

# INDIVIDUAL ANALYSIS REPORT

Group C2.04.05  
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## 1. Executive summary

This report summarizes the analysis needed for the second deliverable, “the data model” for Pedro González Marcos’ work.

## 2. Revision table

No	Date	Description
1.0	15/02/2023	Initial draft of the document.

## 3. Introduction

This document contains a prior analysis done on the requirements needed to be double checked by the client.

## 4. Contents

The student has performed an analysis on customer requirements for Student 4 and have encountered the following problems.

### 4.1. Requirements

#### 4.1.1. Analysis on practicum - 5th requirement

The practicum code had the following pattern `[A-Z]{1,3}[0-9][0-9]{3}` after testing the regex, I realized that just putting `[A-Z]{1,3}[0-9]{4}` was exactly the **same**. I looked it up on the forum and it was previously discussed by Marco Chasco Barry who posted this issue [\[D&T\] Analysis on Practicum](#). The **client stated** that there was a mistake on the requirement and the pattern should be interpreted as follows `[A-Z]{1,3}[0-9]{3}`.

I had trouble when modeling the attribute estimated total time. I decided that the **estimated total time** of the practicum will be a rational number **represented** as a java primitive **double**. The rational number will have **4 digits** for the **integer** part and **2 digits** for the **decimal part**. The decimal part represents a fraction of the hours. For example **1.5 hours** will be saved not 1.30 where 30 will be minutes.

This alternative was previously discussed in the forum with the client. It corresponds to [Ambigüedad en la estimación de tiempo de una lección](#) by Juan Jesús Campos Garrido.

#### 4.1.2. Analysis on practicum sessions - 6th requirement

A boolean attribute was introduced to model the fact that there are two types of practicum sessions. Normal practicum sessions and addendum that can only be scheduled when the practicum is published. This topic was posted by Juan Carlos Morato Navarro [\[D&T\] Análisis de estudiante #4 requisito #15](#). This attribute is useful in the next deliverable D03, but a proper explanation was needed, so I included it in the D02 deliverable as it is an attribute.

#### 4.1.3. Analysis company dashboard on 7th requirement:

**7th requirement:** “The system must handle company dashboards with the following data: total number of practica regarding **theory** or **hands-on courses** grouped by month during the last year”. This statement **contradicts** what the **5th requirement:** “A practicum helps put **hands-on courses** into practice in the context of a real company”. I decided to post this issue in the forum [\[D&T\]: Conflicting requirements regarding Student #4](#). The client said there was a **contradiction** and that requirement should be read as follows: “...total number of practica grouped by month during the last year...”

Next issue was related to the requirement related to “total number of practica regarding hands-on courses grouped by month during the last year” so I asked the client about it in the forum [\[D&T\] Analysis on number of practica regarding 4](#). The client stated we should **count** the different **active practica** in a month (a practicum is active whether it has at **least one session** in that month).

I had another issue **interpreting** the **estimated total time** and the **time period** of a practicum. I have interpreted that the estimated total time was the same as the time period of the practicum.

I decided to ask in the forum how I could model the time period of the practicum ([\[D&T\] Analysis on seventh requirement regarding Student 4](#)).

The client stated that a **time period (interval)** is an **interval in time** and a **time period length** (duration) is the **time elapsed** between the **start** and the **end** of a time period. Both concepts are totally different. Therefore I decided to include **two derived attributes** calculated from sessions in the Practicum entity. The starting date of the practicum will be calculated taking the starting date of the first session in the practicum and the ending date of the practicum will be calculated taking the ending date of the last session of the practica. With the previous attributes I can compute the **period length** (duration) of the **practicum** by subtracting the ending date and the starting date of the practica.

The client wants to display the **practica period length** in **days**.

## 4.2. Diagrams

The following picture represents all the entities in a data model diagram:

