GOI ESKOLA
POLITEKNIKOA
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SUPERIOR

MONDRAGON
UNIBERTSITATEA

LOGL4S

MILESTONE 0 – PROJECT MANAGEMENT

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POPBL5 – TEAM 4

DEGREE OF COMPUTER

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CONTENT

1. PLANNING OF THE PROJECT

We are going to use “Scrum” starting from the practical test run and our basic knowledge. Our goal is to improve and polish our knowledge on the methodology applying on this project.

1.1 MEETINGS

The whole project process will be from 3 sprints (regarding final sprint). Each 2 weeks long. The Sprint are:

1. Sprint 1 until 13 December
2. Sprint 2 until 10 January
3. Sprint 3 until 22 January

We will use the different meetings from Scrum methodology to plan out project. Below is explained how each meeting is going to be developed and what would be done for analyze each of it.

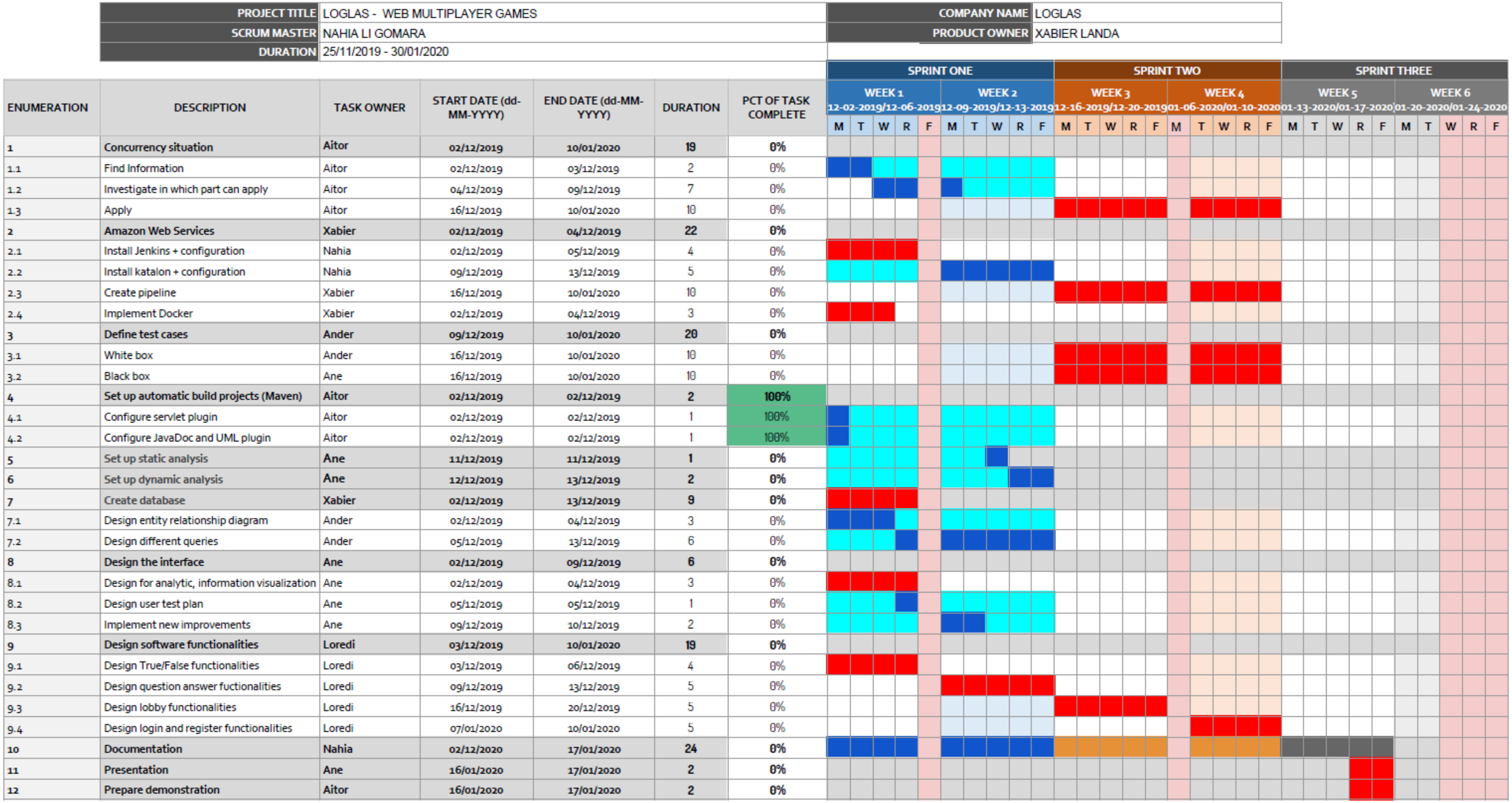
During our planning, the backlog refinement meeting would be the first event we will have. In this meeting, we will know exactly which are the customer’s requirements and which of them are the most important ones. With these requirements, we will make the product backlog items using story points in order to know the importance of them. We already know that this backlog is not going to be the definitive one, due to the changes that will occur during our project. Moreover, it could happen that we do not make all the activities we had planned, or we can make some changes in the planning, such as, we can add new tasks, or dedicate more or less time to an activity…. All these changes will have an impact in our initial planning.

According to each sprint (3 sprints in this case, one every two weeks), we are going to have a daily Sprint meeting. In this meeting we decide what to do in each sprint and define the status of the project after each sprint deadline. For that, we will consider the priority of each activity we have already planned.

We are also going to make a daily planning meeting for each day of the sprint. For that, we will speak about what to do each day and which are the activities that we have already done. Moreover, we would see the issues we have, or the problems that have been during the development of the project. In order to solve these problems, we will take different decisions to redirect the problem.

After each sprint, we have planned to do two different meetings: “Review meeting” and “Retrospective meeting”. The first one will analyze the project status with the product owner, who can share a review with all the team. That review will be used to have a global vision about the product. According to the retrospective meeting, it will be used to analyze how we did the process,
i.e. how we went in the sprint as a group, improving coordination, and seeing what failures we had, being able to improve them as a group for next time.

1.2 GANTT DIAGRAM



POPBL5 - Gantt Diagram

PROJECT TITLE	LOGLAS - WEB MULTIPLAYER GAMES	COMPANY NAME	LOGLAS
SCRUM MASTER	NAHIA LI GOMARA	PRODUCT OWNER	XABIER LANDA
DURATION	25/11/2019 - 30/01/2020		

ENUMERATION	DESCRIPTION	TASK OWNER	START DATE (dd-MM-YYYY)	END DATE (dd-MM-YYYY)	DURATION	PCT OF TASK COMPLETE
1	**Concurrency situation**	Aitor	02/12/2019	10/01/2020	19	0%
1.1	Find Information	Aitor	02/12/2019	03/12/2019	2	0%
1.2	Investigate in which part can apply	Aitor	04/12/2019	09/12/2019	7	0%
1.3	Apply	Aitor	16/12/2019	10/01/2020	10	0%
2	**Amazon Web Services**	Xabier	02/12/2019	04/12/2019	22	0%
2.1	Install Jenkins + configuration	Nahia	02/12/2019	05/12/2019	4	0%
2.2	Install katalon + configuration	Nahia	09/12/2019	13/12/2019	5	0%
2.3	Create pipeline	Xabier	16/12/2019	10/01/2020	10	0%
2.4	Implement Docker	Xabier	02/12/2019	04/12/2019	3	0%
3	**Define test cases**	Ander	09/12/2019	10/01/2020	20	0%
3.1	White box	Ander	16/12/2019	10/01/2020	10	0%
3.2	Black box	Ane	16/12/2019	10/01/2020	10	0%
4	**Set up automatic build projects (Maven)**	Aitor	02/12/2019	02/12/2019	2	100%
4.1	Configure servlet plugin	Aitor	02/12/2019	02/12/2019	1	100%
4.2	Configure JavaDoc and UML plugin	Aitor	02/12/2019	02/12/2019	1	100%
5	Set up static analysis	Ane	11/12/2019	11/12/2019	1	0%
6	Set up dynamic analysis	Ane	12/12/2019	13/12/2019	2	0%
7	Create database	Xabier	02/12/2019	13/12/2019	9	0%
7.1	Design entity relationship diagram	Ander	02/12/2019	04/12/2019	3	0%
7.2	Design different queries	Ander	05/12/2019	13/12/2019	6	0%
8	**Design the interface**	Ane	02/12/2019	09/12/2019	6	0%
8.1	Design for analytic, information visualization	Ane	02/12/2019	04/12/2019	3	0%
8.2	Design user test plan	Ane	05/12/2019	05/12/2019	1	0%
8.3	Implement new improvements	Ane	09/12/2019	10/12/2019	2	0%
9	**Design software functionalities**	Loredi	03/12/2019	10/01/2020	19	0%
9.1	Design True/False functionalities	Loredi	03/12/2019	06/12/2019	4	0%
9.2	Design question answer fuctionalities	Loredi	09/12/2019	13/12/2019	5	0%
9.3	Design lobby functionalities	Loredi	16/12/2019	20/12/2019	5	0%
9.4	Design login and register functionalities	Loredi	07/01/2020	10/01/2020	5	0%
10	**Documentation**	Nahia	02/12/2020	17/01/2020	24	0%
11	**Presentation**	Ane	16/01/2020	17/01/2020	2	0%
12	**Prepare demonstration**	Aitor	16/01/2020	17/01/2020	2	0%

2. PROJECT ORGANIZATION

We are going to going deep by points our project organization.

2.1 OBJETIVES

- The general objective is to develop web based multiplayer games using a remote server, developed with automated building tool, concurrent based integration and a correct visual representation of our data, all together carried out by scrum project management methodology.

- There are several specific objectives, mostly coming from our rubric table.

- In order to meet the basic objectives, we've considered the following specifications:

    - Clients (Users and admins) will be connected using their web browser (Mobile, tablet and/or PC web browsers).

    - The questions should be managed by Administrators. The application should provide the needed infrastructure and functionalities for them to Create/Read/Update/Delete questions.

    - They are going to be two types of questions:
        - Multiple choice answers (A, B, C, D)
        - True/False answers

    - According to the game it is going to have:
        - Log in
        - Lobby
        - The possibility to join to the room as a viewer or as a player

- Moreover, it would have different rules such as that the game will start when the room has the maximum number of players, you can join to the game as a viewer when you want.

- Definition of done: a task will be catalogued as "done" when team members are able to answer the question asked when the item was created. For example: Implement login functionality. Is the user able to login successfully? ¿Yes? Then the task is catalogues as "Done".

2.2 ROLES

Scrum Master:

It will assist the team in all meetings and ensure that scrum principles are being met. It is a person who makes sure that the methodology is being carried out correctly. It's the person who is supporting the team. It focuses on coordinating the team and ensuring that scrum is met but does not provide technical solutions. In our project, the scrum master will be Nahia Li Gómara.

Team:

The team takes care of the technical development of the project. It is self-management, so, the scrum master does not play the role of a project manager. The team must be multidisciplinary and multi-skilled, polyvalent. In that way, each team member can contribute in different project faces.

Our team is composed by:

- Loredi Altzibar
- Nahia Li Gomara
- Aitor Landa
- Xabi Landa
- Ander Olaso
- Ane Sajeras

As we can see in the team members the product owner and scrum master will contribute as a team member, so they are going to develop the technical part too.

Product Owner:

It is the person responsible for achieving the highest product value for customers, users and other stakeholders. He is responsible for the management of the product related to a defined product vision, the prioritization of work, the financing of the project. Our product owner is going to be Xabier Landa.

2.3 TOOLS

Physical Scrum Board:

For manage our project using Scrum method, we have agreed to use a physical scrum board, which is changed all days.

2.4 BURNDOWN CHART

- The burndown chart will be modified after each day of sprint using an Excel template.

- This chart will show, at a glance, the amount of work remaining during a sprint.

2.5 PRODUCT BACKLOG ITEMS

Story points (effort): 1-5
Importance: 1-5
SPRINT 0 - DOCUMENTATION
SPRINT 1 – DOCUMENTATION
SPRINT 2 - DOCUMENTATION

1. Concurrency situation (developing a multithreaded application with monitors in Java) --5

1.1. Find Information about developing a multithreaded application talk about with expert-2 5
1.2. See in which part we can apply in our project -- 2 2
1.3. Develop the application---5 4
1.4 Make the threads of an application to interact without incurring in race condition or deadlocks -- 5
1.4.1 Find information to develop and use, see in which part we can apply. --------3 5
1.4.2 Implement in the application. --3 5
1.4.3 Test the application --3 4
1.5 Make the threads of an application to interact without incurring in race condition or deadlocks -- 5
1.5.1 Find information to develop and use, see in which part we can apply. -------3 5
1.5.2 Implement in the application. --3 5
1.5.3 Test the application --3 4
1.6 Make the threads of an application to interact without incurring in race condition or deadlocks -- 5
1.6.1 Find information to develop and use, see in which part we can apply. . ------3 5
1.6.2 Implement in the application. --3 5
1.6.3 Test the application --3 4

2. Create remote server and set up continuous integration bundle -----------------------------5
2.1. Install Jenkins and configuration --3 5
2.2. Install Katalon and configuration --4 4
2.3. Create pipeline (Jenkins) --5 3
2.4. Implement Docker --2 2

3. Define test cases ---2
3.1. Define function test cases (white box) ---5 2
3.2. Define software functionalities test cases (black box) --------------------------------------5 2

4. Set up automatic build project (Maven) ---4
4.1. Configure servlet plugin (JSTL and API) ---1 4
4.2. Configure JavaDoc and UML plugin ---1 4

5. Develop and use front -end frameworks --5
5.1. JQuery ---2 5
5.2. Bootstrap-- 2 5
5.3. Multilenguaje --4 4

6. Deploy Project on external server ---5
6.1.AWS ---1 5
6.2.Hostname ---3 5
6.3.Commit code to git clone/pull server

7. Create database ---4
7.1 Design entity relationship diagram --2 4
7.1.1 Entity-Relationship Diagram --2 4
7.1.2 Relational Model ---2 4
7.1.3 Create Database --1 4
7.2 Design different queries --4 4

8 Design the interface (flow diagram, interface design) --3
8.1. Design for analytic, information visualization (which graphs to use) ----------------------4 3
8.1.1 Flow diagram --2 4
8.1.2 Interface design ---3 5
8.1.3 Interface interaction --3 5
8.1.4 Define information visualization ---3 4
8.1.5 Define graphics --3 4
8.2. Design user test plan (interface evaluation, UX) ---5 3
8.2.1. Test the application using the user test plan -----------------------------------
8.2.2 Considering the user's opinions make improvements in the application.4 3
8.2.3 Documentation of the test results
8.3. Implement new improvements according UX results-- 4 3
8.4 Use data visualization libraries, frameworks and tools that have not been seen on class for developing new interfaces or for improving the dashboard -----------------------------------5
8.4.1 Grafana --3 5
8.4.2 Dashboard with libraries ---4 5
8.5 Add new interaction types on the interfaces to enhance user experience. ---------------5 5
8.6 Design and run user test for interface evaluation --5 5
8.7.1 Test with the real app ---5 4
8.7.2 Conclusion and improvements of the results --4 4
8.7.3 Documentation for the future changes and conclusion -----------------------------------3 4

9. Design software functionalities --4
9.1. Design True/False functionalities ---3 4
9.2. Design question answer functionalities--4 4
9.3. Design lobby functionalities ---4 5
9.4. Design login and register functionalities ---3 5
9.5. Spring framework --5
9.5.1. MVC--5 5
9.5.2. Boot --5 5
9.5.3. ORM ---5 5
9.5.4. Tiles --5 5
9.6 Sprint Security --3 4

11. Documentation--5 5
11.1 Documentation milestone 1--3 4
11.2 Documentation milestone 2--5 5
11.3. Economic and social impact of the project --1 4
11.4. Handbook 3--3 5

12. Presentation--3 4
12.1 PPT for milestone 1---3 4
12.2FINAL PPT --4 4

13. Prepare demonstration --4 5