9 DE MARZO DE 2024

ANALYSIS REPORT
STUDENT #1

GROUP C-1.047

Repository link: https://github.com/Cargarmar18/Acme-SF

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1. Executive summary

This analysis report outlines the client's mandated requirements for the Acme-SF project in its D02 version. Each requirement is detailed along with any necessary breakdowns, including the original requirement, analysis conclusions, and decisions made to fulfill the requirement. Breakdowns are provided where analysis is required, while straightforward requirements are listed without commentary.

2. Revision table

Revision number	Date	Description
1.0.0	09/03/2024	Creation of the document

3. Introduction

This document aims to thoroughly examine the client's requirements for the successful completion of the Acme-SF project.

The document's structure begins with a cover page containing pertinent information such as the title, project repository, group number, author's name with their corporate email addresses, and the date. There is a table of contents, an executive summary, and an introduction before delving into the main content. The analysis report focuses on the individual requirements specific to each student, with emphasis on the first student's requirement (student #1). A breakdown of each requirement is provided where applicable.

Finally, the document concludes by summarizing the presented information and includes an appropriate bibliography.

4. Contents

The requirements are as follows:

Requirement 002:

*A **project** aggregates several **user stories** elicited by the same **manager**. The system must store the following data about them: a code (pattern "[A-Z]{3}-[0-9]{4}", not blank, unique), a **title** (not blank, shorter than 76 characters), an **abstract** (not blank, shorter than 101 characters), an **indication** on whether it has fatal errors, e.g., panics, a **cost** (positive or nought), and an **optional link** with further information. Projects containing fatal errors must be rejected by the system.*

The following issues and their respective solutions agreed with the client regarding the understanding of the requirement are:

About implicit constraints:

- **All attributes** when not specified must be assigned as **@NotNull**.
- **Abstract attribute cannot be changed** to a synonym to store in database, since we must respect the vocabulary of the client. As abstract is a reserved word in java, we can implement it using a "$" symbol before the word.
- **Attributes must have an upper limit** highlighting the cost and link, already talked in the forum, and limited to 255 characters in the case of the URL and a value of 2000 in the case of cost.
- **Draft mode**, attribute needed to store the projects that aren't formally settled but should be stored in database.

About cost datatype:

This attribute is hard to analyze due to the name of the attribute itself, at first glance it would be obvious a "Money" type, but after further analysis that hypothesis is discarded since the user story cost attribute specifically refers to it as "hour". The new doubt is related to is it double or int?

- **Alternative 1 int:** Using int we cannot work with decimals, is it necessary to work with them?

- **Alternative 2 double:** Using double we can work with decimals, the question again is do we really need to?

After further investigation checking the forum and in agreement with the client, we don't really have to work with decimals for the cost attribute, picking then int as the datatype to use.

Requirement 003:

*A **user story** is a document that a **manager** uses to represent the smallest unit of work in a project. The system must store the following data about them: a **title** (not blank, shorter than 76 characters), a **description** (not blank, shorter than 101 characters), an **estimated cost** (in hours, positive, not nought), the **acceptance criteria** (not blank, shorter than 101 characters), a priority ("Must", "Should", "Could", or "Won't"), and an **optional link** with further information.*

The following issues and their respective solutions agreed with the client regarding the understanding of the requirement are:

<u>About implicit constraints:</u>

- **All attributes** when not specified must be assigned as **@NotNull**.
- **Attributes must have an upper limit** highlighting the cost and link, already talked in the forum, and limited to 255 characters in the case of the URL and a value of 200 in the case of cost.

<u>About explicit constraints:</u>

- Each user story must **linked to a manager,** as mentioned in the follow-up.

<u>About cost datatype:</u>

This attribute is hard to analyze due to the name of the attribute itself, at first glance it would be obvious a "Money" type, but after further analysis that hypothesis is discarded since the user story cost attribute specifically refers to it as "hour". The new doubt is related to is it double or int?

- **Alternative 1 int:** Using int we cannot work with decimals, is it necessary to work with them?

- **Alternative 2 double:** Using double we can work with decimals, the question again is do we really need to?

After further investigation checking the forum and in agreement with the client, we don't really have to work with decimals for the cost attribute, picking then int as the datatype to use.

Requirement 004:

*The system must handle **manager** dashboards with the following data: total number of "must", "should", "could", and "won't" **user stories**; average, deviation, minimum, and maximum **estimated cost** of the **user stories**; average, deviation, minimum, and maximum **cost** of the **projects**.*

There weren't many issues with this specific requirement, but it is worth noting that to implement the total number of "status" it was recommended on the last follow up to implement them as a unique attribute of the dashboard using a map referencing each value of the enumerate. We opted to adapt to this recommendation.

Requirement 005:

Produce assorted sample data to test your application informally. The data must include two ***manager*** *accounts with credentials* *"****manager1/manager1****" and "****manager2/manager2****".*

In this requirement, no commentary on analysis has been deemed necessary given its straightforward nature. Although it is worth mentioning the feedback of the follow-up to improve the sampling of the system to improve and facilitate later testing.

Requirement 013:

There is a new project-specific role called ***manager****, which has the following profile data:* ***degree*** *(not blank, shorter than 76 characters), an* ***overview*** *(not blank, shorter than 101 characters), list of* ***certifications*** *(not blank, shorter than 101 characters), and an* ***optional link*** *with further information.*

The following issues and their respective solutions agreed with the client regarding the understanding of the requirement are:

<u>About implicit constraints:</u>

- All attributes when not specified must be assigned as **@NotNull**.
- **Attributes must have an upper limit** highlighting the cost and link, already talked in the forum, and limited to 255 characters in the case of the URL.

Requirement 014:

Produce a UML domain model.

In this requirement, no commentary on analysis has been deemed necessary given its straightforward nature.

Requirement 015:

Produce an analysis report.

In this requirement, no commentary on analysis has been deemed necessary given its straightforward nature.

Requirement 016:

Produce a planning and progress report.

In this requirement, no commentary on analysis has been deemed necessary given its straightforward nature.

5. Conclusions

Upon reviewing the current report and conducting a thorough analysis for its development, it is determined that some potential ambiguities or conflicts have been detected regarding the examined requirements. Consequently, we can identify an arise of the complexity lead by the confusion of definitions, our job is to keep asking and agreeing with the client to reduce this possibility of conflict and guarantee the best product possible for their future use.

6. Bibliography

https://ev.us.es/ultra/courses/_85092_1/cl/outline ("Foro: Tutorials")