

# Experience Design Doc

---

## Experience Overview:

**Project Name:** Projection Mapping extended

**Experience Name:** Jack'O Lantern

**Set:** Cave - Coffin Graveyard Set

**Project Requirements:** [link](#)

### **Project Goals:**

- A standing experience within the Cave
- One or two guests stand and observe the projection experience
- Use the HeavyM software to create a projection map onto a miniature set
- Use the HeavyM software to create an abstract visual experience
- Using theme - Halloween

### **Experience Goals:**

- Educate the guests about the origin of Halloween in Ireland
- Tell the guests the Irish folklore of Jack O'Lantern
- Educate the guests about why evil figures are carved on pumpkins in reference to Stingy Jack's story
- Teach guests a moral lesson about selfishness and evil
- Generate the joyful festive vibe

**Tag** (one to two sentences that describes the entire experience and may be used for PR ):

- Carve your pumpkin as it's time for evil jack to get it

**Estimated Length:** 2 Minutes

**Actual Length:** 2.03Minutes

**Theme** - The theme of the experience is Halloween.

### **Demographics:**

- Children of 6-13 years of age
- People who admire the festival of Halloween

- People who enjoy watching spooky animation stories

**Location** (Where would this experience be seen):

- Schools at the time of Halloween
- Children's Libraries or art gallery and museums
- Game Shops
- Halloween Carnivals

**Throughput** (Describe how the guest(s) will view the space):

- Guests peep inside a closed coffin with a miniature graveyard set
- Guests look at the projections on the set
- Their eyes follow the images lighting different parts of the set
- Guests leave when the experience is over

**Seeing** (What does the guest(s) see):

- Guests see a coffin and peep inside through a hole on the side
- On peeping inside, the guests see a miniature set of a graveyard
- The following will be seen projected on the graveyard set as the poem plays in the background depicting the story
  - Jack's house
  - Bar
  - Jack's golden house
  - Graveyard
  - Heaven
  - Hell
  - Earth at the time of Halloween
  - Happy Halloween title animation
  - Title and credit title

---

**Supporting Documentation:**

## **Journey Map:** High level experience design [link](#)

**Takeaways** - When the guest leaves the experience they should be thinking about:

- Guests will think about the origin of Halloween
- Guests will think about the story of Stingy Jack
- Guests will be excited to carve their own Jack O'Lanterns
- Guests will be excited about the festival
- Guests will share the story of stingy jack with their friends
- Guests will learn a moral lesson of not being selfish and stingy

**Emotional Arc** - The guests emotions should change throughout the experience. The design aims to instill the following arc of emotions:

- Interest- Guests are curious to see what's inside the coffin
- Admiration - Guests admire the miniature set and the visuals projected
- Surprise- Guests are surprised by the myth behind carving pumpkins
- Joy- Guests feel the joy of Halloween
- Amazement- Guests are amazed by the experience of immersive storytelling

**Facilitator** - The experience needs only a Facilitator to start the experience program and test that all the hardware is functioning properly. The experience is self contained and does not need constant supervision or intervention. Since it is a continually running experience, it would be wise to check on it hourly to ensure that the program has not crashed or is hung.

**Input Devices** - This experience does not need guests to use any input devices.

**Guest Role** - In this experience the role of the guest is to be a passive observer. They need to be able to see the exhibit from a very specific angle.

---

## Experience Design:

**Set:** The set for this project is in miniature form due to the Hybrid nature of education this semester within a pandemic. Plastic graveyard pieces were laid out in one end of a small foam core coffin and a pico projector was installed in the other end. [Photo](#)

**Experience Walkthrough:** Detailed walkthrough of the experience from the point of view of the experience taking into mind the guests journey.

This experience is designed to be displayed in a dark corner with enough space for 2 people to stand in front of the coffin box.

The experience is meant for one or two guests at a time to experience the exhibit from a specific viewing angle. The throughput is low and it is meant for a low traffic area.

The lighting in the room must be dark since projection is being used but there does need to be enough light for the guests to be able to safely move up to the experience and then leave.

Once the floor sensors trigger to the experience that the guest has arrived then the lights change to welcome the guest and signal that something is now about to begin. The lights will project a house and moon at night time

The Sequences have the following mood or feel ... ADD MORE

- Jack's house
- Bar
- Jack's golden house
- Graveyard - abstract and
- Heaven
- Hell -
- Earth at the time of Halloween

When the guests see that the experience has looped they will know they have seen it all and walk away allowing another guest to enjoy the experience.

---

# Reflection:

**Final Presentation:**[Link](#)

**Project video:**[Link](#)

**Three best photos:**

- [1](#)
- [2](#)
- [3](#)

**Conclusion:** (How did the project turn out):

- The project turned out well. It succeeds in telling the story in a fun poetic manner. The visuals are appealing and set the moods successfully. Lack of playtesting doesn't make it sure if the experience will work for the target demographic(6-13years old). The software being unfriendly with gif formats, made it very difficult to impose moving images on each other. The animation was too extensive and there was not much time left to focus on the audio which let us to use a poem and not a song. The original story from mythology had to be changed here and there to make the overall experience and visuals more dramatic.

**Three best points:** (What three things worked out the best in the experience)

- The story is effectively delivered in the estimated time.
- Early documentation including experience doc, storyboard and gold spike helped throughout the production process
- The software worked well for videos and effects

**Three worst points:** (What three things worried out the least in the experience)

- Timeline- Extensive animation work left very little time for audio and the poem couldn't be turned into a song as it was originally planned
- Software- HeavyM had issues with image and gif formats and has no fade out/in effect for videos. Shot duration is very restrictive
- Projector- Certain areas that were supposed to be blacked out were still showing during projection. The images looked much brighter on projecting as compared to what they looked in the windowed view in the software

**Number of rounds of playtesting:** 0

**Playtesting documentation:** [link](#)

**Lessons** (What was learned from playtesting)

- When the time for production is short, it is better to plan the story according to the resources available online that are available to use.
- We should have started working on the audio earlier
- Technology will fail us when we need it the most

**Evolution** (How playtesting changed or evolved the product)

- We were unable to playtest but gold spike helped our project a lot. We were saved from creating a lot of animations that were not required.

**Actual experience length:** 2:03min

**Reasons for difference** from estimated experience length: The music needed more time to fade out. The extra 0.3 seconds are used by the same.

**Safety Concerns:** (What are some safety concerns with the experience? Are there any demographics that the experience is not suitable for physically or mentally? Where these recognized before, during, or after the project was developed?):

- Some children may not be comfortable with the theme of death and ghosts
- 

## Credits:

This project was created for the purpose of exploring experience design with a specific theme to be housed within a pre-built exhibit set as part of the Experience Design Class in the Entertainment Technology Masters Program at Carnegie Mellon University.

The Project Goals were designed for the project and the Experience Goals were designed by the team of students who completed the Project.

**Roles and Team Members**

- Ryan Eckert - Background music
- Jonathan Nee - Voice acting for characters Devil and Jack
- Anjali Shah - Documentation, Visuals, Narration

**Additional Credits**

- Instructor - Ruth Comley
- Set Design and Build - Ruth Comley
- Software Tool - HeavyM ([www.heavym.net](http://www.heavym.net))

**Task List - [link](#)**

---