# Requirements – Student #4

Please, fill in the following form, make sure that you have ticked the requirements that you consider fulfilled, save this document, **and attach it in its original format (.docx)** to every deliverable. Regarding your ID, please keep only four random digits and mask the others using an asterisk. **Please, note that this document must be edited with the desktop version of Word since the web version does not properly support forms.** Attaching this document entails that you are the authors of the work delivered, you have not cheated in any way, and you have read and understood the information delivered regarding the subject, with a special emphasis on the methodological guidelines and how your work is going to be graded. Make sure that your project works well with the latest version of the development framework.

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| --- |
| **Group:** C1.049 |
| **Repository:** https://github.com/DP2-C1-049/D04 |
| **Student #2**  **ID Number:** 2\*0\*4\*3\*Y  **UVUS:**  JLF1828  **Name:**  Bermudo Álvarez, Rafael  **Roles:**  Developer, Operator |
| **Date:** 20/2/2025 |

# MANDATORY Deliverable D01: introduction

## Information requirements

Intentionally blank.

## Functional requirements

1. Modify the anonymous menu so that it shows an option that takes the browser to the home page of your favourite web site. The title must read as follows: “〈id-number〉: 〈surname〉, 〈name〉”, where “〈id-number〉” denotes your DNI, NIE, or passport number, “〈surname〉” denotes your surname/s, and “〈name〉” denotes your name/s.

X

## Non-functional requirements

Intentionally blank.

## Testing requirements

Intentionally blank.

## Managerial requirements

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

X

# MANDATORY Deliverable D02: data models

## Information requirements

1. The **assistance agents** are the people responsible for recording and managing post-flight incidents reported by passengers. The system must store the following data about them: an **employee code** (unique, pattern "^[A-Z]{2-3}\d{6}$", where the first two or three letters correspond to their initials), a list of **spoken languages** (no longer than 255 characters), the **airline** for which they work, the **moment** on which they began to work for that airline (in the past), and optionally, a **brief bio** (up to 255 characters), their **salary**, and a link to a **photo** that should be stored anywhere else.

X

1. A **claim** is a formal request or complain made by a passenger or customer due to a problem or inconvenience experienced during a flight. They are registered by the **assistance agents**, and the data to store when registering a **claim** is the following: the **registration moment** (in the past), the **passenger email**, a **description** (up to 255 characters), a **type** (“FLIGHT ISSUES”, “LUGGAGE ISSUES”, “SECURITY INCIDENT”, “OTHER ISSUES”) and an **indicator** of whether the claim is accepted or not.

X

1. Claims need to be tracked through **tracking logs**. A tracking log records each step in the procedure followed to resolve or reject a claim, ensuring that all actions and decisions are documented. The system must store the following data about **tracking logs**: the **last update moment**, the **step** undergoing (up to 50 characters), a **resolution percentage**, and an **indicator** on whether the claim was finally accepted or not. When a claim is accepted or rejected, the system must store its **resolution** indicating the reason why was rejected or the compensation to offer (up to 255 characters).

X

## Functional requirements

Intentionally blank.

## Non-functional requirements

Intentionally blank.

## Testing requirements

1. Produce assorted sample data to test your application informally. The data must include two **assistance agent** accounts with credentials “**agent1**/**agent1**” and “**agent2**/**agent2**”. Create an additional agent account with credentials “**manager3/manager3”** that accounts for a new agent with no associated data, except for his or her profile.

X

## Managerial requirements

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

X

# MANDATORY Deliverable D03: implementing features

## Information requirements

Intentionally blank.

## Functional requirements

1. Operations by **assistance agents** on **claims**:

* List their completed claims, that is, the ones that have been accepted or rejected and show their details.
* List the undergoing claims and show their details including the leg to which they are linked.
* Create, update, publish, and delete their claims. Claims must be linked to legs that occurred. Additionally, claims can be updated or deleted as long as they have not been published.

X

1. Operations by **assistance agents** on **tracking logs**:

* List and show the tracking logs associated to their claims.
* Create, update, publish, and delete a tracking log. A tracking log cannot be published until its corresponding claim is published. Once published, tracking logs cannot be updated or deleted. In exceptional cases, a new tracking log may be created even after the last one has been published (the one with a 100% resolution percentage). This additional tracking log is generated when the customer expresses dissatisfaction, prompting agents to review their claims.

Es posible modificar el campo “last update moment” mediante POST hacking. No es possible crear un tracking log adicional, aparece continuamente un error estableciendo que ya existe una entidad con el 100% de resolución.

Solución:

Para solucionar el POST hacking, lo que hize fue, en la clase AssistanceAgentTrackingLogCreateService.java, borré la parte de “lastUpdateMoment” en el bindObject impidiento así que el cliente envíe un valor para ese campo. Así quedó el bind:

public void bind(final TrackingLog trackingLog) {

super.bindObject(trackingLog, "step", "resolutionPercentage", "status", "resolution");

}

Para solucionar el problema de crear un tracking log adicional, tuve que cambiar el sample data de trackingLogs ya que eran erroneos. El problema sucedía porque casi todos los trackingLogs estaban asociados a una misma claim y estos trackingLogs tenían status ACCEPTED/REJECTED y resolution percentage a 100. Esto era erróneo ya que como mucho una claim puede tener 2 tracking logs publicados con resolution percentage 100. Para arreglar este error, en el sample data de trackingLogs, puse que cada trackingLog con resolution percentage al 100 estuvieran asociados a claim distintas, de este modo no quedaría ninguna claim con mas de 2 trackingLogs al 100. Ya se puede crear ese trackingLog adicional para cualquier claim, mientras exista otro trackingLog al 100 y esté publicado

## Non-functional requirements

Intentionally blank.

## Testing requirements

Intentionally blank.

## Managerial requirements

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

X

# MANDATORY Deliverable D04: formal testing

## Information requirements

1. Create appropriate indices for your entities, if required.

X

## Functional requirements

Intentionally blank.

## Non-functional requirements

Intentionally blank.

## Testing requirements

1. Produce a test suite for Requirements #8 and #9.

X

## Managerial requirements

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

X

1. Produce a testing report.

X

# SUPPLEMENTARY I Deliverable D01: introduction

## Information requirements

Intentionally blank.

## Functional requirements

Intentionally blank.

## Non-functional requirements

Intentionally blank.

## Testing requirements

Intentionally blank.

## Managerial requirements

Intentionally blank.

# SUPPLEMENTARY I Deliverable D02: data models

## Information requirements

1. The system must handle **assistance agent** **dashboards** with the following **indicators**:

* The ratio of claims that have been resolved successfully.
* The ratio of claims that have been rejected.
* The top three months with the highest number of claims.
* The average, minimum, maximum, and standard deviation of the number of logs their claims have.
* The average, minimum, maximum, and standard deviation of the number of claims they assisted during the last month.

X

## Functional requirements

Intentionally blank.

## Non-functional requirements

Intentionally blank.

## Testing requirements

Intentionally blank.

## Managerial requirements

1. Produce a UML domain model regarding the information requirements in your project.

X

# SUPPLEMENTARY I Deliverable D03: implementing features

## Information requirements

Intentionally blank.

## Functional requirements

1. Operations by **anonymous principals** on **user accounts**:

* Sign up to the system and become an assistance agent.

1. Operations by **assistance agents** on **user accounts**:

* Update their profiles.

1. Operations by **administrators** on **claims**:

* List the claims in the system that are published.
* Show the details of the claims that they can list (including their tracking logs).

1. Operations by **assistance agents** on **dashboards**:

* Show their dashboards.

## Non-functional requirements

Intentionally blank.

## Testing requirements

Intentionally blank.

## Managerial requirements

1. Provide a link to a video in which you informally test requirement #8 and #9. Videos should not exceed 10 minutes in length and must be stored at the USE's facilities.

# SUPPLEMENTARY I Deliverable D04: formal testing

## Information requirements

Intentionally blank.

## Functional requirements

Intentionally blank.

## Non-functional requirements

Intentionally blank.

## Testing requirements

1. Perform five mutations in your code and report on the results.

## Managerial requirements

1. Produce a lint report.

# SUPPLEMENTARY II Deliverable D01: introduction

## Information requirements

Intentionally blank.

## Functional requirements

Intentionally blank.

## Non-functional requirements

Intentionally blank.

## Testing requirements

Intentionally blank.

## Managerial requirements

1. Produce an analysis report.

1. Produce a planning and progress report.

# SUPPLEMENTARY II Deliverable D02: data models

## Information requirements

1. The system is required to store **flight status** or **delays** that assistance agents can consult to help them with some claims. A web service must be used to populate this entity with information about flight statuses/delays. Thus, the exact data to store depends on the chosen service, and it is the students' responsibility to define them accordingly. It is also the students’ responsibility to find the appropriate service; no implicit or explicit liabilities shall be covered by the University of Seville or their individual affiliates if the students contract pay-per-use services!  The students are strongly advised to ensure that the service they choose is free of charge.

## Functional requirements

Intentionally blank.

## Non-functional requirements

Intentionally blank.

## Testing requirements

Intentionally blank.

## Managerial requirements

1. Produce an analysis report.

1. Produce a planning and progress report.

# SUPPLEMENTARY II Deliverable D03: implementing features

## Information requirements

Intentionally blank.

## Functional requirements

1. Operations by **assistance agents** on **flights status/delays**:

* List the flights statuses/delays available in the system.
* Show the details of the flight statuses/delays registered in the system.

1. Operations by **administrators** on **flights statuses/delays**:

* Populate the database with flights status/delay data.

## Non-functional requirements

Intentionally blank.

## Testing requirements

Intentionally blank.

## Managerial requirements

1. Produce an analysis report.

1. Produce a planning and progress report.

# SUPPLEMENTARY II Deliverable D04: formal testing

## Information requirements

Intentionally blank.

## Functional requirements

Intentionally blank.

## Non-functional requirements

Intentionally blank.

## Testing requirements

1. Produce as a complete test suite as possible for Requirement #29 ensuring that the API is properly mocked.

## Managerial requirements

1. Produce an analysis report.

1. Produce a planning and progress report.