# Requirements – Student #1

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.

|  |
| --- |
| **Group:** C3.001 |
| **Repository:** https://github.com/aaronma300604/DP2-C01-31 |
| **Student #2**  **ID Number:** 4913\*\*\*\*\*  **UVUS:**  TXH4995  **Name:**  López Ramos, Daniel  **Roles:**  analyst, developer, manager |
| **Date:** Seville October 16, 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 Mismos problemas indicados en el requisito grupal.

Corrección – Estudiante

Se crearon las tareas correspondientes faltantes de la materia para las entregas anteriores y para la tercera convocatoria. Se asignaron todas las issues a las personas correspondientes y no en el título de cada una de estas. Se adjunta un ejemplo del tablero de la tercera convocatoria:

Captura de pantalla de computadora

El contenido generado por IA puede ser incorrecto.

# MANDATORY Deliverable D02: data models

## Information requirements

1. **Airline managers** are the people responsible for managing flights. The system must handle the following information about **managers**: an **identifier number** (unique, pattern "^[A-Z]{2-3}\d{6}$", where the first two or three letters correspond to their initials), **years of experience** in the airline, his or her **date of birth** and an optional link to a **picture** that must be stored somewhere else.

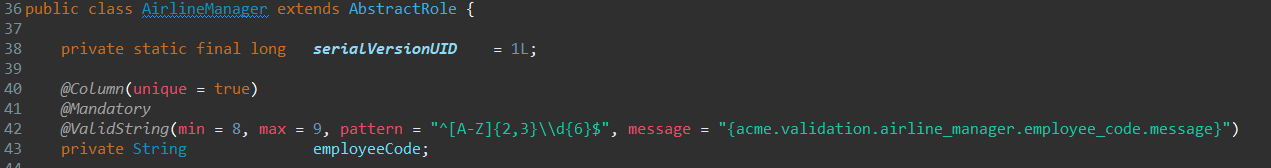
X El employee code no tiene la anotación para restringir el formato del identificador.

A screenshot of a computer program

AI-generated content may be incorrect.

Corrección – Estudiante

La validación ya se realizaba en el validador ValidManager, pero se ha añadido también la restricción con ValidString.



1. A **flight** is a scheduled journey made by airlines to transport passengers between two locations. The system must store the following data about them: a **tag** that highlights some feature of the flight such as "the fastest", "the cheapest" (up to 50 characters), an **indication** on whether it requires self-transfer or not, a **cost**, an optional **description** (up to 255 characters). It also stores information that comes from its **legs**, namely: a **scheduled departure** and a **scheduled arrival** that depends on the first scheduled departure moment of the first leg and the scheduled arrival moment of the last leg, the origin and destination **cities** that comes from the city of the airports to which first and last leg refers to, and finally, the **number of layovers**.

X No es necesario incluir la airline en el flight, porque un flight tiene varias legs y cada leg está asociada a una aircraft, que a su vez pertenece a una aerolínea de modo que en un flight pueden intervenir varias aerolíneas, que no es lo que está modelado, porque se ha puesto que un flight solo puede tener una aerolínea.

Corrección – Estudiante

Se ha eliminado la relación con airline en la entidad, así como un índice que referenciaba a este. Además, se han corregido todos los problemas que generaba la eliminación de esta restricción para garantizar el correcto funcionamiento del proyecto. Para ello se elimina esta información en los csv de flight, las referencias en querys a aerolinea de un vuelo se cambia por la aerolinea de un aircraft de una leg y se eliminan los desplegables de aerolineas en los formularios de flight.

1. A flight aggregates several **legs**. A leg represents an individual segment of a flight, typically corresponding to layovers or connections. The system must store the following data for each leg: a unique **flight number** (composed of the airline's IATA code followed by four digits, unique), a **scheduled departure** and a **scheduled arrival**, a **duration** in hours, a **status** ("ON TIME", "DELAYED", "CANCELLED", "LANDED"). Additionally, each leg must track the **departure** and **arrival** **airports,** as well as the **aircraft** that will be deployed for the journey.

X No es necesario incluir el manager en las legs.

Corrección – Estudiante

Al igual que flight se eliminó la relación de manager en la entidad y sus correspondientes índices. Se cambiaron las referencias al atributo manager de las legs por el atributo de manager del flight correspondiente, se eliminó la información de los manager en el csv de leg, así como otras correcciones para el correcto funcionamiento del proyecto.

## 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 **manager** accounts with credentials “**manager1**/**manager1**” and “**manager2**/**manager2**”. Create an additional manager account with credentials “**manager3/manager3”** that represents a manager 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 **managers** on their **flights**:

* List the flights that they have created and show their details.
* Create, update, or delete their flights. Flights can be updated or deleted as long as they have not been published. For a flight to be published, it must have at least one leg, and all its legs must have been published.

X Si cuando se crea un flight, solo se puede indicar para ese flight la aerolínea del manager logueado y éste sólo tiene una aerolínea, ¿para qué se pone en el formulario la lista desplegable con un solo elmento?

A screenshot of a video

AI-generated content may be incorrect.

Si hago clic en publicar, se indica que no se puede publicar pero el formulario cambia a formato readonly:

A screenshot of a computer

AI-generated content may be incorrect.

Si se renderiza la interfaz en español, no acepta “EUR” como divisa, pero en inglés sí:

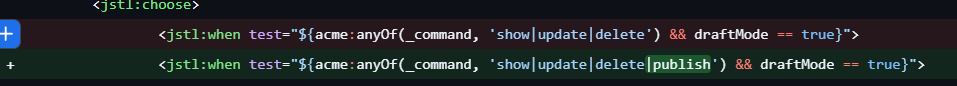
A screenshot of a computer

AI-generated content may be incorrect.

Si se publican las legs de un flight y luego el flight se elimina, las legs también son eliminadas. Las legs ya no pueden ser eliminadas porque están publicadas, tal y como se indica en el siguiente requisito. Por tanto, si un vuelo tiene ya legs asignadas y publicadas, el vuelo no puede ser eliminado.

Corrección – Estudiante

Como se comentó anteriormente se ha eliminado el desplegable de las aerolíneas en los formularios de flight.

Se corrigió el error en el archivo jsp que dejaba el formulario en readonly tras el fallo en la publicación. 

Se corrigió la detección del currency en la función validate de los servicios pertinentes. Captura de pantalla de un celular

El contenido generado por IA puede ser incorrecto.

1. Operations by **managers** on their **legs**:

* List the legs in their flights ordered by their moments (no other sorting criteria is allowed).
* Show the details of their legs.
* Create and publish a leg.
* Update or delete a leg as long as it is not published.

X Se permite publicar dos legs usando la misma aircraft, saliendo del mismo y llegando al mismo aeropuerto y solapándose las legs en el tiempo dentro de un mismo vuelo. No se ha comprobado prácticamente ninguna regla de negocio. A continuación muestro dos legs publicadas que se solapan en el tiempo, que usan la misma aircraft y cuyo aeropuerto de salida y llegada dentro de una misma leg son los mismos:

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Además, la duración debería de ser un campo que se calcula restando la fecha de llegada y la fecha de salida, no es un campo que introduzca el usuario.

Corrección – Estudiante

Se agregaron las restricciones correspondientes en la función validate de los servicios pertinentes.

Para el cálculo de la duración se cambio el atributo duration de la entidad leg a un atributo derivado que calcula la duración en función de las horas de salida y llegada. Se cambiaron las referencias al antiguo atributo por este nuevo atributo derivado.

Texto

El contenido generado por IA puede ser incorrecto.

Segunda convocatoria:

Cuando intento crear como manager3/manager3 una leg con los datos que aparecen a continuación (teniendo en cuenta que no hay aircrafts para seleccionar), el sistema lanza una excepción, en vez de devolver los errores de validación pertinentes. En definitiva, si el campo "aircraft" se deja vacío ("---"), salta una excepción:

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer error message

AI-generated content may be incorrect.

Por lo que se para aquí la evaluación del proyecto en esta segunda convocatoria.

Si creo una aircraft para la aerolínea del manager3

Corrección – Estudiante

Se corrigió el error de validación de tal forma que ya no saltan errores por valores nulos. A continuación, se muestra la corrección:

Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

El contenido generado por IA puede ser incorrecto.

## 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 **manager** **dashboards** with the following **indicators**:

* The ranking the manager achieves based on their years of experience. The more years of experience, the higher the position in the ranking.
* The number of years to retire, assuming that they retire at 65.
* Ratio of on-time and delayed legs.
* The most popular and less popular airports within their flights. An airport is popular as long as it has been an origin or destination for many flights.
* The number of legs of their flights grouped by their status.
* The average, minimum, maximum, and standard deviation of the cost of their flights.

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.

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 a manager.

X

1. Operations by **managers** on **user** **accounts**:

* Update their profiles.

X

1. Operations by **any principals** on **flights**:

* List the flights in the system that are published.
* Show the details of the flights that they can list (including their legs).

X

1. Operations by **managers** on **manager dashboards**:

* Show their manager 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 Requirements #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.

X

1. Produce a planning and progress report.

X

# SUPPLEMENTARY II Deliverable D02: data models

## Information requirements

1. The system must track **weather conditions**. A web service must be used to populate this entity with information about weather conditions. 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 **any principals** on **weather conditions**:

* List the forecast weather conditions and show their details.
* List the flights that took place in the last month under bad weather conditions.

1. Operations by **administrators** on **weather conditions**:

* Populate the database with forecast weather conditions.

## 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.