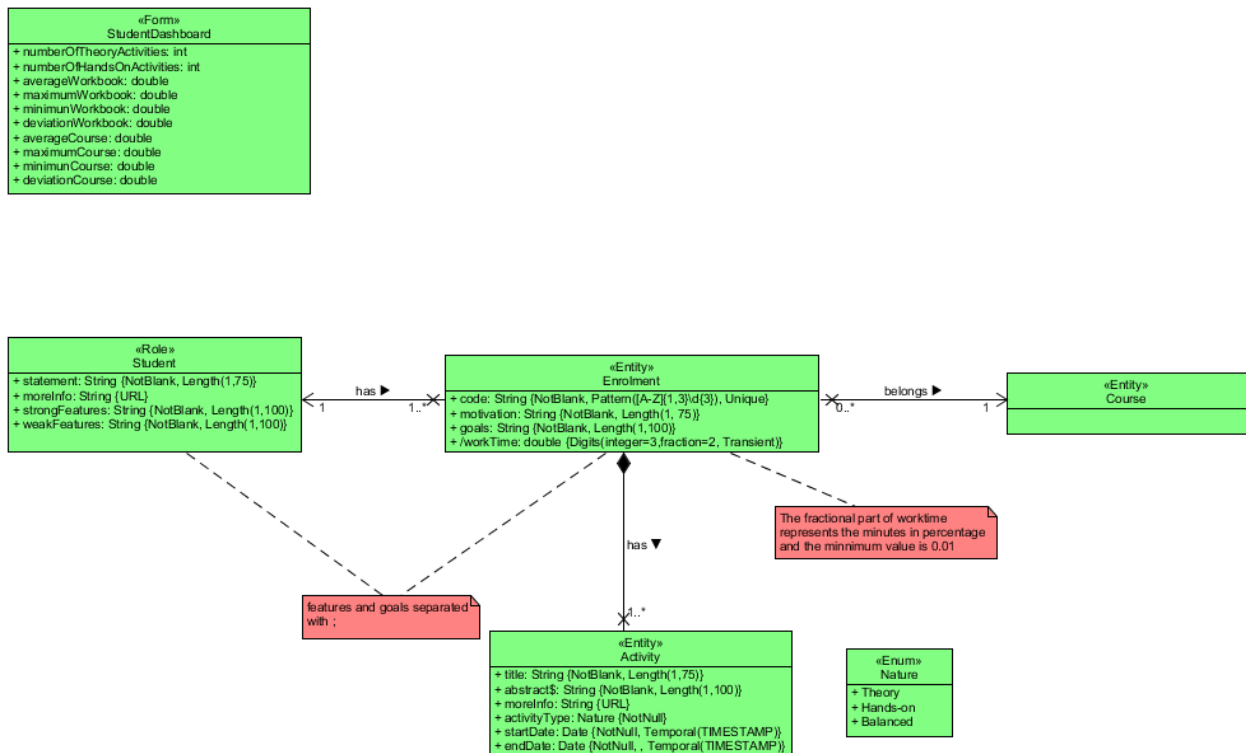
Decision:

The following decision refers to the type property. The requirement at no time specified what had to be done to consider a theoretical or practical activity. In addition, it does not consider the activities that were balanced. After analyzing the possibilities and looking at the forum, I was able to know what the client really wanted. He wants us to implement an enumeration with the nature of the entity with three possible values: THEORETICAL, PRACTICAL AND BALANCED.

Lecture validation:
https://ev.us.es/webapps/discussionboard/do/message?action=list_messages&course_id=_63009_1&nav=discussion_board&conf_id=_303964_1&forum_id=_206215_1&message_id=_357832_1

4.2. Diagrams

Diagrams stored at "*~/Student #2/D2/UML Individual Daniel.uxf*"

5. Conclusions

These were the overall details of the performed individual task by the member.

6. Bibliography

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