# 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:** C2.054 |
| **Repository:** https://github.com/DP2-C1-054/Acme-ANS-C2 |
| **Student #2**  **ID Number:** \*\*56\*\*79R  **UVUS:**  xwg5759  **Name:**  López Pérez, Esteban  **Roles:**  Developer, Tester, Manager |
| **Date:** Sevilla July 04, 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 Al acceder a la aplicación como agent3 nos encontramos lo siguiente:

A screenshot of a computer

AI-generated content may be incorrect.

Por lo que no es posible probar el requisito siguiendo el procedimiento explicado a los estudiantes.

Es necesario cambiar los datos de populación para añadirle a esta cuenta un perfil de agente. Se accede de nuevo al sistema con un perfil de agente “agent3” vacío como se solicita en los requisitos. Se acceder al formulario para crear un claim:

A screenshot of a computer

AI-generated content may be incorrect.

Se deja vacio y al pulsar en el botón crear se produce el siguiente fallo:

A close-up of a computer screen

AI-generated content may be incorrect.

Se sale de esta cuenta de usuario y se intenta probar con la cuenta del agent1. Realizo un borrado de todos los tracking logs y claims de este agente diretamente en la BD para poder realizar las pruebas. No puedo completar la creación de una sola reclamación debido a los problemas descritos más abajo.

Esteban López Pérez – Para corregir esto se añaden datos sobre la cuenta del agent3 a assistance-agent.csv. Sólo con realizar esta acción eliminamos el error que usted muestra en la captura de arriba.

El error saltaba porque usted a la hora de probar la funcionalidad añade datos incorrectos al agent3, es decir, lo más probable es que usted no crease un employeeCode con las iniciales de este usuario, y al crearlo desde Dbeaver no podían saltar los validadores.

En resumen, al añadir un agent3 válido a su correspondiente fichero .csv se corrigen todos los problemas y se pueden probar las funcionalidades con normalidad.

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.

X Al acceder a la aplicación como agent3 nos encontramos lo siguiente:

A screenshot of a computer

AI-generated content may be incorrect.

Tengo que realizar las operaciones descritas en el requisito anterior para poder comenzar las pruebas. Creo un claim con los siguientes datos:

A screenshot of a computer

AI-generated content may be incorrect.

Accedo a los registros de seguimiento pulsando en el botón proporcionado y accedo al formulario de creación. Lo hackeo como se indica a continuación:

A screenshot of a computer

AI-generated content may be incorrect.

Al pulsar en el botón “Crear”, compruebo que es posible hackear ese campo readonly.

A screenshot of a computer

AI-generated content may be incorrect.

Lo intento de nuevo, sin realizar ningún hackeo y obtengo el siguiente resultado:

A screenshot of a computer

AI-generated content may be incorrect.

No le encuentro ningún sentido. No puede haber un error en un campo cuyo valor me proporciona la propia aplicación y que, además, como usuario normal no puedo cambiar al ser readonly.

Esteban López Pérez – Eliminando la validación correspondiente al campo de read only solucionamos tanto el problema de hackeo como el del mensaje de error innecesario y sin sentido.

## 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

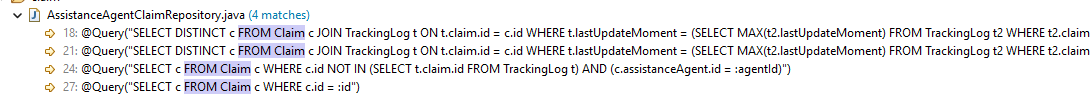
1. Create appropriate indices for your entities, if required.

X Es fácil comprobar que hay errores. Por ejemplo:

A computer screen shot of a computer code

AI-generated content may be incorrect.

El único índice que se define es redundante. Por el contrario se encuentran las siguientes consultas para la que no se ha definido ningún índice apropiado:



Esteban López Pérez – Tras revisar todos y cada uno de los repositorios del proyecto Acme-ANS-C2, se han creado nuevos índices para las entidades correspondientes al student 4, es decir, para las entidades Claim y TrackingLog.

Hay que decir también que pueden aparecer consultas relacionadas con tareas opcionales (supplementary) que podrían llegar a afectar a estas entidades, pero que no se han tenido en cuenta para la realización de estos índices.

## Functional requirements

Intentionally blank.

## Non-functional requirements

Intentionally blank.

## Testing requirements

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

X Es difícil aceptar que la suite sea completa a la vista de los problemas encontrados.

Esteban López Pérez – Tras realizar cambios y correcciones se realizan de nuevo los test para probar las funcionalidades. En primer lugar, se realizan sin índices de optimización y se recogen los resultados para el testing report. A continuación, tras añadir los índices algunos tests fallan. Se corrigen y se evalúan resultados.

Finalmente se presentan en Acme-ANS-C2 los tests que prueban las funcionalidades del Student 4 donde las entidades presentan los índices de optimización.

## 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.

X

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

* Update their profiles.

X

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).

X

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

* Show their dashboards.

X

## 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.

X

# 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.