

Requirements – Group

Please, fill in the following form and make sure that you have ticked the requirements that you consider valid, save this document, and attach it to every deliverable. 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: C1.047

Repository: <https://github.com/Cargarmar18/Acme-SF-D01>

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Date: Seville February 18, 2024

MANDATORY Deliverable D01: introduction

Information requirements

Intentionally blank.

Functional requirements

Intentionally blank.

Non-functional requirements

Intentionally blank.

Testing requirements

Intentionally blank.

Managerial requirements

- 1) 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-SF-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 subsequent group or individual deliverable for it to be considered valid.

✓

- 2) Produce a chartering report.

✓

MANDATORY Deliverable D02: data models

Information requirements

- 3) A **claim** is an opposition or contradiction posted by anyone that is made to something considered to be unjust. The system must store the following data about them: a **code** (pattern "C-[0-9]{4}"), not blank, unique), an **instantiation moment** (in the past), a **heading** (not blank, shorter than 76 characters), a **description** (not blank, shorter than 101 characters), the **department** to which it is addressed (not blank, shorter than 101 characters), an **optional email address**, and an **optional link**.

- 4) An **objective** allows an authenticated principal to define a goal or end towards which the actions or operations of a specific project are directed. The system must store the following data about them: an **instantiation moment** (in the past), a **title** (not blank, shorter than 76 characters), a **description** (not blank, shorter than 101 characters), a **priority** ("Low", "Medium", "High"), a **status** to indicate whether it is critical or not, a **duration** (must start at any moment after the instantiation moment), and an **optional link** with further information.

- 5) A **risk**, positive or negative, is a fact that has a certain impact on the development of a project and must be considered by the administrator. The system must store the following data about them: a **reference** (pattern "R-[0-9]{3}"), not blank, unique), an **identification date** (in the past), an **impact** (positive real number), a **probability**, a **value** (result of the multiplication of impact and probability), a **description** (not blank, shorter than 101 characters), and an **optional link** with further information.

- 6) A **notice** is a message posted by an authenticated principal. The system must store the following data about them: an **instantiation moment** (in the past), a **title** (not blank, shorter than 76 characters), an **author** (not blank, shorter than 76 characters), a **message** (not blank, shorter than 101 characters), an **optional email address**, and an **optional link**. The author must be computed as follows: "<username> - <surname, name>", where "<username>" denotes the username of the principal who has posted the note and "<surname, name>" denotes his or her full name.

- 7) A **banner** allows administrators to advertise products, services, or organisations. The system must store the following data about them: an **instantiation/update moment** (in the past), a **display period** (must start at any moment after the instantiation/update moment and must last for at least one week), a link to a **picture** that must be stored somewhere else, a **slogan** (not blank, shorter than 76 characters), and a **link** to a target web document.

Functional requirements

Intentionally blank.

Non-functional requirements

Intentionally blank.

Testing requirements

- 8) Produce initial data to cold start your project; it must include an administrator account with credentials "administrator/administrator". Produce assorted sample data to test your requirements; it must include two administrator accounts with credentials "administrator1/administrator1" and "administrator2/administrator2".

Managerial requirements

Intentionally blank.

MANDATORY Deliverable D03: implementing features

Information requirements

Intentionally blank.

Functional requirements

9) Operations by any principal on **claims**:

- List the **claims** and show their details.
- Publish a **claim**. This operation requires confirmation because **claims** cannot be updated or deleted.

10) Operations by any principals on **banners**:

- Display any of them randomly, as long as its display period is active; the banners must be shown in every page as little intrusively as possible.

11) Operations by administrators on **banners**:

- List the banners and show their details.
- Create, update, or delete a banner.

Non-functional requirements

12) Moments, money amounts, and Booleans must be internationalised when they are shown. Other kinds of data are not expected to be internationalised. This requirement must be fulfilled in this and every subsequent group or individual deliverable for it to be considered valid.

Testing requirements

Intentionally blank.

Managerial requirements

Intentionally blank.

MANDATORY Deliverable D04: formal testing

Information requirements

Intentionally blank.

Functional requirements

Intentionally blank.

Non-functional requirements

Intentionally blank.

Testing requirements

13) Produce as a complete test suite as possible for Requirement #11.

Managerial requirements

14) Produce a testing report.

SUPPLEMENTARY Deliverable D01: introduction

Information requirements

Intentionally blank.

Functional requirements

Intentionally blank.

Non-functional requirements

- 15) The system must be internationalised in English and Spanish. Other mainstream languages are welcome, but not required. This requirement must be fulfilled in this and every subsequent group or individual deliverable for it to be considered valid.

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Testing requirements

Intentionally blank.

Managerial requirements

- 16) Produce an analysis report regarding this deliverable.

✓

- 17) Produce a planning and progress report.

✓

- 18) Produce a report on how you have set up your development configuration. We are not asking you to reproduce the guidelines to set it up, but to make it clear that you have followed them, and you have your development configuration ready to work.

✓

- 19) Produce a report on what you knew about the architecture of a WIS before this subject.

✓

- 20) Produce a report on what you knew about testing a WIS before this subject.

✓

SUPPLEMENTARY Deliverable D02: data models

Information requirements

21) The system configuration must include the following initial data:

- A system currency, which must be initialised to “EUR”.
- A list of accepted currencies, which must be initialised to “EUR”, “USD”, and “GBP”.

22) The system must handle administrator dashboards with the following indicators: total number of principals with each role; ratio of notices with both an email address and a link; ratios of critical and non-critical **objectives**; average, minimum, maximum, and standard deviation of the **value** in the **risks**; average, minimum, maximum, and standard deviation of the number of **claims** posted over the last 10 weeks.

Functional requirements

Intentionally blank.

Non-functional requirements

Intentionally blank.

Testing requirements

Intentionally blank.

Managerial requirements

23) Produce an analysis report.

24) Produce a planning and progress report.

25) Produce a UML domain model.

SUPPLEMENTARY Deliverable D03: implementing features

Information requirements

Intentionally blank.

Functional requirements

26) Operations by administrators on the system configuration:

- Show the system configuration.
- Update the system configuration.

27) Operations by authenticated principals on **objectives**:

- List the **objectives** and show their details.

28) Operations by administrators on **objectives**:

- Post an **objective**. This operation requires confirmation because bulletins cannot be updated or deleted.

29) Operations by authenticated principals on **risks**:

- List the **risks** in the system and show their details.

30) Operations by administrators on **risks**:

- List the **risks** in the system and show their details.
- Post, update, or delete a **risk**.

31) Operations by authenticated principals on **notices**:

- List the **notices** that are not older than one month and show their details.
- Post a **notice**. This operation requires confirmation because **notices** cannot be updated or deleted.

32) Operations by **administrators** on **administrator** dashboards:

- Show their **administrator** dashboards.

Non-functional requirements

33) The system must show money amounts as they are entered by the users, but also their corresponding money exchanges according to the system currency if their known exchange ratios are recent. It is the students' responsibility to find the appropriate exchange-rate service; no implicit or explicit liabilities shall be covered by the University of Seville or their individual affiliates if the students hire pay-per-use services! This requirement must be fulfilled in this and every subsequent group or individual deliverable for it to be considered valid.

34) The system must prevent the principals from storing any data that can be considered spam. A piece of text is considered spam if the number of spam terms exceeds a predefined spam threshold. The default list of spam terms includes the following ones: "sex", "viagra", "cialis", "one million", "you've won", "nigeria", and their corresponding translations into the languages considered for internationalisation; the default spam threshold is 10%. Note that the previous default values can be changed at will by the administrators. Realise that a term must be considered spam irrespective of its case and the blanks in between its words; for instance, "one_million" is a spam term that matches "one_million", "ONE_MILLION", "OnE_mILLiOn", or "One_ Million"; it doesn't match "One_Millionaire", "One_or_two_millions", or "One_sexy_million", though. The spam detector must be reusable across different projects; that is: it must be implemented as an independent project that must be packaged into a reusable dependency. Do not forget to deliver your spam detector project so that it can also be evaluated or, otherwise, this requirement shall not be considered valid. This requirement must be fulfilled in this and every subsequent group or individual deliverable for it to be considered valid.

Testing requirements

Intentionally blank.

Managerial requirements

35) Produce an analysis report.

36) Produce a planning and progress report.

37) Produce a lint report.

SUPPLEMENTARY Deliverable D04: formal testing

Information requirements

Intentionally blank.

Functional requirements

Intentionally blank.

Non-functional requirements

Intentionally blank.

Testing requirements

Intentionally blank.

Managerial requirements

38) Produce an analysis report.

39) Produce a planning and progress report.