



ADAPTATION OF DIGITAL INTERACTIVE PLATFORM AND TOOLS

HOTEL ACADEMY

*Project funded by the European Commission within the ERASMUS+ programme
under the agreement n° 2019-1-FR01-KA202-063097*

Deliverable D3.1-4 – Version I

Type of Activity		
IO	Intellectual Output	X
A	Project Management and Implementation	
M	Transnational Project Meeting	
E	Multiplier Event	

Nature of the deliverable		
	Feedback from participants	
	Direct effect on participants and project partners	
	Practical & reusable resources for the practitioners	
	Research material bringing forward the reflexion in the sector	
	Community building tools	
	Partnerships and Cooperation	
	Dissemination material	
	Organizational and working documents	X

Dissemination Level		
PU	Public	X
CO	Confidential, only for members of the consortium (including the Commission Services)	

ACKNOWLEDGEMENT

This report forms part of the deliverables from a project called "HOTEL ACADEMY" which has received funding from the European Union's ERASMUS+ program under grant agreement No. 2019-1-FR01-KA202-063097. The Community is not responsible for any use that might be made of the content of this publication.

The project runs from September 1st, 2019 to December 31st, 2021 (28 months), it involves 4 partners (MANZAVISION, France; MBA ESG, France; European University Cyprus, Cyprus; Fachhochschule Dresden, Germany) and is coordinated by Manzavision.

List of participants

Participant No*	Participant organisation name	Acronym	Country
1 (coord)	Manzavision	MZV	France
2	MBA ESG	ESG	France
3	European University Cyprus	EUC	Cyprus
4	Fachhochschule Dresden	FHD	Germany

CONTENT

1	INTRODUCTION	4
2	TEEMEW VR ADAPTATION AND CONFIGURATION	4
2.1	VR ROLEPLAY CONCEPT	4
2.2	ROLEPLAY SEQUENCING	6
2.2.1	Before the roleplay session.....	6
2.2.2	During the roleplay session	6
2.2.3	After the roleplay session	6
2.3	LAUNCHING A POLL / RATING DURING ROLEPLAY	7
3	TEEMEW VR NEW TECHNICAL FEATURES	7
3.1	PROJECTED SCHEDULE	7
4	TEEMEW MOBILE design and theme categories	8
4.1	USERS DEFINITION	9
4.2	APP CONFIGURATION	9
5	TEEMEW MOBILE FEEDBACK AND GROUPING TECHNICAL FEATURES	10
6	CONCLUSIONS	10
7	ANNEXE	10
7.1	ROLEPLAY ACTIVITY DESIGN & ANIMATION.....	10

Abbreviations

- VR: Virtual Reality
- HMD: Head-mounted Display
- CMS: Content Management System

I INTRODUCTION

The present document corresponds to the adaptation of the immersive and interactive digital tools which will be used during the course of the project and will constitute the dedicated digital collaborative framework of the project.

These tools are the following:

- TEEMEW VR Academy, a collaborative virtual room accessible via Virtual Reality (VR) headsets (Head-Mounted Displays or “HMDs”), where participants can be immersed in a 360° environment and attend a lecture, a course, a collaborative workshop.
- TEEMEW MOBILE, a personal and social micro-learning mobile application running on mobile phones, with a centralized back office for loading content and analysing usage and performance data.

Partners decided not to implement the use of Serious Games given that the subjects they covered were not relevant for the academic levels of all institutions. For instance, negotiation was important for MBA students, but not so much for VET.

2 TEEMEW VR ADAPTATION AND CONFIGURATION

With the intention of adapting the VR application to specifics of immersive training dedicated to the Hospitality Industry, 5 possible case scenarios were proposed to integrate Serious Games in Collaborative VR:

- 1st Case Only one student in Replica in front of the others
- 2nd Case All students play one Replica simultaneously
- 3rd Case Unscripted Role-Playing
- 4th Case Voting
- 5th Case Replay

After several discussions, finally the third option was retained because it involved a more universal approach that could be adapted to all sort of situations.

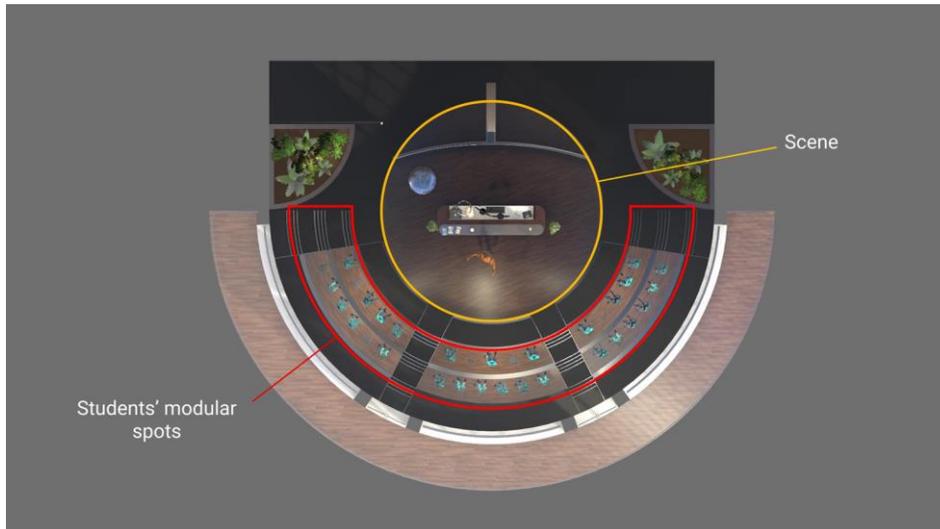
2.1 VR ROLEPLAY CONCEPT

Firstly, the identification of the different type of users that will intervene during the sessions is necessary with the aim of defining the roles involved, their specific needs and possible interactions.

- Trainers: Manage roleplay sessions
- Actors: The participants selected as actors when assigning the roles
- Spectators: Watch the roleplay without acting

In order to carry out role-play activities in Teemew VR, the room configuration has been redesigned with a central circular stage and a grandstand to accommodate students around the stage.

Figure 1 VR room configuration



When the trainer launches a VR Roleplay activity, the following actions will take place:

1. For the actors of the activity chosen by the trainer:
 - They will be teleported on stage.
 - A skybox (360° bubble) surrounds the actors. They are then completely immersed in the experience.
2. For the spectators of the activity chosen by the trainer:
 - Some 3D elements appear on stage.
 - They see the actors selected by the trainer on the stage.

Figure 2 View I for actors

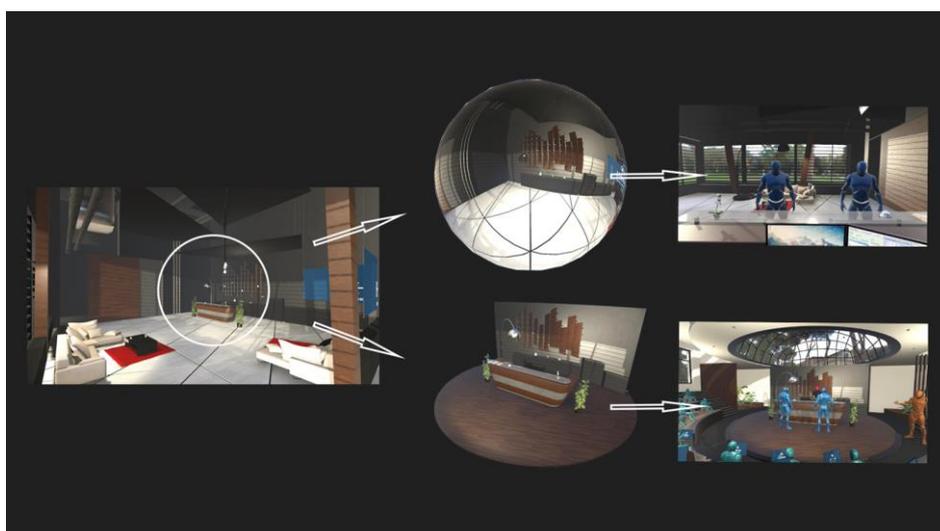


Figure 3 View 2 for spectators



2.2 ROLEPLAY SEQUENCING

2.2.1 Before the roleplay session

The trainer launches a Roleplay exercise and chooses the students who will be the actors in this Roleplay.

2.2.2 During the roleplay session

The actors can talk to each other and hear the trainer.

The trainer can talk to the actors and the spectators.

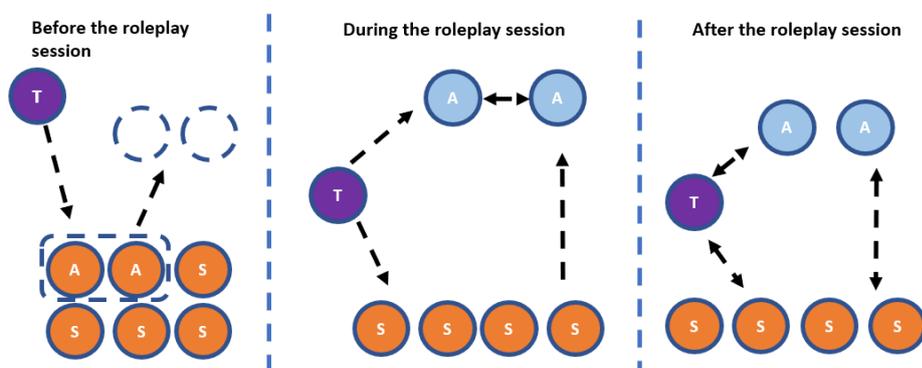
The spectators can hear the trainer and the actors, but cannot speak.

2.2.3 After the roleplay session

Actors go back to their seats and become spectators again.

The trainer can debrief with the students and/or launch another Roleplay exercise.

Figure 4 Roleplay sequencing



2.3 LAUNCHING A POLL / RATING DURING ROLEPLAY

During a Roleplay, the trainer(s) can launch a poll / rating. When this happens, the spectators see an interface appear on their personal screens.

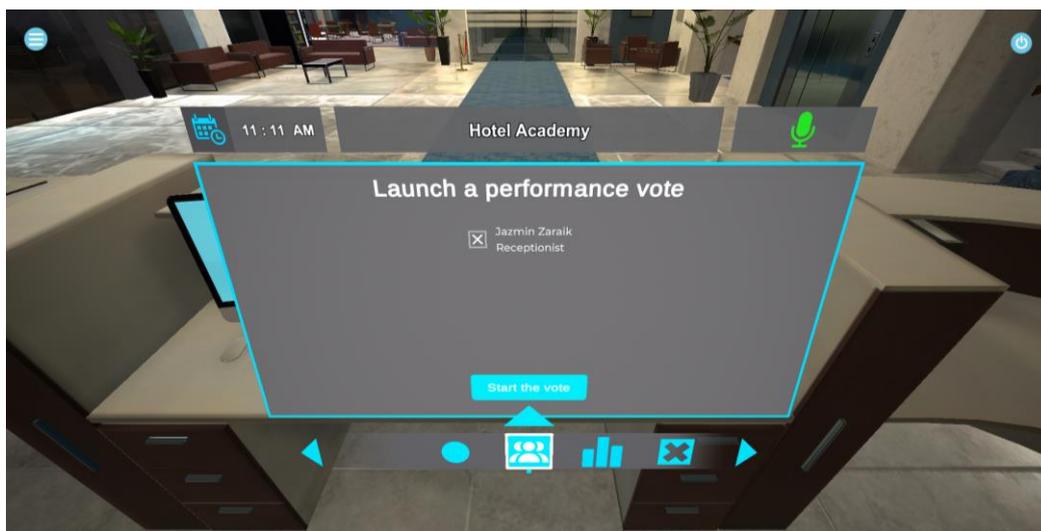
The spectators can then rate the actors of the Roleplay, as long as the trainer does not close the poll / rating. The spectators can:

- Give a grade to an actor: they see the actor's name and the role that has been associated with him/her
- The rating goes from 0 to 5 stars
- Correct a score already given

As soon as the teacher closes a poll, the poll interface disappears from the spectators' side.

The results of a poll are visible in-App when the trainer closes the poll session, then they are sent by e-mail to the trainer and a security copy to Manzavision.

Figure 5 Launching a performance vote



3 TEEMEW VR NEW TECHNICAL FEATURES

After several meetings with partners to define the scope of the VR application and redefine the scenario to be played, which was quite ambitious and implied special effects, partners agreed on the technical features below as described in the projected schedule.

Three different levels of complexity were identified and structured in separate deliveries. The basic features being comprised for the Alpha version, then refinement and polish for the Beta and Master versions.

3.1 PROJECTED SCHEDULE

ALPHA for preliminary tests in March:

- Sessions of 36 users in VR minimum

- Default avatars in VR
- Roleplay of 8 users minimum who can only talk and move their heads (for the moment)
- 1 décor for roleplay: a hotel reception
- 3 types of avatars for roleplay in male and female with possibility to change clothes colours: manager, receptionist, guest
- Favourites (rating performances of actors): Results sent by e-mail to trainers and Manzavision
- Possibility to share documents on big and individual screen
- Possibility to mute participants if sound problems
- VR and Desktop version for spectators (priority to Desktop due to Covid-19 restrictions)
- Desktop version for trainers

BETA for experimentation in May and June:

- Favourites (rating performances of actors): Results stored in BO
- Possibility for actors to move in roleplay and interact with 3D objects (i.e., telephone)
- Possibility to choose a different décor (at least 2, namely an office) for the roleplay
- Possibility to record roleplay sessions and replay them

MASTER for multiplier event in December:

- Bug fix and user feedback integration
- Customised avatars on mobile and/or VR

Due to the COVID-19 crisis, developing a desktop version for the VR application became a priority, so that students could join the test sessions from home, since they had no access to the head-mounted displays (HMD) acquired by the partners for the project.

All efforts were concentrated on this temporary solution that was not planned in the original project. This implied regular technical support both for partners and students, because of the simultaneous use of MS Teams and the Hotel Academy desktop version, among other issues.

When we realized that the days provided for this task would suffer an overcharge, we were forced to reduce the scope to the basic features.

4 TEEMEW MOBILE DESIGN AND THEME CATEGORIES

The Teemew Mobile application, developed by Manzavision, at the beginning of the project allowed the following features:

- Creation of **articles** of 1500 characters maximum which may include images and videos
- Creation of **flashcards**, **mini games** and **quizzes** in relation to the articles which may be used as gamified training on different themes

Adaptations as regards the specifics of the project included the Hospitality theme and Trainees' interactions.

4.1 USERS DEFINITION

We have identified 4 types of users for the mobile application:

- **Administrator:** Manages the access to the platform and its users, i.e. IT-pedagogical consultant, Webmaster, Developer, Teacher (IT).
- **Content Contributor / Moderator:** Creates and/or validates content, i.e. Expert in Hospitality, Teacher.
- **Trainers:** First end users to the Content Management System (CMS) who can create content, i.e. Teachers, IT-pedagogical consultants, "IT support" teachers.
- **Trainees:** End users who consult and train themselves with the application, i.e. Students, apprentices, professionals.

4.2 APP CONFIGURATION

Teemew mobile is a toolbox that offers lessons, training courses, mini games, flashcards, and a leader board.

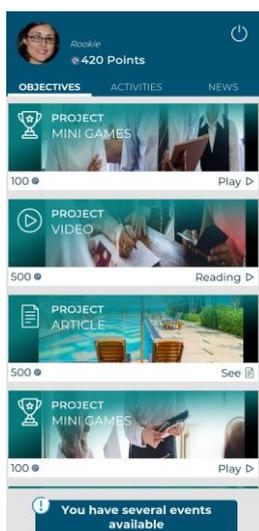
The application is available on iOS & Android Compatible and on web browser through a WebGL version.

This combination of learning resources can cover a variety of pedagogical objectives, which are organized in “themes”.

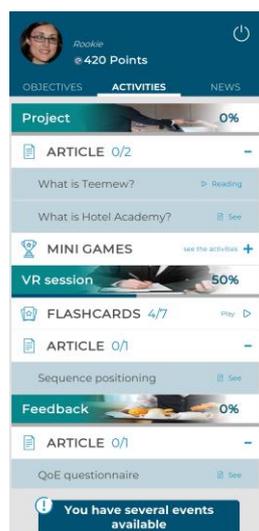
For Hotel Academy, we defined 3 themes for the activities:

- **Project:** An introduction to the Hotel Academy project and the use of the Teemew Mobile application.
- **VR Session:** Different activities to carry out before connecting to the VR session, according to the pedagogical contents developed on IO2 (articles, flashcards, quizzes).
- **Feedback:** A User Experience questionnaire to be filled out by students once the VR session is over.

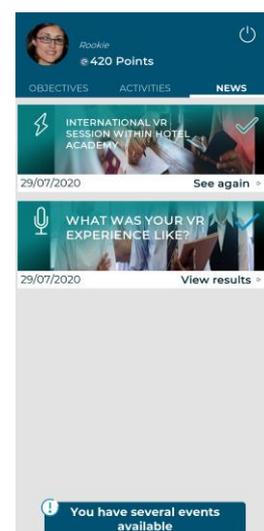
Figure 6 Teemew Mobile’s Homepage



This section offers a selection of recommended contents for every user thanks to an algorithm.



This section gives access to all contents (video clips, games, flashcards, articles, etc.). It also shows the level of progression for every theme.



This section presents the last articles, news or video clips published.

5 TEEMEW MOBILE FEEDBACK AND GROUPING TECHNICAL FEATURES

Due to the COVID-19 crisis, as previously mentioned, students were at home and had no access to HMDs. The need to develop a desktop version for the VR application was imperative and all efforts were concentrated on the organisation of remote test sessions.

The use cases testing phase became more complicated because all instructions and installation processes were remote and depended on the personal equipment and connection of every student, so partners decided to simplify by leaving the mobile application aside.

In addition, the idea of the project is to favour immersion in order to stimulate concentration and facilitate learning, and mobile prevents it.

Another drawback to the use of the mobile app was its competitiveness. On ESG's original proposal, the points cumulated with the app's activities would reflect on the leader board and give a certain order list of students to access the VR sessions. FHD and EUC found this approach counterproductive.

6 CONCLUSIONS

Taking all these into consideration, the partners have set the basis for the use cases testing phase with the implementation of Roleplay activities mainly through a desktop application.

Should the Covid-19 restrictions allow it, VR sessions with HMDs in face-to-face courses will be later organised.

However, some aspects still need to be specified:

- Regarding the feedback and measurement aspect, users' data will have to be collected manually through the use of online questionnaires before and after the sessions.
- Regarding the immersive aspect, it will be reinforced by the use of one application only, but it will be less effective as VR is not the first option available.

Thus, the next steps will consist in adapting the pedagogical contents on IO2 as well as the course schedule to the digital tools that will eventually be implemented.

7 ANNEXE

7.1 ROLEPLAY ACTIVITY DESIGN & ANIMATION



**HOTEL
ACADEMY**

ROLE PLAY ACTIVITY

Design & Animation

*Project funded by the European Commission within the ERASMUS+ programme
under the agreement n° 2019-1-FR01-KA202-063097*



Erasmus+

The purpose of this document is to guide you step by step to design and implement your role play activity. Some pages are meant to be shared with the participants to help them to play their role, identify their objectives and missions.

CONTENT

1. **The students:** identify up to 30 students
2. **The game:** define the key features of the scenario, the pedagogical objectives and the main characters
3. **The hotel:** describe the hotel and the precise state when the action takes place
4. **The characters:** describe each character and their missions in the scenario
5. **Monitoring:** overview of the players and their mission in the scenario

I. The students

The following page will allow you to identify up to 30 students to join your training activity

I. The students – the Participants and their Position in the amphitheatre

	Participant
A1	
A2	
A3	
A4	
A5	

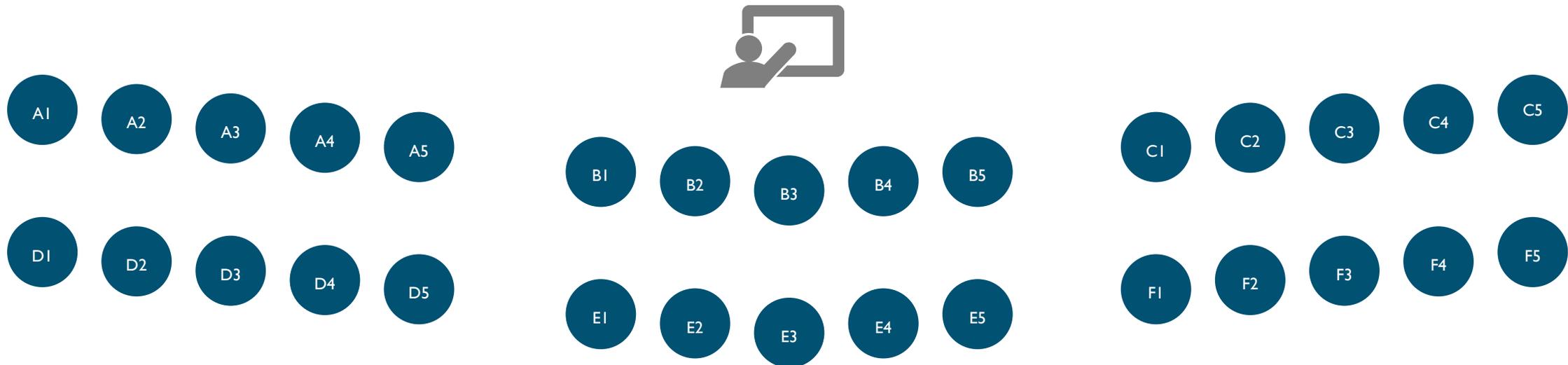
	Participant
B1	
B2	
B3	
B4	
B5	

	Participant
C1	
C2	
C3	
C4	
C5	

	Participant
D1	
D2	
D3	
D4	
D5	

	Participant
E1	
E2	
E3	
E4	
E5	

	Participant
F1	
F2	
F3	
F4	
F5	



2. The game

The following pages will help you to define the main features of the game you are planning to organise.

- 1. define the main pedagogical objectives and how the scenario is built to support them, through the characters, their specificities and the situation*
- 2. List precisely the characters and define their position in the hotel lobby. You have the possibility to assign the role to the student of your choice. This assignment can be (re-)decided at any time, including upon discussion with the student themselves at the time of play.*

2. The game – Key components of the scenario and pedagogical objectives



What is the general context of the situation?

Briefly describe the situation, the hotel, the general context when the action takes place, potential variations of the scenario etc.
 e.g. One of the character is a manager, recently promoted and another one is a receptionist. A client is coming with a request, e.g. willing to book in the hotel restaurant for tonight, but the restaurant is closed tonight. The hotel team will have to find a solution for the client.



What are the pedagogical objectives?



How can pedagogical objectives be achieved?



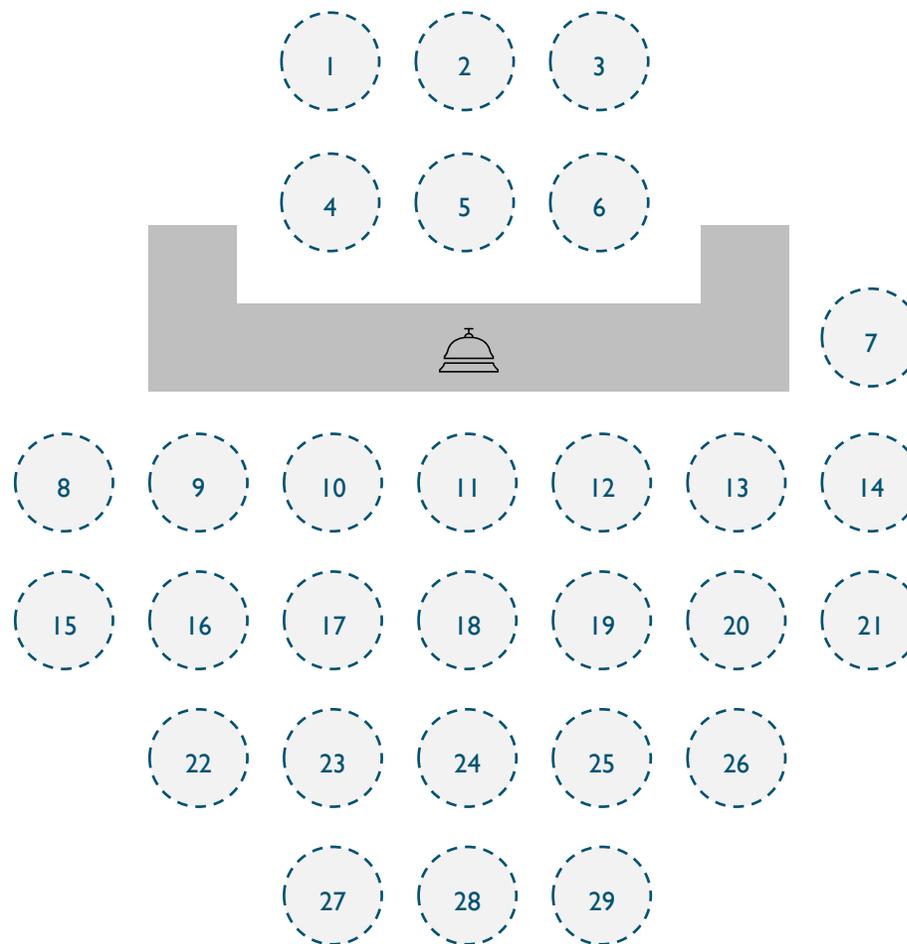
How can achievement be evaluated?

#1	My first pedagogical objective e.g. training management skills help my team to gain new competencies	Specific elements of the scenario that support, illustrate the 1st pedagogical objective e.g. A character is a new manager and has to help a receptionist to learn new competencies and face a critical situation with a client.	Metrics or evaluation criteria to apply to evaluate how the role play will succeed e.g. success of the receptionist to manage customer satisfaction
#2	My second pedagogical objective e.g. training of Customer relationship management (CRM) ...	Specific elements of the scenario that support, illustrate the 2nd pedagogical objective e.g. The client is not satisfied, the receptionist has to find a solution.	Metrics or evaluation criteria to apply to evaluate how the role play will succeed e.g. satisfaction of the client
#3	My third pedagogical objective	Specific elements of the scenario that support, illustrate the 3rd pedagogical objective	Metrics or evaluation criteria to apply to evaluate how the role play will succeed

2. The game – The participants and their position in the hotel

You can add up to 8 participants per session, you assign them a role among “Hotel receptionist”, “Hotel manager”, “Guest” and choose the place where they will stand in the Hotel lobby.

	Role	Participant
	Guest	
	Manager	
	Manager	
	Receptionist	
	Receptionist	



3. The hotel

The following pages provide

1. a general description of the hotel where the action takes place.

You can fill it and share it with the students when you are planning the activity.

It will help the students to figure out the general context (not yet the precise scenario and the role they will play)

2. a specific description of the hotel at the time the action takes place.

You can fill it and share it with the students when you are starting the activity.

It will help the students to figure out the precise scenario and the situation.

3. The hotel – General description



Enter hotel name

Enter hotel address Street
 Enter hotel address City
 Enter hotel address Country

Transportation



Airport(s) around hotel



Train line(s) around hotel



Bus line(s) around hotel



Tram / metro line(s) around hotel



Electric car parking



Car parking

Room description

Total room number

XXX

CATEGORY 1

Number of rooms:	xxx	Room capacity:	xxx
Price:	Enter price (normal, min, max)		
Description:	Describe the room category		

CATEGORY 2

Number of rooms:	xxx	Room capacity:	xxx
Price:	Enter price (normal, min, max)		
Description:	Describe the room category		

CATEGORY 3

Number of rooms:	xxx	Room capacity:	xxx
Price:	Enter price (normal, min, max)		
Description:	Describe the room category		

Service description

Restaurant

Type	xxx	Capacity:	xxx
Price:	Price range		
Opening:	Hours opening / closing		
Description:	Describe the rest		

Room service

Type	xxx	Capacity:	xxx
Price:	Price range		
Opening:	Hours opening / closing		
Description:	Describe the rest		

Spa

Type	xxx	Capacity:	xxx
Price:	Price range		
Opening:	Hours opening / closing		
Description:	Describe the rest		

3. The hotel – Current situation

Hotel Staff

General manager			
Number of rooms:	xxx	Room capacity:	xxx
Price:	Enter price (normal, min, max)		
Description:	Describe the room category		

Desk 1			
Number of rooms:	xxx	Room capacity:	xxx
Price:	Enter price (normal, min, max)		
Description:	Describe the room category		

Desk 2			
Number of rooms:	xxx	Room capacity:	xxx
Price:	Enter price (normal, min, max)		
Description:	Describe the room category		

Room description

Total occupancy

XXX

CATEGORY 1			
Number of rooms:	xxx	Room capacity:	xxx
Price:	Enter price (normal, min, max)		
Description:	Describe the room category		

CATEGORY 2			
Number of rooms:	xxx	Room capacity:	xxx
Price:	Enter price (normal, min, max)		
Description:	Describe the room category		

CATEGORY 3			
Number of rooms:	xxx	Room capacity:	xxx
Price:	Enter price (normal, min, max)		
Description:	Describe the room category		

Service description

Restaurant			
Type	xxx	Capacity:	xxx
Price:	Price range		
Opening:	Hours opening / closing		
Description:	Describe the rest		

Room service			
Type	xxx	Capacity:	xxx
Price:	Price range		
Opening:	Hours opening / closing		
Description:	Describe the rest		

Spa			
Type	xxx	Capacity:	xxx
Price:	Price range		
Opening:	Hours opening / closing		
Description:	Describe the rest		

4. Persona

The following pages provide templates for the characters'/roles' description.

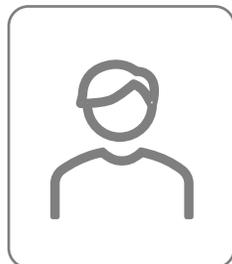
You can create as much sheet as you need for all hotel staff members and guests you plan to have in your game.

You can fill it and share it with the students when you are starting the activity.

It will help the students to figure out their role in the scenario and their objective during the play.

The objective you define will help the players to engage in a realistic situation, progress on the defined pedagogical objectives and on the target skills.

4. Persona – Hotel staff



Identity

Name

Enter Name

Age

Enter Age

Role

Enter Role, position in the hotel

History

Experience in the hotel

Seniority level, years of XP in the hotel

Experience in the field

Seniority level, years of XP in the field

Personality

Describe main personality traits

...

Additional information

Add any other information about the character that could impact the situation or help the students to play the role.
e.g. sick, new in the team, recently promoted manager...

Mission #1

Mission description

Describe the first mission

e.g. You've been a receptionist and have recently been promoted as manager. You have to learn not to do by yourself but to supervise your team and organise their work.

Skill(s) to be trained

Skill 1

Skill 2

Skill 3

Mission #2

Mission description

Describe the second mission

e.g. As a manager, you have to support your team to gain new competencies and to progress.

Skill(s) to be trained

Skill 1

Skill 2

Skill 3

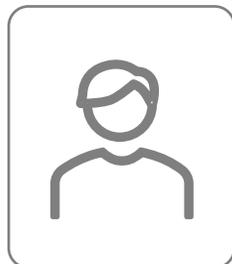
Bonus Mission

Mission description

Describe the bonus mission

e.g. Make the client join the loyalty programme

4. Persona – Guest



Identity

Name

Enter Name

Age

Enter Age

Role

Enter Role, why traveling in the hotel

History

Reason for stay

e.g. Business, Holidays, with friends, family ...

Duration

Duration of stay in the hotel

Room

Type of room occupied

Personality

Describe main personality traits

...

Additional information

Add any other information about the character that could impact the situation or help the students to play the role.
e.g. You are in the hotel for an important business meeting and your family will join you for the weekend.

Mission #1

Mission description

Describe the first mission

e.g. You are looking for a restaurant for an important diner with your clients tonight. You want to book in the hotel restaurant, as you've heard it's a very good one.

Skill(s) to be trained

Skill 1

Skill 2

Skill 3

Mission #2

Mission description

Describe the second mission

e.g. Your family will join you for the weekend, you want to book 2 extra nights for you and your family.

Skill(s) to be trained

Skill 1

Skill 2

Skill 3

Bonus Mission

Mission description

Describe the bonus mission

e.g. Get a discount for your stay in the hotel

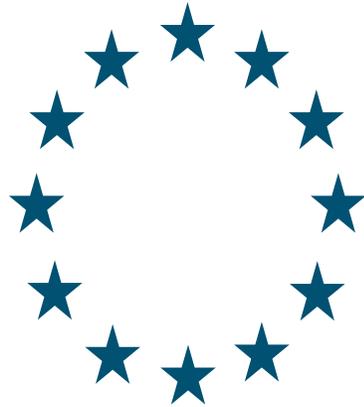
5. Monitoring

*The following page provides an overview of the participants and their missions during the game. You can add comments.
You can use this page at the end of the game to give feedback to the students.*

Monitoring – Objectives overview

Use this page to follow up students' objectives during the game and comment on their achievements after the game.

Participant	Role	Mission 1	Mission 1 achievement	Mission 2	Mission 2 achievement	Bonus mission	Bonus Mission achievement	Comment
Name Student 1	Character name Role	Briefly restate mission 1 obj. and evaluation	How mission 1 is fulfilled?	Briefly restate mission 2 obj. and evaluation	How mission 2 is fulfilled?	Briefly restate bonus mission obj. & evaluation	How bonus mission is fulfilled?	
Name Student 2								
Name Student 3								
Name Student 4								
Name Student 5								
Name Student 6								
Name Student 7								
Name Student 8								



Erasmus+

