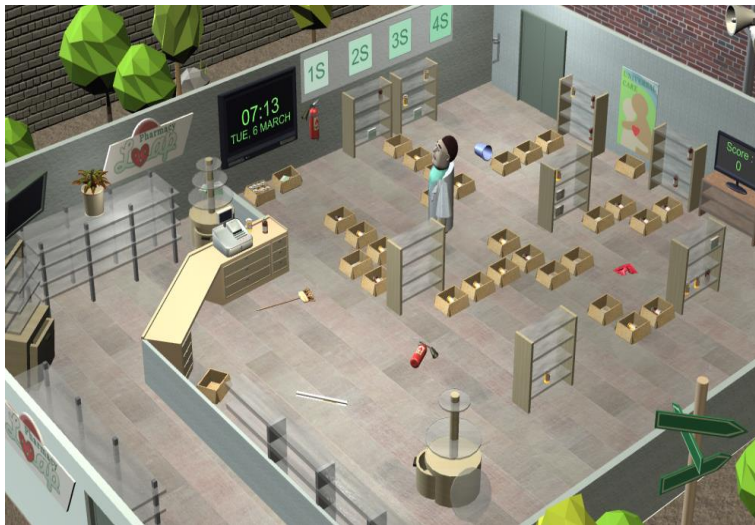## 5S – The Pharmacy

Learning Goal

The goal of this learning activity is to make the students experience first-hand the efficiency and interest of the 5S concepts by experiencing the process in the framework of a pharmacy.

Learning Objectives and Outcome

After playing this scenario, learners will be able to:

- Know about the challenges of applying the 5S concept.
- Understand how to adapt 5S to different environments.
- Recognize the specificities and advantages of each of the individual S in the 5S methodology.
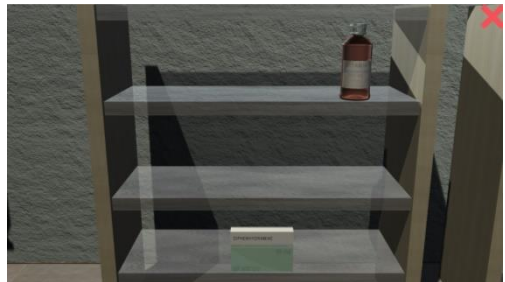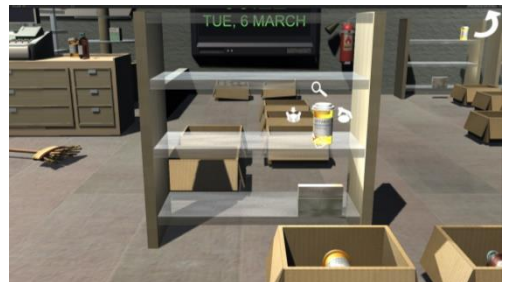
How to Use LEAP

In this game, the players are placed in a pharmacy work environment for a week and are supposed to complete a certain number of tasks, based on finding certain objects in a limited amount of time provided. Given how the working environment is set up, those tasks are quite difficult to achieve as they might prove time consuming. Therefore, the players can try to improve their work environment by themselves or by the application of the 5S methodology.

Because the span of the software spans over several different types of applications of the 5S methodology, we consider that the last S (sustain) is demonstrated by putting the player in many different environments and making them apply 5S repeatedly. For that reason, the first 4 of the 5S are directly implementable in-game by the players.

Each workday for the players lasts 180 seconds (3 minutes), from 7 o'clock in the morning up to 7 in the evening. There are 5 workdays in total before the end of the game. Finding an object asked for will bring points to the player and applying one of the 5S methods will demand an investment in terms of game timer.
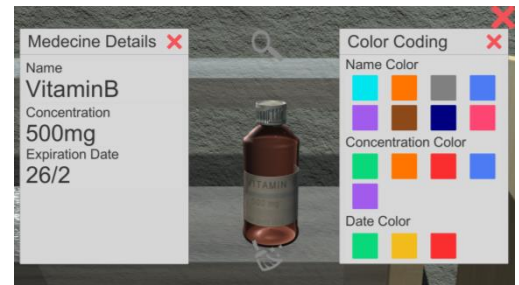
How to play	
Explain how to start the game (clicking on the door which gives access to the pharmacy main screen) and the two different modes that can be chosen: **story mode** (with game tutorial) or **standard mode**. When a player is both new to the game and/or concepts of the 5S methods, it's important to start the game in **story mode** as it contains explanations on both the game and 5S methods.	
Explain the game mechanics (main character, how to move around, etc) and the game purpose related to the main character (the pharmacist) as he needs to find the right medication according to the prescriptions brought by the pharmacy's customers. To move the character around, the players simply have to click on the floor or on one of the objects in the game scene. Some crucial elements integrated in the game itself are: - **Clock**: shows current time (game starts at 7 am for 5 days and stops at 7pm. Customers arrive at 9 am and stop arriving by 6 pm - **Panel**: allows the player to implement 1/4 actions of the 5S methodology - **TV screen**: shows current score of the player	

and each medication accurately delivered to a customer nets 100 points

- **Loudspeakers**: triggers the option menu

Other elements: 8 shelves, boxes containing medication, different elements lying on the floor, clients.

By clicking on an unsorted element lying on the floor, a screen will show up and if answered affirmatively, the pharmacist will go and put the object in its rightful place.

When the players click on a set of shelfs, the pharmacist will move next to the shelf and the screen will zoom on the content of the shelf.

Expose to the player the different types of medications (box, jar of pills, bottle of syrup) and the interaction wheel of 4 possible actions related to the medication is given at this point:

- 🧹 clean the dust of the object and make the tag more readable

- ✊ picking up the object

- 🤲 put an item in the inventory back in its place

- 🔍 closer view of the object

There are 8 possible medication names and 5 possible concentrations. Each of them has an expiration date (to be compared to the date displayed on the in-game clock)

It's important to have in mind that when you gain the closer view of the object (clicking on the magnifying glass button), a zoomed view of the object will appear: - Right hand side of the panel: information about the object - Left hand side: players can colour code the information by clicking on the correct colour	
Expose and explain to the student the 5S methodology and its presence in the game. Once the players start using the 5S methodology, the pharmacy will see drastic changes taking place. The players are free to either try to sort everything in the pharmacy by themselves or use the automated 1S/2S/3S/4S implementation button on the wall. This action will cost some time. Explain the different types of the 5S methodology: 1S — Clean up all the objects on the floor and put them in their place 2S — Medication colour coding 3S — Clean up the dust in the entire pharmacy 4S — Get rid of the cardboard boxes, put the medications on color-coded set of shelves where each shelf corresponds to a type of expiration date (red, yellow and green).	
In the end, check the results of all the students. Have the students with the higher score explain their method to the other students.	

Class Collaboration

Questions to stir discussion in the classroom:

1. Does 5S make it easier to organise a pharmacy instead of implementing brute force method?
2. Is it effective for the player to use their own methods of sorting out the medicines? Why?
3. Does the 5S improve the students' perspective, as far as it concerns the managing of a business?
4. What are the advantages of using the 5S process in organising a pharmacy?

Assessment

Have the students play the game and assess the 5S process. Make them use the Story Mode at first and try to be as quick as possible. Then, let them follow the 5S steps. Let students explain the flexibility of this process, the need of applying 5S methodology, and the connection between the customer's satisfaction and the 5S implementation.

Auxiliary materials

The AGILE Manifesto: http://agilemanifesto.org/

SCRUM Guides: http://www.scrumguides.org/

LEAP Portal: http://leapproject.eu/