Planning and Progress Report – D02 (Student #3)



**Group Number:** C1.037  
**Repository:** <https://github.com/DP2-C1-037/Acme-ANS-D02>

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# Executive Summary

This report provides an overview of the planning and progress of the project deliverable, covering both the preparation and execution phases.

The planning phase details the tasks undertaken, assigned roles, and a comparison between estimated and actual time spent. It also outlines the projected budget, considering personnel costs and amortization through a linear depreciation method.

The progress phase evaluates performance, challenges encountered and their resolutions, and a financial analysis comparing initial estimates with actual costs. This report aims to offer insight into project execution and overall financial performance.

# Revision Table

|  |  |  |
| --- | --- | --- |
| **Revision Number** | **Date** | **Description** |
| 1.0 | 26/02/2025 | Introduction |
| 1.1 | 27/02/2025 | Planning |
| 1.2 | 10/03/2025 | Conclusion and conflicts arisen |
| 1.3 | 12/03/2025 | Final version |

# Introduction

This report presents a comprehensive analysis of the task planning and execution for the project deliverable. It explores the strategies implemented, time and resource allocation, and the financial aspects involved. The document aims to assess both the adherence to initial estimates and the challenges encountered during execution.

The Planning section details the tasks performed, their descriptions, assigned roles, and a comparison between estimated and actual time spent. It also includes an evaluation of the budget, breaking down personnel costs and amortization using a linear depreciation method. Additionally, it provides a visual representation of task progression with screenshots from various work stages.

The Progress section reviews team performance, highlighting contributions, conflicts, and their resolutions. It also compares initial cost estimates with final expenses, offering a financial performance assessment.

The report is structured as follows:

* Section 4: Planning covers tasks, screenshots of tasks, budget comparison, and the progress chapter.
* Section 5: Conclusions provides a summary of key findings and project outcomes.
* Section 6: Bibliography (intentionally blank).

# Contents

## Planning

Below is a list of tasks performed to meet the requirements of the deliverable. Each task includes a title, description, assigned personnel and roles, planned time, and actual time spent.

**Task 1:**

* **Title:** Dashboard Planning
* **Description:** Define the structure and layout of the system dashboard to ensure intuitive navigation and accessibility of key functionalities. This includes:
  + Identifying the main components and widgets to be displayed.
  + Establishing user roles and access permissions for different dashboard elements.
  + Designing a wireframe or mockup to visualize the interface.
  + Planning the data sources and API integrations required for real-time updates.
  + Ensuring responsiveness and usability across different devices.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Manager).
* **Planned Time:** 30 minutes.
* **Actual Time:** 45 minutes.

**Task 2:**

* **Title**: Flight Crew Members Entity
* **Description**: The flight crew members are responsible for operating aircraft and ensuring passenger safety and comfort during flights. The system must store the following data about them:
  + Employee Code: Unique identifier with the pattern "^[A-Z]{2-3}\d{6}$", where the first two or three letters correspond to their initials.
  + Phone Number: Pattern "^+?\d{6,15}$".
  + Language Skills: Up to 255 characters.
  + Availability Status: "AVAILABLE", "ON VACATION", "ON LEAVE".
  + Airline: The airline they are employed by.
  + Salary: Stored for payroll processing.
  + Years of Experience: Optional field for tracking expertise.
* **Assignee(s) and Role(s)**: Miguel Álvarez Raya (Developer).
* **Planned Time**: 30 minutes.
* **Actual Time**: 80 minutes

**Task 3:**

* **Title:** Flight Assignment Entity
* **Description:** A flight assignment represents the allocation of a flight crew member to a specific leg of a flight. Each assignment includes:
  + **Flight Crew Duty:** The role assigned to the crew member in that flight leg ("PILOT", "COPILOT", "LEAD ATTENDANT", "CABIN ATTENDANT").
  + **Last Update:** Timestamp of the last modification (must be in the past).
  + **Assignment Status:** Current state of the assignment ("CONFIRMED", "PENDING", or "CANCELLED").
  + **Remarks:** Optional notes (up to 255 characters) providing additional details if necessary.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 30 minutes.
* **Actual Time:** 90 minutes.

**Task 4:**

* **Title:** Activity Log Entity
* **Description:** The activity log records incidents that occur during a flight, logged by any assigned flight crew member after the flight leg has taken place. The log includes:
  + **Registration Moment:** Timestamp of when the entry was recorded (must be in the past).
  + **Incident Type:** A short label describing the type of incident (up to 50 characters).
  + **Description:** Detailed account of the incident (up to 255 characters).
  + **Severity Level:** A scale from 0 to 10, where 0 represents no issue and 10 indicates a highly critical situation.
  + **Common Incident Examples:** Weather disruptions, route deviations, passenger issues, or mechanical failures.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 30 minutes.
* **Actual Time:** 80 minutes.

**Task 5:**

* **Title:** Flight Crew Member Test
* **Description:** Generate sample data to informally test the application. This includes:
  + **Four flight crew member accounts** with credentials formatted as “memberX/memberX” (X ranging from 1 to 4), each with a different duty.
  + **A fifth member account** with credentials “member/member” representing a newly created account with no flight assignment.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 60 minutes.
* **Actual Time:** 260 minutes.

**Task 6:**

* **Title:** Provide Link to GitHub Dashboard
* **Description:** Share the GitHub planning dashboard to facilitate task review, status tracking, and schedule monitoring.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 10 minutes.
* **Actual Time:** 5 minutes.

**Task 7:**

* **Title:** Flight Crew Member Dashboards
* **Description:** Implement dashboard features to display key indicators for flight crew members, including:
  + **Last five assigned destinations.**
  + **Number of flight legs** with recorded incidents, categorized by severity levels (0-3, 4-7, and 8-10).
  + **Crew members assigned together** in the last flight leg.
  + **Flight assignments grouped by status.**
  + **Flight assignment statistics** for the last month, including average, minimum, maximum, and standard deviation.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 60 minutes.
* **Actual Time:** 30 minutes.

**Task 8:**

* **Title:** UML Domain Model
* **Description:** Design a UML domain model to define the information requirements of the project, ensuring that the structure accurately represents key entities and relationships.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 60 minutes.
* **Actual Time:** 120 minutes.

**Task 9:**

* **Title:** Visa Requirement
* **Description:** Implement a system feature that provides flight crew members with visa requirement information by integrating a web service. Key aspects include:
  + **Choosing an appropriate web service** to retrieve visa-related data.
  + **Defining the required data fields** based on the selected service.
  + **Ensuring the selected service is free of charge** to avoid unexpected costs, as no financial liability will be covered by the University of Seville.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 180 minutes.
* **Actual Time:** 110 minutes.

**Task 10:**

* **Title:** Analysis Report
* **Description:** Generate an analysis report to assess the project's current state and progress. This report should include:
  + **Project Overview:** A brief description of the project’s goals and objectives.
  + **Methodology:** Overview of the analysis methods used to assess the project.
  + **Findings:** Key observations, including performance metrics and any issues encountered.
  + **Recommendations:** Suggestions for improvements and adjustments based on the analysis.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 60 minutes.
* **Actual Time:** 80 minutes.

**Task 11:**

* **Title:** Planning and Progress Report
* **Description:** Produce a planning and progress report detailing the planning and execution phases of the project. This report must cover:
  + **Planning Phase:** Tasks completed during the planning phase, including role assignments, time estimates, and resource allocation.
  + **Progress Phase:** Updates on task execution, challenges faced, and adjustments made during the implementation of the project.
  + **Time and Budget Comparison:** A comparison between the estimated and actual time spent on tasks and the projected versus actual costs.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 120 minutes.
* **Actual Time:** 80 minutes.

**Task 12:**

* **Title:** Upload requirements sudent #3
* **Description:** Mark with an "X" the tasks that are considered completed and uploaded to GitHub.
* **Assignee(s) and Role(s):** Miguel Álvarez Raya (Developer).
* **Planned Time:** 15 minutes.
* **Actual Time**: 10 minutes.

## Screenshots of tasks

**Todo**

Captura de pantalla de un celular

El contenido generado por IA puede ser incorrecto.

**In progress**  
  
Captura de pantalla de computadora

El contenido generado por IA puede ser incorrecto.

**Done**

Captura de pantalla de un celular

El contenido generado por IA puede ser incorrecto.

## Budget comparison

The total estimated cost required for these tasks is calculated as follows:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Role | Estimated hours | Real hours | Cost per hour (€) | Estimated cost (€) | Real cost (€) | Amortisation cost (€) |
| Developer | 11.41 | 16.46 | 22 | 251.02 | 362.12 | 37.03 |

Amortisation cost is computed using a linear depreciation method over three years.

amortisation\_period\_3\_years = (real\_cost - estimated\_cost) / 3

## Progress chapter

**Progress Records**

|  |  |  |  |
| --- | --- | --- | --- |
| Team member | Performance Indicators (RequirementsAchieved-RequirementsExpected) | Evaluation | Reward /  Admonishment |
| Miguel | Mandatory:  5 - 5 = 0 | |  | | --- | | "Performing well" (Full completion of mandatory tasks) |  |  | | --- | |  | | |  |  |  | | --- | --- | --- | | |  | | --- | | Recognition for completing all mandatory tasks |  |  | | --- | |  | |  |  | | --- | |  | |
| Miguel | Supplementary I:  2 – 2 = 0 | |  | | --- | | "Performing great" (Full completion of supplementary I tasks) |  |  | | --- | |  | | |  |  |  | | --- | --- | --- | | |  | | --- | | Congratulations for completing all supplementary I tasks |  |  | | --- | |  | |  |  | | --- | |  | |
| Miguel | Supplementary II:  3 – 3 = 0 | |  | | --- | | "Performing really great" (Full completion of supplementary II tasks) |  |  | | --- | |  | | |  | | --- | | Congratulations for completing all supplementary II tasks |  |  | | --- | |  | |

**Conflicts arisen and how I have addressed them**

**Challenges:**

* Time overruns in certain tasks due to unforeseen complexity.
* Initial estimations underestimated workload.
* Difficulties in understanding requirements due to missing detailed information. Specifically:
  + Uncertainty about the level of detail required for the UML domain model (type of UML, attribute information, level of class detail).
  + Ambiguity in creating sample data (whether to generate sample data for all created classes or only for those necessary to meet the requirement).

**Resolutions:**

* Adjusting task allocations for better workload distribution.
* Improving task estimation accuracy for future iterations.
* Requesting more precise requirement specifications to clarify expectations, particularly regarding UML domain model details and sample data scope (see “Analysis Report” for more information).

**Cost Comparison:** remit to point 4.3 for budget comparison.

# Conclusions

This report provides an overview of the challenges encountered and the solutions implemented during my work.

While initial estimations underestimated workload, I adjusted task allocation and refined estimation techniques to improve efficiency. One of the main difficulties was the lack of detailed requirements, particularly regarding the UML domain model and the scope of sample data, which created uncertainties about the level of detail needed. Addressing these gaps required careful analysis and iterative clarification.

Despite these challenges, I managed to adapt by refining my approach and improving communication through forum discussions to ensure a better understanding of expectations.

Overall, this experience highlighted the importance of clear specifications, proactive problem-solving, and adaptive planning in overcoming unforeseen complexities.

# Bibliography

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