

# Quality Management and Improvement

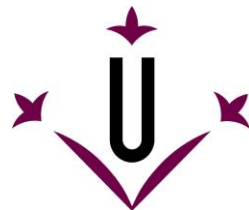
Joint Project – Deliverable 1

*To design a quality plan*

*Mandatory!*

*2020/21*

Juan Enrique Garrido Navarro  
juanenrique.garrido@udl.cat



**Universitat de Lleida**  
Departament d'Informàtica  
i Enginyeria Industrial

# Joint Project – Deliverable 1

## Introduction

- **Objective** -> *To design a quality plan.*

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- **Domain:**
  - Joint Project developed together with other subjects in the 3rd course of the "Software Engineering" specialization:
    - » Quality Management
    - » Process Models
    - » Requirements Engineering

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Software quality management and improvement.

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    - » Virtual Campus -> document
    - » Oral presentation

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27<sup>th</sup> April 2021 11:10

English!



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English!

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13:00

English!

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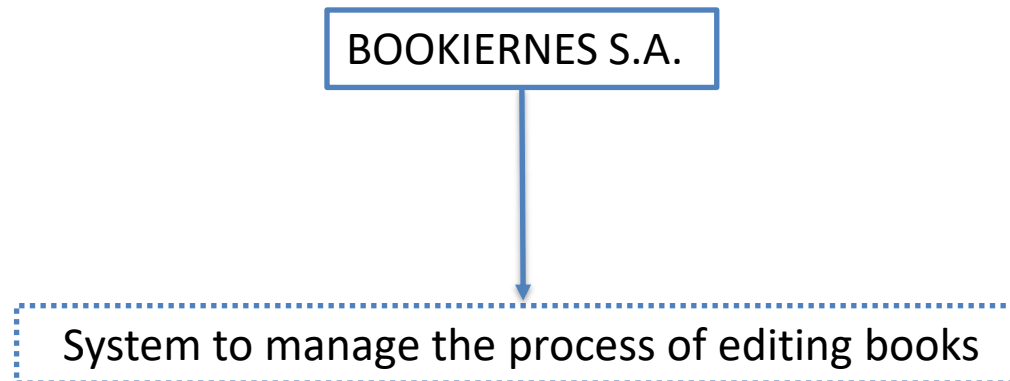
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BOOKIERNES S.A.

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# Joint Project – Deliverable 1

## Introduction

- **Objective** -> *To design a quality plan.*

### TASKS

To design and write a **quality plan**

1

**Mandatory!**

To make **an oral presentation**  
**(20-30 minutes)**

2

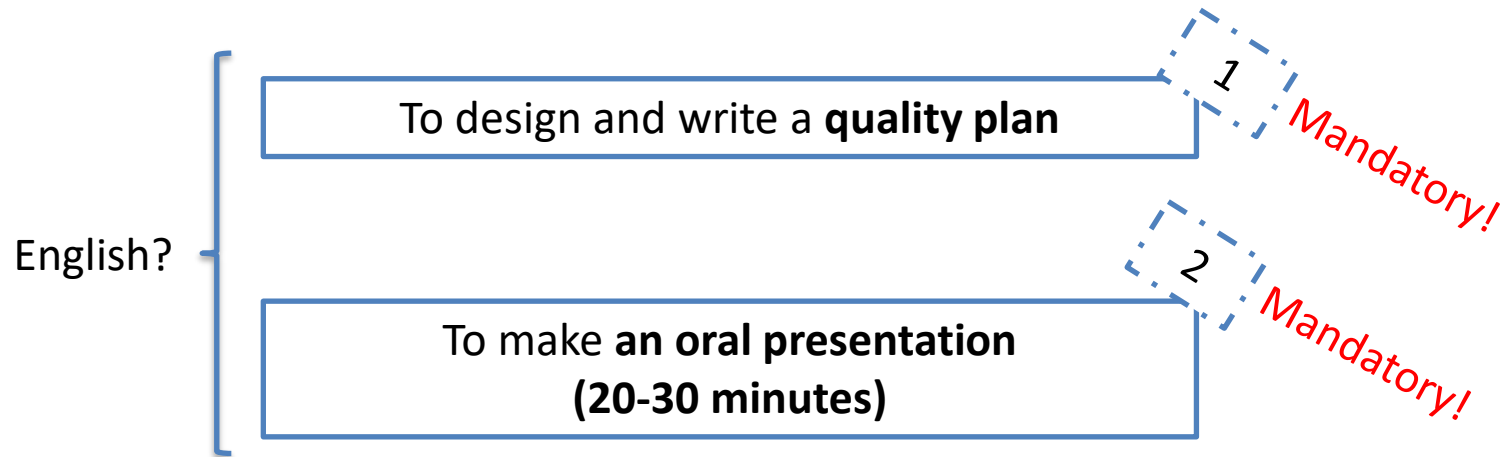
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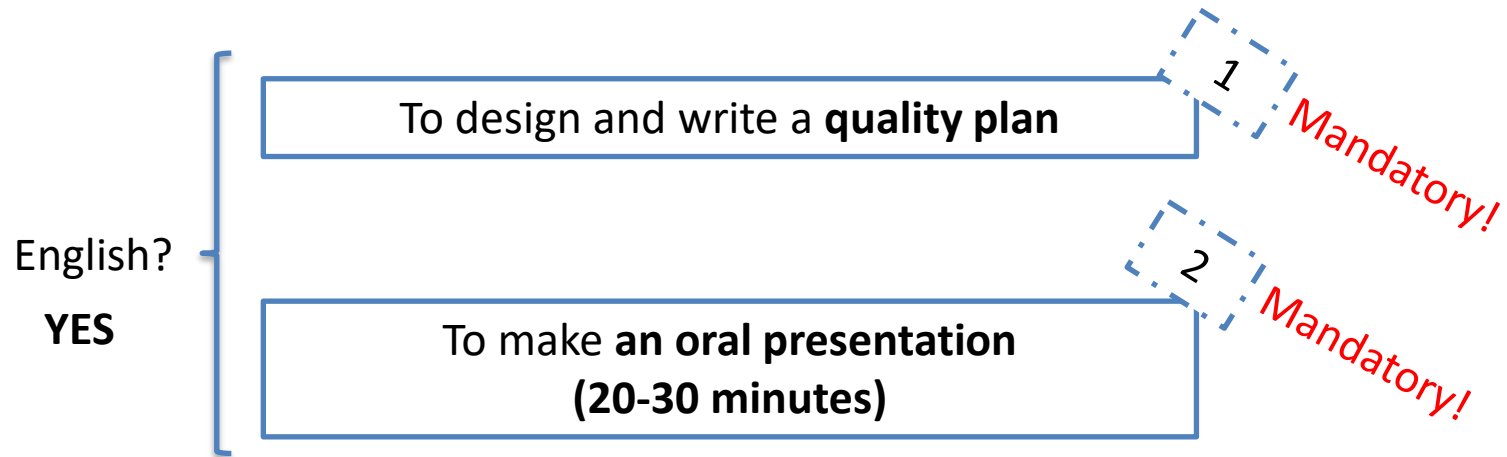


# Joint Project – Deliverable 1

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- **Objective** -> *To design a quality plan.*

### TASKS



# Joint Project – Deliverable 1

## Guidelines - Suggestions

### QUALITY PLAN

[Galin, 2004]

1

List of quality goals

The quality goals should reflect the major acceptance criteria indicated in the customer's requirement document. As such, quality goals serve as measures of the successful achievement of the customer's quality requirements.

Galin, D. (2004): "Software Quality Assurance. From theory to implementation". Pearson Education Limited, 2004.

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Qualitative and quantitative. Preferred?

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## Guidelines - Suggestions

### QUALITY PLAN

[Galin, 2004]

1

List of quality goals

Quantitative measures are usually preferred to qualitative measures when choosing quality goals.

**Why?**

Quantitative measures provide the team with more objective assessments of software performance during the process.

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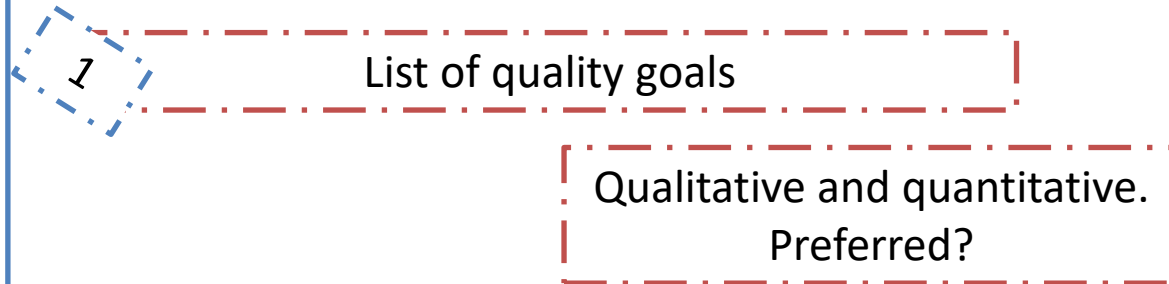
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## Guidelines - Suggestions

### QUALITY PLAN

[Galin, 2004]



Qualitative	Quantitative
The system should be very reliable	The availability should exceed 99.5%. The downtime should not exceed 30 minutes per week
The system should operate continuously	The system's recovery time should not exceed 10 minutes in 99% of cases of failure

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## Guidelines - Suggestions

### QUALITY PLAN

[Galin, 2004]

1

List of quality goals

2

Review activities

Listing of all planned activities: *design reviews, code inspections, etc.*

For each activity:

- Scope
- Type of review activity
- Schedule (with priority)
- Specific procedures to be applied
- Who is responsible for carrying out the review activity?

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## Guidelines - Suggestions

### QUALITY PLAN

[Galin, 2004]



The plan should provide a complete list of planned sw test. For each test:

- The unit, integration or the complete system to be tested
- The type of testing activities to be carried out
- The planned test schedule
- The specific procedures to be applied
- Who is responsible for carrying out the test?

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# Joint Project – Deliverable 1

## Guidelines - Suggestions

### QUALITY PLAN

[Galin, 2004]

- 1 List of quality goals
- 2 Review activities
- 3 Software tests
- 4 Acceptance tests for sw externally developed

A complete list of acceptance test planned for externally developed software should be provided within the quality plan.

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## Guidelines - Suggestions

### QUALITY PLAN

[Galin, 2004]

- 1 List of quality goals
- 2 Review activities
- 3 Software tests
- 4 Acceptance tests for  
sw externally developed
- 5 Configuration management

The quality plan should specify configuration management tools and procedures, including:

- Software change control procedures
- Dates for release of versions
- Documentation control
- Communication (client)

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## Guidelines - Suggestions

### QUALITY PLAN



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## Guidelines - Suggestions

### QUALITY PLAN



In some cases . . . checklists, templates . . .



- **To submit a PDF with the work.**
- **The document should be appropriate: cover, table of contents, sections, figures, references, etc.**
- **An introduction is needed, before the Quality Plan:**
  - **Project**
  - **What's a Quality Plan?**
  - **Structure / Sections of the Quality Plan**
  - **Members**
  - **...**

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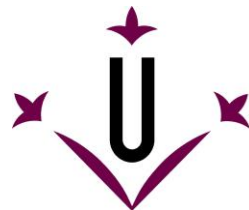
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