

Universidad de Sevilla

Escuela Técnica Superior de Ingeniería Informática

## Individual Analysis Report



Grado en Ingeniería Informática – Ingeniería del Software

Diseño y Pruebas 2

Curso 2022 – 2023

| Grupo de prácticas: C3-03-09 |                       |
|------------------------------|-----------------------|
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## **1. Resumen ejecutivo**

En este documento se detallarán los problemas que se han encontrado en los requisitos junto a las respectivas decisiones tomadas para resolverlos.

## 2. Tabla de revisiones

| Fecha      | Versión | Descripción                   |
|------------|---------|-------------------------------|
| 16/03/2023 | 1.0     | Primera versión del documento |

### **3. Introducción**

A continuación dejo constancia de los análisis que se han tenido que hacer sobre algunos requisitos, y las decisiones consecuentes para estos.

## 4. Análisis

### Requisito 7.

7) *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; average, deviation, minimum, and maximum period length of the sessions in their practica; average, deviation, minimum, and maximum period length of their practica.*

**Análisis 1:** La duda que me ha surgido realizando este requisito ha sido a la hora de implementar el “Company Dashboard” el atributo “*total number of practica regarding theory or hands-on courses grouped by month during the last year;*”. No sabía cómo modelar este atributo si con un Map<String,Integer> donde el string serían los meses y el integer el número de prácticas realizadas, o había alguna manera más sencilla para modelarlo.

Sin embargo leyendo el foro de discusión encontré a un estudiante con un problema similar al mío, y la forma correcta de modelar el atributo.

Dear Pedro,

Thanks for taking our pieces of advice regarding your requests into account.

Yes, the period of a practicum must be computed from the corresponding sessions, although that's something implicit and it's interesting to make it explicit so that there cannot be any confusions.

The requirement states that the dashboard must show the number of practica each month during the last year. It makes sense to assume that a practicum is active during a particular month if there's at least one session of that practicum during that month.

For instance, consider the following sessions of two different practica:

- Practicum 1: Feb. 15 – Feb. 16, Feb 28 – Mar. 04 (Active in Feb. and Mar.)
- Practicum 2: Feb. 15 – Feb. 28, Apr 01 – Apr. 20 (Active in Feb. and Apr.)

The number of practica in January is zero, but two in February, one in March, and one in April. The customer has confirmed this interpretation.

To model a dashboard that can show the number of X grouped by month during the last year, you simply need a list with 12 integers.

```
+ practicaPerCourseLastYear: int[]
```

Realise that we're currently just trying to model the data, not the functionality required to compute or to manipulate those data. That's another problem that will be dealt with in the next lesson.

You mention that you choose option 3 because “it has less cons and computational drawbacks as the other proposed solutions”; note that there's no actual a priori significant difference in performance. Neither is it clear to me why option 3 “loses information”. Please, review your argumentation... but don't forget that your goal is to represent your information requirements using as simple as possible data structures.

Regards, RC

Finalmente gracias a esta entrada pude encontrar una solución al problema encontrado.

