HALLOWEEN HAUNTING:
A PARTY PUZZLE EXPERIENCE

In 2019, I was tasked with throwing a Halloween party, since my group's usual hosts couldn't make one happen that year. They always had amazing decorations and ambiance, but my attempts to make stuff as great as theirs wasn't going as well as I hoped. I was messing with some ideas when a thought hit me. I was trying to copy a party made by people who weren't me. Their strengths were in visual arts, which wasn't my best area. But I had a different talent: game design.

So why not make a game?

DESIGNING THE EXPERIENCE

The biggest thing about the game that I knew right from the start is that no one should know it was going to happen beforehand. In true horror movie fashion, I wanted the party guests to be caught off guard (and probably already somewhat intoxicated) before Shit Hit The Fan and they had to deal with whatever was thrown at them. There was also the question of difficulty; I am friends with both other game devs and people who basically never play games, and I wanted to be sure that both groups would be able to enjoy the experience. I went through a lot of different ideas about how to make a party a gameified experience with these constraints, but I finally came upon one I liked: an escape room type experience. Gamers and non-gamers alike enjoy them, they don't require anyone to remember a role or stay in character, and there's props, which could be hidden in plain sight as Halloween decorations. Perfect!

I came up with a general story idea: the party host (played by myself) went to a mysterious antique store for Halloween decorations and ended up getting the entire house infested with hauntings that the players would have to banish through various actions, like taking shots, dancing, or sharing Halloween memories. It would merge traditional puzzle solving with party activity, so people of various skillsets and interests would be able to participate. Since the party would be taking place in November, I decided to make the theme of the party "bringing back the Halloween spirit for one final night," and created the Halloween Toast, a special shot-taking at 9pm sharp, to ensure that people would make it to the party before the game started.

Then I ran into a snag. A big thing in escape rooms is using locks or new rooms to designate when old puzzles end and new ones begin. My apartment isn't that big, and I don't have many boxes that lock. I enjoyed the idea of a more free-form environment, but didn't want people to get stuck thinking two elements were connected when they were different puzzle props. Additionally, since this would be taking place in my home, my own possessions would be in the play zone as well, and I didn't want anyone digging through my closet for possible clues. I needed a way to, without locks and keys, show the players what items were puzzle pieces, and which were related to each other. Enter the smart home device Alexa, aka the game's AI system.

COMPUTER, PREPARE FOR ANALYSIS!

I've had an Amazon Alexa for several years now, but mainly only used it for turning my lights off or reading out the weather. A somewhat new feature of the device is Custom Routines, where you can set custom phrases to set off a string of events, such as Alexa saying phrases or changing smart lights. You can also change her wake word to be Alexa, Amazon, or the more generic Computer, which is what I chose for this experience.

Using these custom phrases, I created the "Curses and Hauntings Security System," a paranormal-detecting AI that could scan objects and locations and give players more information about if puzzle elements were connected, or if they were puzzle elements at all. I couldn't make a custom command for every single item I owned, so instead I made the scans work on categories of objects, such as books or games. Scanning an item category would alert players if the item had "paranormal energy" coming from it, and what that energy was connected to, if anything. It worked on locations too, alerting players which rooms of my house had "high paranormal activity," aka many puzzle props, or if there was nothing to be found in a location. (My bedroom, for example, was "void of paranormal activity," alerting players that it would be a waste to search in there.)

I was also able to create back-end game experiences using phrases I knew no one would say out loud. The app allows you to play commands remotely, so using my phone, I was able to play routines that changed the lights of my house, played spooky sounds, or gave players updates about their progress. For example, during the Halloween Toast (the start of the game), I played a routine to turn off all my lights, then change them to red, then make Alexa read an alert saying the Curses and Hauntings Security System had been activated, leading to the rest of the game.
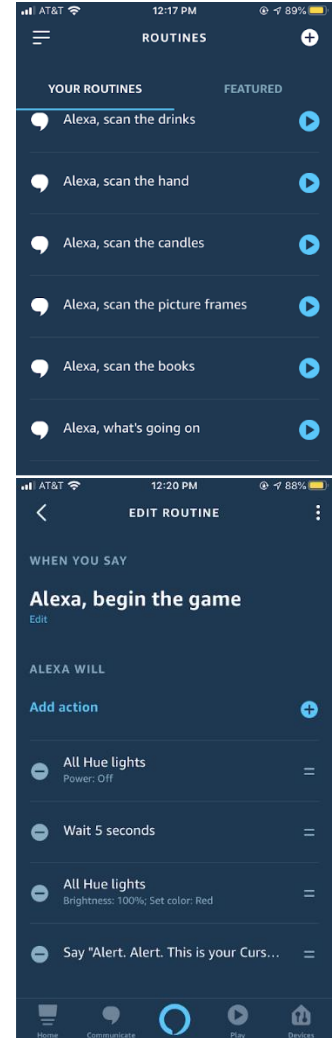
TURNING PUZZLES INTO ACTIVITIES

A big element of the game that I had figured out up until this point was that I wanted each puzzle to end with the players performing some kind of party-related activity, like dancing or smoking, in order to bring people together and make it more party-like than a traditional escape room. It was pretty difficult to think of ways to turn puzzles into commands until I started writing the Curses and Hauntings Security System Manual. I originally started this document for flavor and extra help for people new to using Alexa, but as I wrote it, I remembered a classic horror movie trope of weird numbers, symbols, or words appearing in the place of a haunting. Through this idea I created the Countermeasure System: each puzzle would end with a three-digit number as the solution, which would then be matched to an action entry in the document that players would have to perform. For example, if you found the number 670 after doing some puzzle actions, you would go to that entry in the document and translate the words next to it, which read "at least three people share their favorite halloween memory." Once players performed that action, I would remotely trigger a command in Alexa informing players that the paranormal energies had lowered, thereby letting them know that a puzzle was complete.

DECODING THE DOCUMENT: AN EMOJI PUZZLE

In order to prevent people from brute-forcing the solution by doing everything listed in the document to see what worked, I not only added a bunch of joke/filler entries, but also put them into a code that needed to be solved and translated. There were far too many entries to translate them all, so players were forced to actually find puzzle solutions instead of fixating on the document and ignoring other clues.

In order to de-code the entries, I created a puzzle I knew people without any escape room experience would be able to solve: an emoji phrase match. I made different categories, such as Music, Movies, and Objects, and then represented some things in those categories as a series of emojis. Each emoji set had the answer written in code, and figuring out the answer in English would allow players to figure out what symbol matched what letter. I wanted to be sure that even if a hypothetical player didn't know anything about music, they could help figure out the solutions for something they did know, like movies.

Once the code was figured out, the document also gave players who felt aimless in the game a direct task in translating, so they would be able to participate even if they weren't following the other puzzles.
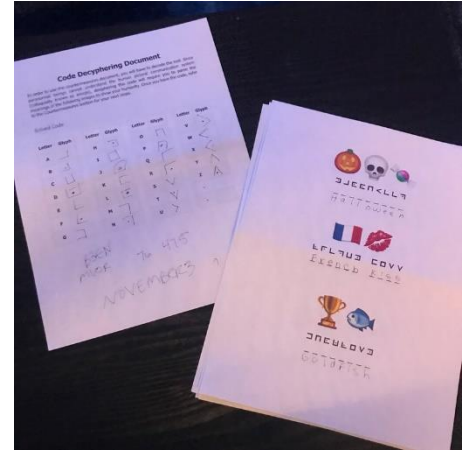
THE HAUNTING RESPONSE BOX

In addition to Alexa and the document, I also provided a haunting response box with various tools that would help players solve puzzles. A UV light, notebooks, pens, and joints were included specifically for parts of the game. Additionally, I added a gemstone "for energy protection" and a harmless plushie "in case of possessions," to add some ghost hunting themed flavor outside of specific puzzle elements. Amusingly, the plushie actually became a big element of the game without my planning, which I'll write more about when I get to how the parties went.

THE "TUTORIAL" REGISTER PUZZLE

I knew the "puzzle > three digit number > document > action" game flow would need to be taught to players, and I got lucky enough to find the perfect prop for a tutorial: a broken vintage register toy. I got it from a local store on a whim, and while playing with it, discovered it was broken in a very specific way: usually only one number would pop up at a time, but if you hit a number and then the 60 key, 60 would pop up, but the other number wouldn't go back down. Additionally, the number tags were in two layers and offset slightly. When 70 was hit, 60 stayed up, but half of it was hidden, making the readout look like 670 - a three digit number. I made a fake receipt for my haunted shopping trip with a series of numbers to hit on the register, ensuring the last two would cause the broken 670 effect. I also put this prop on my desk and under a lamp light, acting almost like a spotlight so players would investigate it immediately. They'd get a number fast, connect it to the document, and get a command, showing the entire game workflow right from the start.

670: At least three people share their favorite Halloween memory.

THE BIG HAND PUZZLE

The first-made full puzzle had three elements: candlesticks, a hand statue, and a very old Farmer's Almanac that happened to be exactly what I needed to bring it all together. Scanning the objects with Alexa revealed their connection, letting players focus on only these props. A scan of the candlesticks also brought player attention to the their bases, giving the clue that they may need to "get creative when finding their meaning."

I glued letters to the base of the candlesticks, and de-scrambling them spelled out "NOVEMB3R," with a 3 replacing one of the E's of the month. Going to the November 3rd entry in the Almanac gave players three planetary symbols. The fingers of the hand statue had the same symbols, and those fingers also had numbers on each of them. In order, those numbers on the fingers with the symbols read out 475, giving players a three digit number to get an action from.
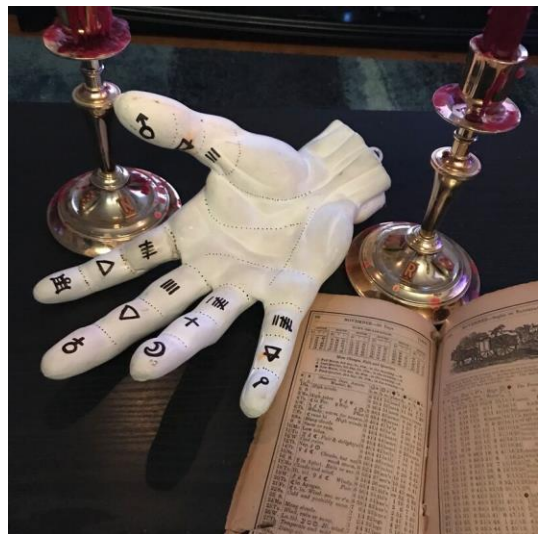
475: Two people light and inhale from two joints using each of the cursed candle flames.

THE CREEPY PHOTOS PUZZLE

When I found a huge box of old photos at the antique store, I knew I needed to do something with them. I lucked out and found two of the almost-same picture, offset just slightly but still visibly the same. These old pictures were also see-through, which inspired the puzzle.

The two same-photo pictures had the numbers "2_7" and "5_4" on them, making players think maybe this puzzle would have two solutions. The photo box had the phrase "All Photos are Sacred" on them, and one of the picture frames in the room had the number "_3_" on it. The numbers 237 and 534 don't exist in the document though, showing the puzzle isn't complete. When the two same-photos are overlayed so their pictures match, the numbers overlay as well, revealing "8_9" and leading to the correct puzzle answer of 839.

839: Two people dance to a favorite song while a third photographs it.

THE UV SKELETON PUZZLE

I simply couldn't ignore the fun of UV lights and inks for a Halloween puzzle. This was also the one puzzle I got outside help with: my live-in partner couldn't decide if she wanted to participate or help me design, so our compromise was that she would design one puzzle with me and ignore it when playing. When I mentioned wanting to use the skeleton, she started talking about the spine, which led to the final puzzle design.

Using UV light, a skeleton in the drink area would glow with various phrases on different bones, plus the spine colored in red, blue, and green. Connecting fragmented phrases on each top arm and leg bone would create "BLUE PLUS GREEN MINUS RED EQUALS YOUR CLUE." The skeleton also had a bone saying "I love books!," and on the bookshelf was a book marked with ??? in UV light. In that book was a page on the spine, highlighting the three sections of the spine in different UV colors, along with a written number indicating how many vertebrae are in each segment of the spine. Connecting these numbers to the earlier clue lead to 12+5-7, equaling 10. Other areas on the skeleton said "Make me a drink" and "I'm thirsty," and looking at the bottle with a 10 on it with the UV revealed that the 1 of 1693 was crossed off, leaving only 693, a three-digit number. There were also two shot glasses by the drinks that glowed extremely bright under UV light, which were used in the action the number revealed.
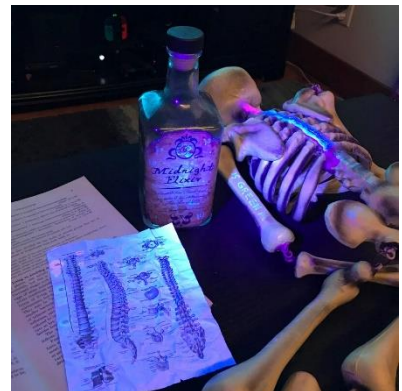
693: Two people drink the elixir together using the glowing shot glasses.

THE "FINAL BOSS" AND THE POWER OF FRIENDSHIP

In addition to the actions that players had to perform at the end of puzzles, the document also warned of a possibility that the entity would appear in some kind of physical form after the actions had been taken, and a special final action would have to be done to stop the haunting completely. To prepare for this, the Alexa response to each action success would also inform players that the security system has new information about the specific haunting, if they wanted to hear it.

The haunting updates gave more story to the game: the paranormal entity haunting the house was created from the negative emotions of humans, specifically from people who were excluded from Halloween parties. The entity, born from these feelings of exclusion and loneliness, wanted revenge on those trying to have a good time, and the Halloween Toast that had taken place at the start of the party attracted the being's attention to the party-going fun that it hated so much.

After all the puzzles above were complete, I set the lights to go red and a second alarm to go off, warning that the entity had appeared and, oh no, it's possessed the party host! I planned for a quick costume change to become the entity, and had a general idea for who I was as a character: an angry spirit lashing out at everyone, but secretly craving to be included in the festivities. The final action to take, as listed in the document under the Possessed Friend entry, was "repeat all the countermeasures you have done with the friend as a participant." By including the entity, the players would teach it the power of friendship, the haunting would be over, and the game would be won.

WHAT ACTUALLY HAPPENED

Once I had everything planned and set up, it was time to actually run the game. I had two parties set up, one on Friday and the next on Saturday, in order to let more people play the game without filling my small apartment with too many guests. One party happened to be way less game-oriented than the other, which let me see the differences between how new-to-escape-room players and players who worked at escape rooms or other game development jobs would think. The Friday party was the Newbies party, and the Saturday party was the Veterans party.

NEWBIES VS VETERANS

The parties ended up being quite similar in completion time. Not accounting for a full-party food and smoke break, the Newbie party finished in a little over two hours, and the Veterans party finished in an hour and a half. I gave the Newbies party more clues than the Veterans, but never blatantly solved parts of puzzles for them, so the difference in solve time is pretty fair.

The Newbies party had a harder time figuring out when they were looking at puzzle pieces or solutions to puzzles without my prompting or an Alexa command, which is something I expected. For example, a player overlayed the see-through photos to get the 8_9, and had the _3_, but didn't tell other players or realize it was a solution until I commented. They were also pretty open to using Alexa and relied heavily on her clues, though I also had to remind players to scan rooms before searching them when I found two of them in my bedroom. While they did enjoy the puzzles, they were much more invested in the story of the game. Every attendee would yell "Computer, Haunting

Update!" when Alexa said she had one to learn about the entity and its backstory. Additionally, when the entity did appear, everyone immediately began interacting with it, and were hyped to include it in the party when the final action entry was translated.

The Veterans party knew exactly what to do once the game elements of the party were revealed. They generally could recognize which of my decorations were props, and were immediately comfortable with the three-digit-number solution system. However, their familiarity with traditional escape rooms also tripped them up; they would routinely forget about Alexa as a game mechanic, leading to confusion about which puzzle elements connected with each other when they couldn't find markings or symbols on the objects (a traditional way of connecting puzzle elements in escape rooms). They also had little interest in the story of the game, and were so solution-focused that during the final confrontation, they translated half of the passage (repeat all the countermeasures you have done) and began excluding the entity in their activities once again before translating the second half (with the friend as a participant).

One person in each party did something I didn't plan for, but made for a very satisfying conclusion to the game. After partying with the entity, it would give a final thanks about letting it be included, even if it had taken over the body of their friend to do it. In both parties, someone grabbed the mouse plushie from the box and offered to let the entity possess it so they could keep partying together. It worked so well as an ending that no one believed I didn't plan for it, and I'm surprised I didn't think of it myself.

A FEW BUMPS

A first try at anything will have a few bumps in the road, and this game was no exception. Since I was keeping it a secret from everyone, I couldn't test anything beforehand, and had to just hope it worked. Thankfully nothing was straight up broken and the puzzles were in a good area of difficulty where players felt challenged but not stumped, but a few things did need tweaking.

My green UV marker rubbed off of the skeleton on the first night, making part of the skeleton puzzle much harder than anticipated until I told players the missing information. It also came off of the green drink bottle, but since it was a decoy bottle, it didn't affect the puzzle.

Even though only one puzzle used the UV lights (Alexa even mentioned this fact in multiple scan entries), players took the UV flashlight to absolutely everything until I told them it was no longer needed, and even then they'd pull it out every so often.

Alexa had a lot of difficulty hearing commands in a party setting. I simplified the commands between nights one and two to try and make up for it, but unfamiliar voices plus background chatter meant that there were a lot of failed attempts at commands. I was able to force commands through with my app, but it wasn't as easy to interact with her as I had hoped.

In a similar vein, players tended to forget about Alexa unless reminded of her existence through her voice or myself. The first party picked up on it and were scanning things regularly by the end, but both parties failed to scan rooms for clue information, and the second party only scanned objects when stumped and reminded to do so.

I have a few ideas on how to fix these bumps should I choose to make another interactive experience, but I'll save writing about those for another time.

FINAL THOUGHTS

I've never designed or run an experience like this before, and had an absolute blast doing it. Everyone at the parties had a great time, and multiple people remarked that, even after realizing it was a puzzle game, didn't realize just how much complexity there was to the game experience. I managed to get all of this done in about two weeks (I don't even think about Halloween until after my birthday in mid October), so I can't put into words how happy I am that it all came together and worked almost perfectly. I also loved interacting with the players as the entity possessing a body, and love that players liked the character enough to want to keep partying with it in plushie form.

People were asking me at the parties if I planned to do something like this for Halloween or some other time, and as I picked up all the props and put them into a storage area with my other random creative endeavors, I decided I absolutely will. I don't know what form it will take or whether it'll be another solo venture or a team effort, but figuring all that out is part of the fun.

Stay spooky, everyone 🤞