

IMMERSIVE AMUSEMENT PARK ATTRACTION

Introduction

The exit is the last part of the attraction. This is where the visitors will recover from their overwhelming ride, this is the part where they will slowly experience the transition to the real world. As the Efteling focuses on really immersive experiences it is important for the exit to guide the visitors to this real-world by taking small steps and changes to their surroundings.

The exit has some connections to other systems. Therefore it is important that the information flow in the attraction itself and in the design process are monitored and defined when all components are being defined and worked out. This is a large part of this poster. The poster contains information about the intern system and of the extern systems to get a good overview of all the aspects that are included.

Method

The exit is designed as a sub system of the entire attraction. That is why communication between the system and other systems should be clear to make the entire attraction work. A structured approach is needed during this design process. To get an overview of the system the main components are defined and requirements are set up. Next the information flow internally and externally are defined with help of an N2 diagram. The N2 diagram includes insights on what input and output the subsystems need to function properly. The diagram creates an overview of all the aspects that should be taken into account when designing. At the same time the layout of the rooms and the visitors flow is defined to get an overview on the

placement of the rooms and the connections between them. Considering the layout and the N2 diagram the functional components can be defined and detailed. This includes a system flow diagram that shows how the functional components interact; safety measures and interfaces. Some sketches are made to show the appearance and decoration of the exit. The appearance plays a large role in the immersion factor and it is used to show the end of the story and the transition to the real world. Design concepts are made for the various visual components while keeping close contact with the other subsystems to create a coherent experience for the visitors. Lastly, a test plan is made to ensure that the requirements are met. The test plan can be found in the hand out.

Requirements

The requirements are separated into two main categories to envision which requirements concern other systems.

Externally

- Has to fit within the area given by SE
- Should fit the style of the entire ride
- Should be connected with the entrance and ride through employee routes
- The souvenir shop and exit should be able to be closed off from the park (in case of repairing the ride)
- Shouldn't be discriminating
- Should guide 28 visitors out of the ride building into the exit in less than 90 seconds

Internally

User experience

- Should wrap up the story of Thumbelina and provide an illusion of growth
- Provide extra information and entertainment to the customers
- Should provide an illusion of growth and the transition to the park
- Provide customers with the opportunity to purchase photos and souvenirs
- Should be part of the immersive experience

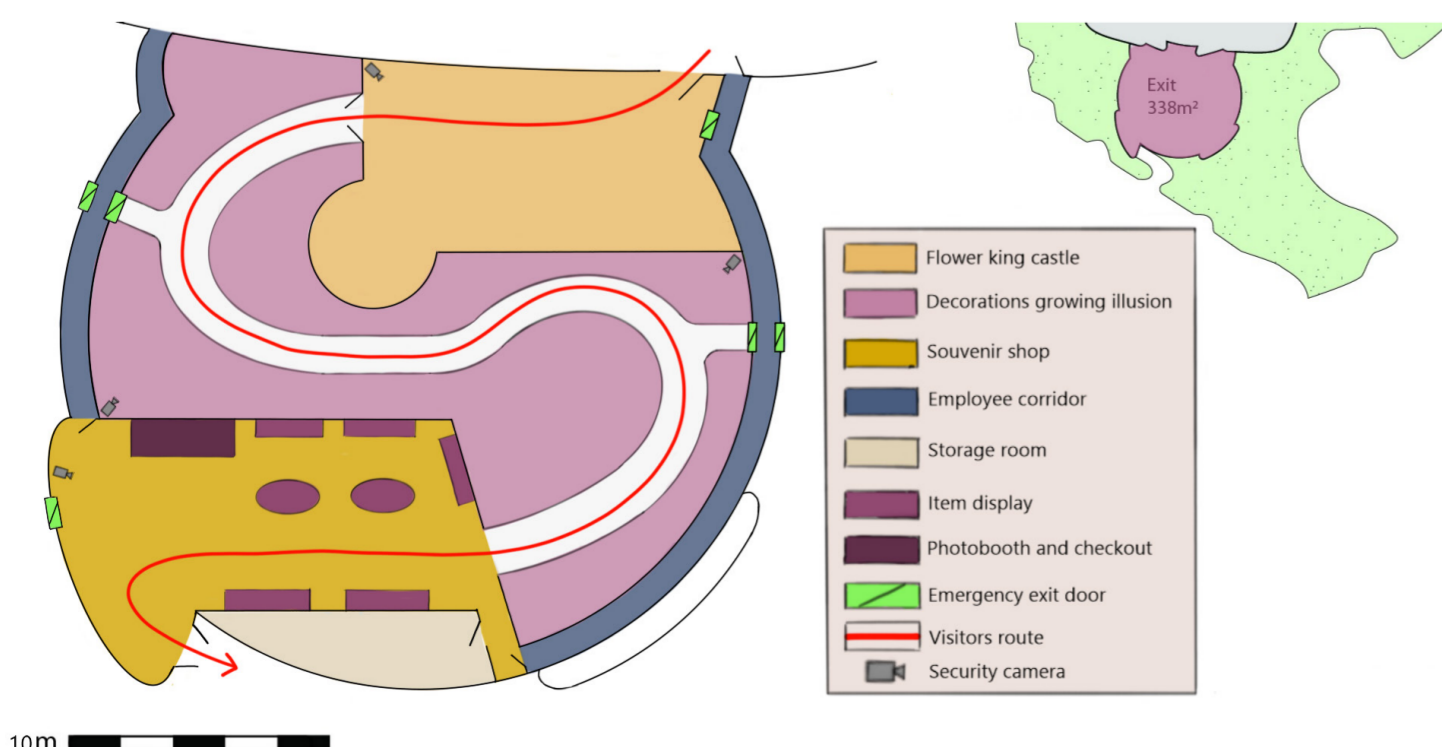
Safety

- Should contain safety control
- Decor must be safe for children
- Should contain emergency exits

Functional N2 diagram

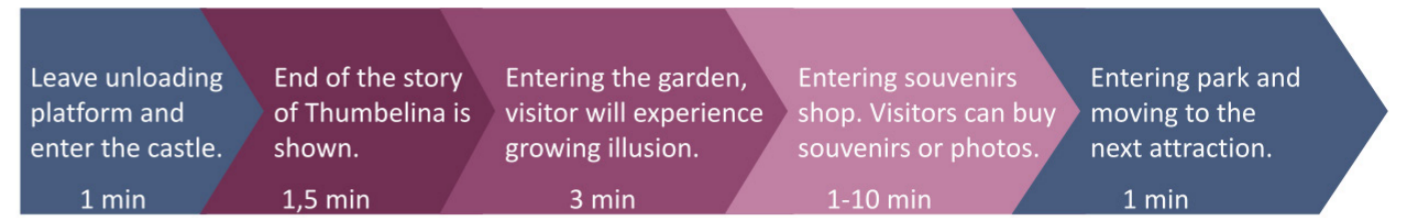
control room				send ride photos to photobooth		
	unloading platform	- guide visitors into the castle - signals when doors can open				guides visitors into the park in case of emergency
- send security camera footage - send update on whether doors are open/closed	- signals when doors can close - signals when room is emptied	castle room	guides visitors out into the room when story ends		set boundaries	guides visitors into the park in case of emergency
send security camera footage			growing illusion room	guides visitors to	set boundaries	guide visitors into the theme park
send security camera footage	give access to disembarking platform for employees	give access to castle room for employees	give access to illusion room for employees	souvenir shop		
		provide story	provide illusion of growth		decor	
						park

Layout



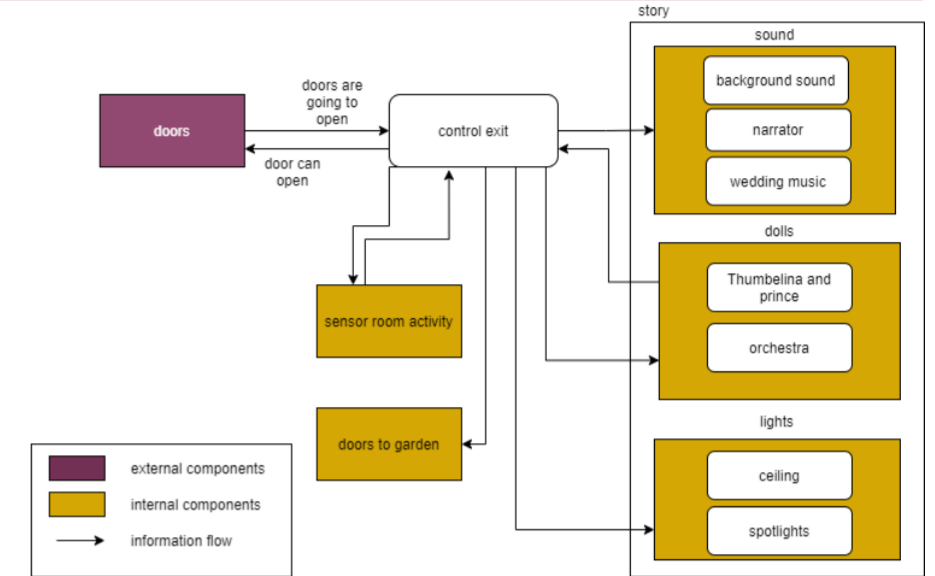
Crowd logistics

Approximately every 90 seconds a new group of 28 visitors arrive at the exit. They will proceed through the castle for the story ending in the same time span. The automatic door system forces the visitors to move forward into the garden. Since the garden lacks an active system to encourage the crowd to move forward, the pathway is two meters wide to avoid congestion. Given the amount of space, the exit should not have any problems with the rate of visitors coming through.



System functional diagram of the castle

The castle room includes a story with visuals. These visuals are 3D dolls that are moving during the narration. It is a fully automated system that reacts on signals from the doors. The signal will start the story and when the story is ended there will be a signal send back to the doors. This way there is no need of a employee to start the story.



Souvenir's shop

The last area which the visitors go through, before they reach the exit, is the souvenir shop. The shop is directly connected to the castle garden without a separating door. Visitors who are not interested in buying souvenirs have the option to walk through the shop quickly because of the pathway in the middle of the shop. Visitors can purchase various souvenirs related to the Thumbelina story and the ride itself. These items are presented on displays throughout the shop. There is also room for storage to keep the supply of souvenirs and there are two doors leading to employee corridors. These corridors connect the shop with other areas of the ride and allows the employees to quickly traverse between them.

The photo booth is also located in the souvenir shop. Here visitors can purchase an action photo taken during the ride. These photos are presented on a screen behind the register which displays two rows of seven photos, one row per train, one photo per cart. Every 2,5 minutes a row gets replaced by a new set of photos. Visitors that purchase a picture receive a quality print of the photo and a digital copy send by email.

Interior

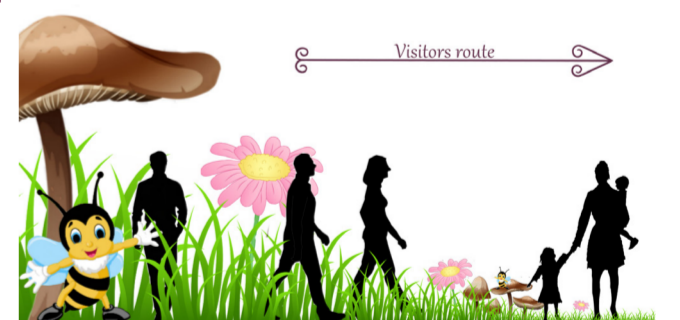
Castle - wedding of Thumbelina

The first room in the exit will tell the end of the story of Thumbelina and the prince to wrap up the ride and take the first step to leaving the immersive experience. The visitors will enter this room with everyone who disembarks at the platform, this is a group of 28 people. When they are in the room the doors will close and the story will start. A narrator will tell the story combined with visuals and music. When the story of around 1 minute is finished the visitors will be directed to the castle's garden.



Castle's garden

The second room connects the ending of the story with the park again. This room helps the visitors transition from this immersive world back to reality. This is done by creating an illusion of growth for the visitors while they go through the room. When they enter the room, the surrounding décor will still be huge relative to them, but as they move along these decorations will become smaller until they are of normal size. The ceiling starts high and as the surroundings shrink the ceiling will gradually become lower, creating the illusion that the visitors are growing in relation to the room and decorations around them. When the visitors arrive at the exit they will be of normal size in relation to the rest of the world and they will be ready to exit the world of Thumbelina and return to the park.



On the left side the layout of the entire exit is shown. The right side shows a more detailed overview of the castle room. The castle will provide the ending of the story, which helps the visitor with the start of returning to reality. The orchestra shown in the castle room will consist of fairy dolls that are moving when music is played out of the speakers in front. The purple circles indicate the placement of Thumbelina and the prince during the story. A matching daigram with more details can be found in the handout.

