

# SCRUM Demonstrator Reference Manual

This is how the campus looks like now.

analanta



Olivier Heidmann, CERTH Hariklia Tsalapatas, UTH

Co-funded by the Erasmus+ programme of the European Union.

Next

# LEAP SCRUM software manual

Cor	ntents	
I.	Introduction	4
K	ey Concepts	4
	Product owner	4
	Development team	4
	Scrum master	4
	Sprint	5
	Product backlog	5
Т	echnical note	5
II.	Word of caution	6
III.	Gameplay concept	7
IV.	Presentation of the interface	8
1.	. The introduction screen	8
2.	. The main menu	9
3.	. The Dialog system	12
4.	. The Recap Screen	13
5.	. The Scoring Screen	13
V.	Scenarios	15
1]	) Urban engineering	15
2]	) Agricultural engineering	18
VI.	The roles	20
1]	) Product Owner	20
	Role Description	20
	Gameplay Description	20
	Client	20
	Brief the team	21
	Pool of ideas	21
	Scrum Master Question	22
	Select Backlog Tasks	23

	Assign Priorities	23
	Sprint	24
2)	SCRUM Master	27
F	Role Description	27
C	ameplay Description	27
	Briefing	27
	Pool of ideas	28
	Assigned Priorities	29
	Setting efforts	29
	Suggesting tasks	30
	Sprint	31
	Team member abilities	34
	Team member traits	35
3)	SCRUM Team	36
F	Role Description	36
C	Sameplay Description	36
	Briefing	36
	Pool of ideas	36
	Assigned Priorities	38
	Setting efforts	38
	Suggested tasks	39
	Selecting tasks	40
	Sprint	40
VII.	Gameplay Details	42
The	e Scoring system	42
F	Product Owner	42
S	CRUM Master	42
S	CRUM Team	43
Annez	x: Table of figures	44

# I. Introduction<sup>1</sup>

# **Key Concepts**

**Scrum** is an agile framework for managing work with an emphasis on software development. It is designed for teams of three to nine developers who break their work into actions that can be completed within timeboxed iterations, called *sprints* (typically two-weeks) and track progress and re-plan in 15-minute stand-up meetings, called *daily scrums* 

A key principle of Scrum is the dual recognition that customers will change their minds about what they want or need (often called requirements volatility) and that there will be unpredictable challenges—for which a predictive or planned approach is not suited. As such, Scrum adopts an evidence-based empirical approach—accepting that the problem cannot be fully understood or defined up front, and instead focusing on how to maximize the team's ability to deliver quickly, to respond to emerging requirements, and to adapt to evolving technologies and changes in market conditions.

There are three core roles in the Scrum framework. These are ideally co-located to deliver potentially shippable product increments every sprint. Together these three roles form the scrum team. While many organizations have other roles involved with defining and delivering the product, Scrum defines only these three.

## **Product owner**

As the face of the team to the stakeholders, the following are some of the communication tasks of the product owner to the stakeholders:

- demonstrates the solution to key stakeholders who were not present at a sprint review;
- defines and announces releases;
- communicates team status;
- organizes milestone reviews;
- educates stakeholders in the development process;
- negotiates priorities, scope, funding, and schedule;
- ensures that the product backlog is visible, transparent, and clear.

#### **Development team**

The development team is responsible for delivering potentially shippable product increments every sprint (the sprint goal). The team has from three to nine members who carry out all tasks required to build the product increments (analysis, design, development, testing, technical writing, etc.).

## Scrum master

The core responsibilities of a scrum master include (but are not limited to):

<sup>&</sup>lt;sup>1</sup> Wikipedia - https://en.wikipedia.org/wiki/Scrum\_(software\_development)

- Helping the product owner maintain the product backlog in a way that ensures the needed work is well understood so the team can continually make forward progress
- Helping the team to determine the definition of done for the product, with input from key stakeholders
- Coaching the team, within the Scrum principles, in order to deliver high-quality features for its product
- Promoting self-organization within the team
- Helping the scrum team to avoid or remove impediments to its progress, whether internal or external to the team
- Facilitating team events to ensure regular progress
- Educating key stakeholders in the product on Scrum principles
- Coaching the development team in self-organization and cross-functionality

## **Sprint**

A sprint (or iteration) is the basic unit of development in Scrum.

# **Product backlog**

The product backlog comprises an ordered list of requirements that a scrum team maintains for a product. It consists of features, bug fixes, non-functional requirements, etc.—whatever must be done to successfully deliver a viable product. The product owner prioritizes those product backlog items (PBIs) based on considerations such as risk, business value, dependencies, size, and date needed.

# **Technical note**

The game is supposed to be in played in sessions of 20 minutes to half an hour on any type of computer (Windows, Mac OS X, Linux or in the Web browser). The demonstrator is multilingual: English, Spanish, Portuguese, Estonian and Greek are the currently supported languages. The software has been created using Unity.

The game is available on the LEAP project portal, at this URL:

http://leapproject.eu/leap-serious-games-for-building-experience-on-agile-design2/

The game has been developed specifically to be used on a screen with a 16/9 ratio resolution. Playing the game in any other resolution is going to lead to some cropping of the screen and make the game not playable. The launch screen has been programmed to display only the 16/9 resolution available for the computer, so no cropping should ever happen whatever resolution is selected.

Please never select the *Windowed* mode, as the size of the window might result in cropping issue at the bottom of the screen. Always play full screen, even if you have to select a resolution lower than the native one for your computer screen.

# II. Word of caution

The demonstrator is a work in constant progress. This means that the online version of the game is updated frequently in order to add new features and correct bugs, up to several times a day. So until the software reaches it's very final version, this manual is also a work in progress.

You might find for example that there are some discrepancies between some screenshots and the actual images included in the manual, or maybe some features in the software are not detailed in the manual. Don't worry, it just means that a new version of the manual is about to be published.

If you have any question, please feel free to send an email to the lead developer at this email address, he will answer you promptly: olivier.heidmann@gmail.com.

# III. Gameplay concept

The players are placed in a team, which applies the SCRUM methodology in order to manage a project up to completion. They are given the project by a client and currently two different scenarios exist, one for an urban and the other for an agricultural engineering project. All of the main roles of the SCRUM methodology are playable and will each one has its own impact on the final outcome. The player will need to balance both the requirements of its team and the demands of the client in order to achieve the maximum performance of the first and the satisfaction of the latter.

The game begins on the first days of August and consists of 5 sprints, varying in in-game time duration according with the client demands. Each decision of the team is random in every gameplay (having in mind the current goals of the game) so each gameplay is unique. This is trying to reflect an actual team applying the SCRUM methodology and the random events that might occur in a workplace.

# IV. Presentation of the interface

1. The introduction screen

# **SCRUM Demonstrator**



Co-funded by the Erasmus+ Programme of the European Union



#### Figure 1: The splash screen

On the introduction screen of the demonstrator the user is greeted with the SCRUM and European Community Erasmus+ logo. This screen fades out in 2 seconds.

# 2. The main menu

This screen displays five available actions possible: starting a new game, changing the interface language, getting some help about the game, getting some information about the LEAP project and exiting the game. On the bottom left of the screen is also displayed the current version of the software. Be sure you're always using the latest version available (currently 1.4f).



## Figure 2: The main menu



Figure 3: Choosing the scenario

The "New Game" option will start a new game. At first it will prompt you to select a scenario and then to select the role you will play in the game.



Figure 4: Choosing the role

The player can also select with the left and right arrows which language the game is going to be using.

The choices are: English, Estonian, Greek, Spanish and Portuguese. This choice can be changed only in main menu so be sure you have chosen the preferable language before starting a new game.



Figure 5: Changing the interface language



Selecting the help option will open a careen giving details about the menu buttons.

**Figure 6: About information** 

Clicking on about will launch the LEAP project web portal (<u>http://leapproject.eu/</u>).



Figure 7: The LEAP project portal

# 3. The Dialog system

A big part of the game is based on dialogs. Reading and answering them happens in the lower third of the screen where all the text and interactions appear (the .purple box in figures 8 and 9).

In discussions where no user input is needed, pressing the next button on the lower right corner will advance the story. If the player needs to make a decision, instead of the next button, selectable options will appear below the question. In the following figures you can see two examples of the dialog system.

	ool of Idea	S			
Lecture Cafe Halls Cafe Laboratories Par Spi Accommodation Accommo Library Kito	eteria Fence King Common Room Ace Conference Hall Conference Hall Compus Logo	Garden Troph Room Art Gues Room Gymnasic Theatre	y t s		
Product (You can	<i>Owner</i> : Here are hover over tasks	some ideas for the to learn more about	upcoming project. them)		
				Next	

Figure 8: A dialog where no input is needed



LEAP SCRUM Manual

Figure 9: A dialog where the player needs to select an answer 07/09/2017

# 4. The Recap Screen

When the team finishes the project after going through all the sprints, the final outcome of your work will appear on a map, showing which buildings were built.



Figure 10: The recap screen

# 5. The Scoring Screen

After the recap screen, the final screen of the game will be displayed, announcing you your score and your total performance. The scoring system consists of two separated scoring methods. You are graded for your role performance, how good you played as the role you chose, and the client score which represents how much you satisfied your client's demands.



#### Figure 11: The scoring screen

The client can display three different possible reactions according to your performance to his demands. Having a score lower than 50 will result to an angry client, lower than 80 to a satisfied client and for scores bigger than 80 the client will be excited with your performance.

Clicking the red button with the white cross will return you to the main menu.

# V. Scenarios

# 1) Urban engineering

This scenario will put you in charge of a university building project. There are four different types of universities that can be built (Law, Sports, Science and Music), each emphasizing on their specialized kind of buildings. Each "sub-scenario" (one of the different types of university campuses) has 4 obligatory tasks that have to be done in order to have a functional campus. In general there are 19 buildings as tasks that the player can choose to build.



Figure 12: The buildable parts of the campus

Those 19 buildings are:

- Lecture Halls
- Laboratories
- Accommodations
- Library
- Dining Room/Cafeteria
- Parking
- Staff accommodation
- Kitchen
- Fence
- Common Room
- Conference hall
- Campus Logo
- Garden
- Art Hall
- Music Practice Room
- Theater
- Trophy Room
- Guest Rooms
- Gymnasium

For each type of campus the compulsory buildings are:

Music	Lecture Halls Accommodations Art Hall Music Practice Room
Sport	Accommodations Garden Trophy Room Gymnasium
Law	Lecture Halls Accommodations Library Conference Hall
Science	Lecture Halls Laboratories Accommodations Library

 Table 1: Compulsory buildings for the campuses

# 2) Agricultural engineering

This scenario will put you in charge of a garden building project. There are four different types of gardens that can be built (Fruits, Vegetables, Leisure and Herbs), each emphasizing on their specialized kind of buildings. Each "sub-scenario" (one of the different types of university campuses ) has 4 obligatory tasks that have to be done in order to have a functional campus. In general there are 19 buildings as tasks that the player can choose to build.



Figure 13: The buildable parts of the garden

Those 19 buildings are:

- Greenhouse
- Water Reserve
- Garden Borders
- Pond
- Compost Bin
- Scarecrow
- Birdhouse
- Sage
- Oregano
- Basil
- Broccoli

- Lettuce
- Spinach
- Apple Trees
- Cherry Trees
- Peach Trees
- Tulips
- Roses
- Lilies

Fruits	Greenhouse Apple Trees Cherry Trees Peach Trees
Vegetables	Greenhouse Broccoli Lettuce Spinach
Leisure	Greenhouse Tulips Roses Lilies
Herbs	Greenhouse Sage Oregano Basil

 Table 2: Compulsory buildings for the gardens

# VI. The roles

# 1) Product Owner

## **Role Description**

The product owner is the person responsible for managing the product backlog in order to achieve the desired outcome and also addresses the challenges where the product development team loses direction or gets confused about it.

# **Gameplay Description**

## **Client**

Starting a game as Product Owner will bring you to the introductory scene where the client will inform you about the specifications of the project he wants you to complete.



## Figure 14: Meeting with the client

According to the client's demands, you will need to adapt your playing strategy in order to satisfy the client's needs.

# Brief the team

After the short briefing from the client, the Product Owner (the player) will inform the rest of the team about the specifications through the dialog system, according to the information acquired previously. You will need to answer to questions about:

- 1. The type of university/garden that you are going to build
- 2. The size of the plot
- 3. The capacity of the buildings regarding the scenario you chose (for example in the Urban scenario it refers to the amount of students it can accommodate and in the Agricultural to the number of the plants) and
- 4. The month that the project should be delivered



#### Figure 15: Briefing the team

# Pool of ideas

After finishing with the briefing the Product Owner will present the pool of ideas. This is the list of buildings/tasks that the current project, depending on the scenario, will have.



#### Figure 16: The pool of ideas

## **Scrum Master Question**

After presenting the pool of ideas to the list, the Scrum Master will ask if we need to keep a building, selected randomly each time. Selecting "Yes" as an answer, the building/task will be kept in the pool of ideas. Selecting "No" will result in discarding the building/task.





# Select Backlog Tasks

As the Product Owner, you will be responsible for selecting the 15 tasks that your sprints will consist of.

Pool of Ideas	
Lecture Halls       Cafeteria       Fence       Garden       Trophy Room         Laboratories       Parking Space       Common Room       Art Rooms         Laboratories       Parking Common Room       Music Rooms         Accumentation       Conference Room       Guest Rooms         Library       Kitchen       Campus Theatree	
Click on a task to add it to the backlog. Highlighted tasks are the ones you have selected. You can pick a total of 15 tasks. (Backlog is a list of taks which are necessary and sufficient to complete a project)	

#### Figure 18: Selecting the tasks

You can't select more than 15 tasks and the "Next" button will appear only when you have 15 tasks selected.

# Assign Priorities

After your team has selected the tasks to be done in this game session, the next objective is to assign priorities to the tasks.

Product Backlog
Lecture Hails       Library       Conference Test         Artt       Laboratories       Kitchen       Campus Logo         Artt       Cafeteria       Fence       Garden         Music Room       Parking Space       Common Room       Common Room
Green is high, yellow is medium and blue is low priority. Click on a marker to select a color and then on a task to mark it. You can continue after you have set priorities to every task.

## Figure 19: Assigning priorities

There are three kind of priorities, high, medium and low and each one is represented by a marker (Blue, yellow and green respectively). By clicking to a marker the cursor changes to the icon of the marker you clicked and clicking a post it will change its color to represent the priority.



#### **Figure 20: Priorities colors**

#### *Sprint*

When everything is set, the team will start working on the tasks. They will announce what they are planning to do at the next sprint (working time) by showing it on the board.

Product Backlog	Sprint Backlog	Done
Sprint 1/5 Art States Common Room Music Room Kitchen Library Fence Scrum Master : This is what we are going	Lecture Halls Cafeteria Parking Space Campus Logo	
		Next

#### Figure 21: The tasks chosen

As the Product Owner, you can't participate directly in the procedure but instead, after each sprint, the client will communicate with you.



Figure 22: The client wants a word

There are three different reactions from the client and three different actions for the user to do in the following screen



Figure 23: The client giving some feedback

What the client said	What the player should do
I am pleased with your progress.	No actions required.
I certainly want you to do	The player must put the task referred by the client to the To-Do list by selecting the "Pick a task for the next sprint" option.
This is very important for me	The player must change the priority of the task by choosing the "Change Priorities" option.

Table 3: The best strategy for pleasing the client

Both of these options can be used only once per sprint. When the user feels ready, clicking the next button will continue the production procedure which will occur 5 times in total.



#### **Figure 24: The Product Owner reacts**

# 2) SCRUM Master

# **Role Description**

The Scrum Master is often considered a coach for the team and does anything possible to help the team perform at their highest level. Also they are responsible for ensuring that goals, scope, and product domain are understood by everyone on the Scrum Team as well as possible.

# **Gameplay Description**

In this role you will experience the same storyline from a different perspective.

# Briefing

Starting the game you will be presented with the briefing of the Product Owner, transferring the client's demands. You will get informed about the demands affirmatively.



Figure 25: The Product Owner briefing

# Pool of ideas

After finishing with the briefing the Product Owner will present the pool of ideas. This is the list of buildings/tasks that the current project, depending on the scenario, will have.

	Pool of Ideas	
Lecture Halls Laboratories Accommodation Library	Cafeteria       Fence       Garden       Trophy Room         Parking Space       Common Room       Art Hall       Guest Rooms         Accenterionaria       Conference Room       Music Room       oymnasium         Kitchen       Campus Logo       Theatre	
Her (You	e are some possible buildings for the project. I can hover over tasks to learn more about them) Next	

## Figure 26: The pool of ideas

As the SCRUM Master, you will be responsible for selecting the 15 tasks that your sprints will consist of.



Figure 27: Selecting the tasks

You can't select more than 15 tasks and the "Next" button will appear only when you have 15 tasks selected.

## **Assigned Priorities**

After clicking the next button, you will be presented with the 15 tasks you chose in the form of posts-it. Then, the Product Owner will assign the priorities based in our predefined list.

Pr	oduct Back	log	
Library	Music Room	Parking Space	
Kitchen 6	ymnasium Guest Rooms	Laboratories	
Campus Logo	Start Commonsisten Art Hall	Lecture Halls	
Theatre	Common Room		
Produc (Prioriti	ct Owner : Great! I a ies is about how imp	issigned priority to each task. ortant is a task for our project. Green is high, yellow is medium	and blue is low priority)
			Next

Figure 28: Priorities assigned

Clicking the next button will proceed with the game.

## Setting efforts

The SCRUM Team will set the efforts according to our predefined list.

Product Backlog	
Lecture Kitchen Fence Art Hall 13 Kitchen 5 Fence Art Hall 13 Laboratories Common Garden 20 Parking Campus Trophy 10 Parking Campus 4	
Scrum Team : We set the efforts for each task. (Effort is the amount of work needed in order to complete a task. Click on task to set its effort)	Next

Figure 29: Setting efforts

LEAP SCRUM Manual

Clicking the "Next" button will proceed with the game.

## Suggesting tasks

Another duty as SCRUM Master is to suggest to your team what to do to the upcoming sprint. You do this by dragging a post-it to the area marked by the dashed lines.





Below the "To-Do" title you can see a horizontal bar and a number. This represents the effort points available for this spring and the bonus points acquired from the previous sprints.



Empty suggestion list



Green bar: Sum of the efforts less than or equal to 10



Yellow bar: Sum of the efforts more than 10 and less 20



Red bar: Sum of the efforts more than or equal to 20

07/09/2017

LEAP SCRUM Manual

The suggestion list works as a recommendation to the SCRUM Team (and the AI in this case) for which tasks to pick. In our current implementation, the Team will randomly decide if they are going to select a high priority task (70% to actually do and 30% to not select a high priority task). After deciding that, they will fill the rest of their todo list with tasks of less than high priority (medium and low ones).

You can also leave the suggestion list empty, but it will cost you in points, because you leave your team without a hint on what is important and where they should focus.

#### **Sprint**

As the SCRUM Master, you have full control over the sprint time. Your goal is to maximize the cooperation between your team members and the tasks that they will be assigned to. Each task consists of 3 subtasks and each one of them needs 3 workers so it can be completed.



The UI of the sprint screen looks like this

#### Figure 31: Team work

On the left hand side you can see the workers of your team, each one having different trait and skill which you can see by hovering over them.

LEAP



Figure 32: Team member characteristics

You can assign a worker to a subtask simply by drag and dropping his picture to the black boxes in the center.



Figure 33: Assigning a team member

Each of the subtasks displays a smiley face icon and a cog icon. The first one represents how the team members you assign to that subtask cooperate and the cog their total ability in performing it. You can have 3 states in both of them.

Completely full: The members of the team like each other Half full: This is the normal state, the team members have average relationship with each other Empty: The cooperation between team members is not good and should be avoided.

Completely full: The workers' abilities allow them to perform extraordinary on this subtask

Half full: This is the normal state; the subtask will be completed in an average manner.

Empty: The end result will look more like a disaster. You should avoid this.

After finishing with your current task you can press the "Next" button to move to the next one. Your previous selection is kept to save time but adjustments might be needed!

# Team member abilities

There are 6 different abilities that are assigned to each worker randomly each time you start a new game.



**Table 4: Abilities** 

# Team member traits

Each worker at the beginning of each game gets assigned randomly a trait for the rest of the game. The traits are presented in the table below, following the Belbin classification.



07/09/2017

# 3) SCRUM Team

## **Role Description**

The SCRUM team is responsible for delivering potentially shippable product increments every sprint (the sprint goal). Although there will be several disciplines represented in the team, its members are referred to generically as developers. The development team in Scrum is self-organizing, even though there may be interaction with other roles outside the team.

## **Gameplay Description**

## Briefing

Starting the game you will be presented with the briefing of the Product Owner, transferring the client's demands. You will get informed about the demands affirmatively.



#### **Figure 34: Briefing**

## Pool of ideas

After finishing with the briefing the Product Owner will present the pool of ideas. This is the list of buildings/tasks that the current project, depending on the scenario, will have.



#### Figure 35: Pool of ideas

As the SCRUM Team, you will be responsible for selecting the 15 tasks that your sprints will consist of.



#### Figure 36: Tasks selection

You can't select more than 15 tasks and the "Next" button will appear only when you have 15 tasks selected.

07/09/2017

# **Assigned Priorities**

After clicking the next button, you will be presented with the 15 tasks you chose in the form of posts-it. Then, the Product Owner will assign the priorities based in our predefined list.

<u>*-1</u>	P	roduc	t Bacl	klog	
The	atre	Accommodation	Gymnasium	Parking Space	
Cam Log	ipus go	Stuff Accommodation	Guest Rooms	Laboratories	
Kitc	hen	Conference Hall	Art Hall	Lecture Halls	
Libr	ary	Music Room	Common Room		
-	Produ	ict Owne	r : Great! I	assigned priority to each task.	2
	(1131				<i>"</i>
				Next	

Figure 37: Assigned priorities

Clicking the next button will proceed with the game.

# Setting efforts

Your next duty as SCRUM Team Member is to define efforts.

Product Backlog	
Library       Music Room       Conterence Hell       Parking Space         12       12       12         12       12       12         Kitchen       Guest Rooms       12         12       12       12         Campus       Art 12       Lecture Hall         12       12       12         Theatre       Common 12       12         12       12       12         Theatre       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12       12       12         12	Lecture Halls 12
	Next

Figure 38: Efforts set

Clicking on a task will show the slider that adjusts the effort for the selected task. After changing the priorities of 5 tasks, the "Next" button will appear. You should change and experiment with the efforts of each task and when you feel confident about your choices you can click the "Next" button and the game will proceed.

# Suggested tasks

Before starting a new Sprint, the SCRUM Master will present to you his recommendation for the tasks that you should choose. It's up to you if you are going to follow his directions or not.

Product Backlog	Sprint Backlog	Done	
Theatre       Ammunic       Gymmanic       Parking Space         9       10       11       Space         Campus       Ammunic       Guest       Leonstories         Logo       5       Roms       20         Kitchen       Conference       Hall 2       13         Library       Music       Common 10       10         Library       Music       Common 10       10         Scrum Master : This is what i suggest you       Scrum Master : This is what i suggest you	25(2xi2)+0)         Kitchen         Theatre         Parking         Space         Conference         Mail         Conference         Value         Space         Space	1 make you own list!	
		Next	

Figure 39: Suggested tasks

Clicking the "Next" button will proceed with the game.

## Selecting tasks

Now, you will be in full responsibility about the tasks that will happen on the next sprint. By dragging and dropping post-it notes from the left side to the side in the middle, you fill the To-Do list.



#### Figure 40: Selecting tasks

## **Sprint**

As the SCRUM Team Member, you have full control over the sprint time. Your goal is to maximize the cooperation between your colleagues and the tasks that they will be assigned to. Each task consists of 3 subtasks and each one of them needs 3 workers so it can be completed.

The UI of the sprint screen looks like this



**Figure 41: Team members** 

After finishing with your current task you can press the "Next" button to move to the next one. Your previous selection is kept to save time but adjustments might be needed!

You can assign a worker to a subtask simply by drag and dropping his picture to the black boxes in the center.



Figure 42: Managing the team

# VII. Gameplay Details

# The Scoring system

The user's performance on the game is determined by the final score that appears at the end of the gameplay. That scoring system takes into account user choices and compares it with the best choices the player could make during his game. This also might include dialog choices or if you followed the instructions of the game, depending on the role selected.

# **Product Owner**

The grading of the product owner role begins by finding how many **correct dialog choices** were made during the briefing of the team. For **each correct answer** the player gets **6 points**. Then for every **compulsory task** that **kept** in the backlog during the initial selection the player gets **10 points**. Afterwards, the game **counts** the **compulsory tasks** the user set them as the highest priority during the game.

Tasks correctly assigned as High Priority	Points awarded
>2	0
2	5
3	15
4	30

Table 6: Scoring system (1)

Finally, for each completed client request the player is awarded 5 points.

## **SCRUM Master**

The SCRUM Master gets awarded with **5 points** for each task they **suggest** to the SCRUM Team as **recommended from the Product Owner**. Also **10 points** are rewarded if a recommended task is a **compulsory one** (regardless if it was required from the Client and the Product Owner). Also **10 points** are rewarded for each **compulsory task** that **kept** in the backlog during the initial selection.

## **SCRUM Team**

For each **task** the client asked and the **Team finished**, the player gets **5 points**. Then, for every **compulsory task** that **kept** in the backlog during the initial selection the player gets **10 points** and for every **High Priority** task (assigned by the Product Owner) the player gets **5 more points**. Finally, the last points are given from the **deviation** the player has at **assigning efforts** to the tasks. The effort assigned is compared to the actual effort of the task (always constant and hidden from the player) and the difference is added to the deviation.

Deviation	Points awarded
> 12	2
10	5
5	10
2	20

Table 7: Scoring system (2)

# Annex: Table of figures

Figure 1: The splash screen		
Figure 2: The main menu		9
Figure 3: Choosing the scenario		9
Figure 4: Choosing the role		
Figure 5: Changing the interface langua	age	
Figure 6: About information		
Figure 7: The LEAP project portal		
Figure 8: A dialog where no input is ne	eded	
Figure 9: A dialog where the player nee	eds to select an answer	
Figure 10: The recap screen		
Figure 11: The scoring screen		
Figure 12: The buildable parts of the ca	ampus	
Figure 13: The buildable parts of the ga	arden	
Figure 14: Meeting with the client		20
Figure 15: Briefing the team		21
Figure 16: The pool of ideas		22
Figure 17: Discarding a building		22
Figure 18: Selecting the tasks		23
Figure 19: Assigning priorities		23
Figure 20: Priorities colors		24
Figure 21: The tasks chosen		24
Figure 22: The client wants a word		25
Figure 23: The client giving some feedb	back	25
Figure 24: The Product Owner reacts		26
Figure 25: The Product Owner briefing	ç	27
Figure 26: The pool of ideas		
Figure 27: Selecting the tasks		
Figure 28: Priorities assigned		29
Figure 29: Setting efforts		29
Figure 30: Suggesting tasks		
Figure 31: Team work		
Figure 32: Team member characteristic	CS	
Figure 33: Assigning a team member		32
Figure 34: Briefing		
Figure 35: Pool of ideas		
Figure 36: Tasks selection		37
Figure 37: Assigned priorities		
Figure 38: Efforts set		
Figure 39: Suggested tasks		
Figure 40: Selecting tasks		40
Figure 41: Team members		40
07/09/2017	LEAP SCRUM Manual	Page 44

Figure 42: Managing the team	41
Table 1: Compulsory buildings for the campuses	17
Table 2: Compulsory buildings for the gardens	
Table 3: The best strategy for pleasing the client	
Table 4: Abilities	
Table 5: Traits	
Table 6: Scoring system (1)	
Table 7: Scoring system (2)	