

Analysis report



Acme AirNav Solutions, Inc

Group Number: C1.066

Repository: <https://github.com/mquirosq/DP2-C1.066>

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Executive Summary

Customer requirements are one of the most important resources for the team, as they define the project's expected outcome.

The aim of this report is to perform an analysis of these requirements. This will allow the team to better understand them and ensure that all the necessary actions to comply with them are stated.

Any ambiguities, errors, misclassifications, or other issues that could obstruct the development of the project will be identified and described. Several solution alternatives will be discussed, contrasted, and evaluated to determine the most appropriate solution. The proposed solution will always be validated by a lecturer.

Requirements in which no ambiguities have been found will be omitted from this report.

To provide structure and clarity, the report organizes the analysis into three levels of requirements: Mandatory, Supplementary (I), and Supplementary (II). This helps to categorize and prioritize the issues based on their criticality.

By addressing these requirements thoroughly, the analysis aims to mitigate potential risks and improve the efficiency of the project's development.

Revision History

Revision	Date	Description
1.0	2025-02-18	Initial draft
1.1	2025-02-18	Requirements analysis (I)
1.2	2025-02-19	Requirements analysis (II)
1.3	2025-02-19	Included lecturer validations
1.4	2025-02-19	Detailed last document sections

1. Introduction

This report presents a list of records obtained from the analysis of the group requirements of the first deliverable for the Acme AirNav Solutions (Acme ANS) project. The purpose of this analysis is to identify and address any potential problems in the requirements, ensuring they are clear, accurate, and aligned with project goals.

These records have been divided into three sections. Each of them corresponds to a different requirement level: Mandatory, Supplementary (I) and Supplementary (II).

Each of the mentioned sections will contain a sub-section for each of the requirements in which ambiguities, misclassifications, or other issues have been identified. If a single requirement has multiple issues, separate sub-sections will address each problem individually.

The general structure that has been used to describe these problems is the following:

1. Copy of the analysed requirement
2. Problem identified
3. Solution alternatives
4. Conclusion and proposed solution
5. Lecturer validation link

If several issues are found for a single requirement, points 2 to 5 will be repeated for each problem in its corresponding sub-section.

2. Mandatory requirements

2.1. Requirement 1

The following requirement has been analysed:

”Instantiate and customise the appropriate starter project so that you can work on this project. Make sure that the name of your project folder, maven configuration (pom.xml), and database is “Acme-ANS-D<dd>”, where “<dd>” denotes the deliverable number using two digits. Make sure that you have followed the instructions in the “On Your Deliverables” document to package and deliver your work. This requirement must be fulfilled in this and every other group or individual deliverable for it to be considered satisfied.”

2.1.1 First conclusion

This requirement mentions the "appropriate starter project", but does not specify which one it refers to.

2 starter projects are considered:

1. Hello World: Starter including basic functionalities, that could be re-used in almost every project.
2. Acme Jobs: Starter including more specific functionality regarding the management of job publishing and applications.

As the purpose of this project is the management of charter flights, functionalities present in the Acme Jobs starter will not be useful. For this reason, the basic functionality of the Hello World starter is the one required for this project.

2.1.2 Second conclusion

We can also find that this requirement outlines that name of the project folder must be "Acme-ANS-D<dd>". Due to the nature of our development environment, we must decide if either:

1. "Acme-Ans-D<dd>" is the complete name of the project.
2. "Acme-Ans" is the complete name of the project, and "D<dd>" is the version of the project.

The first approach would leave versioning open-ended, making it difficult to track and manage different versions of the project over time. Version control could become inconsistent, potentially leading to confusion or errors in future updates.

On the other hand, the second approach clearly defines "Acme-ANS" as the project name and "D<dd>" as the version, ensuring that versioning is structured and easily traceable. This method allows for more efficient version tracking and consistency in naming conventions.

Thus, the second approach will be the proposed solution.

Check the lecturer's validation of this record by clicking [here](#)

2.2. Requirement 3

The following requirement has been analysed:

”Provide a link to your planning dashboard in GitHub to review the tasks, their current status, and your schedule.”

During the analysis, we identified that this requirement specifies what needs to be done correctly, but it does not provide clear information about where the link should be attached.

Different solution alternatives were considered:

- Alternative 1: Include the link to the planning dashboard in the Chartering Report document
 - Advantages: This approach would reduce the amount of directories and documents in the project.
 - Disadvantages: On the other hand, it could make it difficult for lecturers to find the exact location of the link.
- Alternative 2: Include the link to the planning dashboard in a specific file, where all the links would be located.
 - Advantages: Avoids repetition, and allows lecturers to have a quick access to any link that is required for the evaluation.
 - Disadvantages: As students are evaluated separately, having a document storing both group and individual links might increase the difficulty of the evaluation process.
- Alternative 3: Create the subdirectory ”reports/D0X”. This subdirectory would contain a subdirectory for each student (”reports/D0X/Student Y”), and for the group (”reports/D0X/Group”). Links would be stored in different files, contained in these subdirectories.
 - Advantages: Breaking up directories into different parts will enable an easy access to the required links and documents, while allowing to evaluate each student and the whole team independently.
 - Disadvantages: Repetitive approach, with a more complex structure.

Taking into account the different alternatives, and due to the context of this project, we have considered that the best solution alternative is Alternative 3.

Different students will work on their specific subdirectory, or in the group subdirectory when needed. These subdirectories will be used to store a document with the link requested in requirement 3, as well as any other document/report requested.

Check the lecturer’s validation of this record by clicking [here](#)

3. Supplementary requirements (I)

No ambiguities or inaccuracies were identified in this section.

4. Supplementary requirements (II)

No ambiguities or inaccuracies were identified in this section.

5. Conclusions

The main issues identified were related to the project's configuration and structure, which initially caused uncertainties in the earliest phases of the development process. Ensuring a well-defined configuration and structure was crucial to avoid future complications.

Regarding its configuration, we determined the appropriate starter project that should be used as the base of the Acme AirNav Solutions project. Additionally, we clarified how its name and version should be specified within our development environment, ensuring consistency across all team members.

For requirements in which links or other individual or group documents are requested, we have established a project structure that, without introducing unnecessary complexity, provides the necessary files for the lecturers to evaluate each member's contributions independently, and throughout the different project deliverables. This structure ensures clarity in document organization and accessibility for assessment purposes.

With the refinements performed, we will be able to continue the development of the project without complications.

References

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