

## Final presentation script

### Legend of speakers

Jorge

Ángel

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### 0.- COVER

#### Slide 1

Hi, we are Ángel Casanova, Rodrigo Juez, Pablo Soëtard and Jorge Blanco.

### 1.- INTRODUCTION

#### Slides 2, 3

We are going to talk about the project definition, then an estimation of the resources, the planning and finally how are we going to monitor everything we do, it is a lot, so let's get right into it!

### 2.- PROJECT DEFINITION

#### Slide 5

After going through analysis and design phases we obtained 5 subsystems where we covered all the requirements, these are:

#### 1.- Team Management

The requirements fulfilled are related to creation of teams, adding a student to the team and handling preferences between others.

#### 2.- Meeting Scheduling

The Meeting Scheduling Subsystem allows students to see pending or completed teamwork meetings.

#### 3.- Meeting Management

The Meeting Management Subsystem will handle the requirements regarding creating meetings, having a meeting date agreement mechanism, and managing the rooms that make up the meeting infrastructure.

#### 4.- Meeting-making

The Meeting-making subsystem will manage the automatic delivery of practical assignments to Moodle, provides an in-call toolbox for students, that will include all the necessary tools that the student may need during the call.

#### 5.- Statistics Management Subsystem

The Statistics Management Subsystem will cover professors' textual and graphical reports. These reports must contain enough information for teachers to evaluate the scope and complexity of the practical assignments.

### 3.- PROJECT ESTIMATION

#### Slide 7

The project estimation has been calculated using an **empirical technique** based on Function Points and adjusted with its complexity factor.

In the system data is transferred online in both directions between the server and the client, it has a high **Distributed Data Processing** complexity. As it is an interactive web portal, we will need an admissible time response and the system will have most of its inputs from online user interactions, hence it has some **Performance** complexity and a lot of **On-line Data Entries**.

On the other hand, as we have an adjustment factor of 1, we get the same amount of UFP than AFP, resulting in a total of 289 AFP.

#### Slide 8

In this table we can see different estimations for the project based on its adjusted function points, we would need an average of 20 people per month working on our project and it would take around 418 days. We have chosen to develop the system on an OO Language and based on the metrics from an internal survey of our company it takes around 29 LOC and 0.5 pages of documentation per AFP, resulting in more than 8K LOC and 145 documentation pages.

### 4.- PROJECT PLANNING

#### Slide 10

We have divided the whole project in three increments, and we have calculated, using Microsoft Project, 155, 131 and 42 days, respectively. We managed to reduce the initial days estimated thanks to doing two subsystems at the same time per increment.

In total we need 328 days for finishing.

#### Slides 11, 12, 13

Here we can see which kinds of worker handle which tasks.

Regarding the staff organization we have both junior designers in one subsystem, while the senior designer has a whole subsystem as it works faster.

The senior designer will work side by side with the juniors, this way he can help them and try to avoid issues as much as possible.

#### Slide 14

Here we can see the **salary distribution and total working hours of each worker.**

The working schedule will be **Monday to Friday working 40 hours per week.**

We are going to need some acquisitions of workstations and software, and fees will be charged for other equipment.

#### Slide 15

About the cost's distribution per increment, we can clearly see that it is highly related with its duration.

That is why increments 1 and 2 share most of the budget while increment 3 is the shortest one, since it is the last one is where we are going to have less people working.

The 1<sup>st</sup> bar is all the common costs to all the increments.

#### Slide 16

We also followed the quality management plan in which we specified the analytical measurements, like revisions at the end of each phase, dynamic measurements, like the testing phase and then some organizational and humane constructive measurements to avoid risks.

We also defined risk management plans where identified the potential risks and thanks to revisions and meetings will be able to quickly course correct. These risks are the usual such as personal rotation, delaying more than expected, technical difficulties, as we have already explained in previous sections.

## 5. PROJECT MONITORING AND CONTROL PROCEDURE

### Slide 18

The main goal of the progress monitorization is to provide an objective view of the project progress in terms of requirements and schedule, in respect to the initial estimations. To do so, we are going to establish meetings with the development team, and with the client each time we achieve a milestone and at the end of each increment, this is to be able to pass to the next phase.

We will develop a software configuration plan at the beginning of the analysis phase, and once an element becomes baseline, the project manager must approve or reject any modification that is proposed for that element.

### Slide 19

We have four milestones in the project, almost at the end of each phase, when we are going to do a revision of the work performed. We can also see who is the responsible of each revision (the analyst for analysis, integration and installation, and the senior designer for design), as well as the documents obtained at the end of each milestone.

After each increment we will have a delivery to you, the client, with all the documents and code generated until that point.

The tools used are Gantt diagram, burndown schemas and meetings with the client to revise the progress.

For coordination and monitoring between the team **members we are going to use Slack**, thanks to its excellent capabilities for communication and organization.

### Slide 20

For guaranteeing that all the requirements are fulfilled, we have developed a testing plan. This plan contains dynamic tests such as black box for all the modules and white box for two.

As we have a limited estimate, we cannot afford to do white box testing in every module. So, we have decided to carry out white box testing only on the modules related with the Meeting Scheduling and Statistics Management subsystems, since they are more connected and are smaller.

## 6.- GENERAL REFLECTION ASPECTS

### Slide 22

#### Difficulties encountered.

It was **difficult to find a good working schedule as well as good tools** for doing and sharing the work between us, but as we were progressing, we learnt the best way to solve this problem, using Google Docs and Microsoft Office at the same time.

#### Improvable aspects

Some things we should improve, is to **pay more attention when reviewing** the documents before uploading, since we have had some errors that could have been easily corrected.

#### Acquired knowledge.

We have learnt how to **write technical formal documentation** such as a viability plan, project estimations like workdays using Gantt Diagrams, using function points, and a risk plans as well as using the correct tools for it. And of course, we learnt how to be better at teamwork.

## Cohesion and teamwork

We have tried to use the **same templates** that we were given along with the assignment, if possible.

To perform an efficient team workflow, we have tried that **all the members** of the team where **available on all the working session** to ensure communication and effective collaborative work.

## 7.- SPECIFIC REFLECTION ASPECTS

### Slide 24

In order to guarantee the **quality** of the project, we downloaded the online versions of the documents to fix many bugs, Jorge mainly did that part.

Regarding our **work procedure**, we held meetings to determine how to face it. In those meetings we divided the work. And then revised each other's.

Regarding the **team management**, each of us performed a role, Elena was the customer representative, Jorge the Project Documentation Manager, Pablo is the Project quality manager and Rodrigo and I (Angel) were the project leader and head, respectively.

Individual **or personal contribution**.

- **Jorge:** I tried to revise grammar and coherence errors, by reading my own work and the one of my colleagues, as well as to give, maintain and correct the format.
- **Pablo:** I tried to coordinate the team to parallelize and optimize the work schedules as much as possible.
- **Rodrigo:** I tried keeping everything organized and knowing what part went where, trying to maintain a quality in the project.
- **Ángel:** I have tried to properly explain everything that I have done to make it easy for my partners to understand it.

## 8.- CONCLUSION

### Slide 26

To sum it up, we have designed a plan for developing and monitoring this software product using different techniques such as revisions, function point estimation and monitoring. We have estimated that it will take 328 working days and will have a total cost of more less 190,000€.

Is there any question?