**Exam – WSOA3003A – Ashley Jurisich – 1946550**

**Hypothesis**

How to create and compare different player experiences by:

* changing the type of lighting used in a set space
* using a combination of static and interactive spaces

Using a standardized corridor, players will be subjected to various types of lighting creating different effects, and will rate and comment on their experience with each one.

Moving down sets of interactive corridors will trigger events, and players will rate and comment on their experience with each one.

Players experience games differently, and these experiences may be exaggerated when it comes to horror/thriller games. By dividing players by their preference for horror/thriller games/movies, it would be interesting to determine if there is a pattern amongst the ratings and comments of the players.

**Process**

Environment design:

In order to have a fair rating system, each lighting system is created within identical corridors. This ensures that players are only comparing the lighting, and not the physical environment.

Game experience:

The first set of corridors involves no extra movement by the player. The player simply stands at the entrance to the corridor, and rates their experience based on the visuals. The second set of corridors involves the player standing at the entrance to give an initial rating, before moving down the corridor to a certain point where an event is triggered, where they will give a second rating. Corridors with flickering/flashing lights will have a wall blocking the entrance with a warning, and will be skipped by players if necessary.

Lighting system – static corridors:

* Corridor 1: The lighting system appears to be a series of 5 spotlights, meaning the length of the corridor alternates between bright light and comparatively darker sections. Each light section consists of multiple light sources. There is a spotlight located on the ceiling, which creates a circle of light on the ground. A low intensity point light is located in the same position, which is where the lightbulb for the spotlight would be. A slightly higher intensity point light is located above the circle of light on the floor, which adds some light around the circle and on the walls nearby to mimic the reflection of some of the light from the spotlight.
* Corridor 2: I wanted to include a corridor with solid lighting, but didn’t want to simply have the ceiling as the light source. Instead I created an area light covering the entire floor, which would mean the player would be walking on the light if they were to move down the corridor. Since an area light was used, a lightmap had to be baked for this corridor.
* Corridor 3 (Warning: flickering lights): The lighting system consists of 5 ceiling lights (representing LEDs or other typical ceiling lights). Each light source makes use of a point light. The lights randomly turn on and off at a relatively slow rate, and do not do this synchronously.
* Corridor 4 (Warning: flickering lights): The lighting system consists of the same light sources as corridor 3, but the flickering pattern is changed for this corridor. Only lights 3 and 5 flicker at a more rapid pace than in corridor 3, while the other lights remain on permanently.
* Corridor 5: A point light is located at the entrance to the corridor, but the rest of the corridor remains dark beyond the reach of the point light.
* Corridor 6: An area light is located at the far end of the corridor, while the close side of the corridor is in darkness. The area light created 2 different impressions depending on which direction it was facing. One direction made the back wall light up, while the other left the back wall slightly dimmer with a bright outline. I preferred the appearance of the second option, which is what is shown in the prototype.

Lighting system – interactive corridors:

* Corridor 7 (Warning: flickering lights): The lighting system consists of 5 ceiling lights (representing LEDs or other typical ceiling lights). Each light source makes use of a point light. Before the player moves, all of the lights are constantly on. When the player starts moving down the corridor, the end light begins to flicker. Once the player has moved a certain distance down the corridor, the end light will turn off entirely.
* Corridor 8: A point light is located at the entrance to the corridor, with no other light sources in the corridor. Once the player enters the corridor, the point light follows them wherever they move within the corridor.
* Corridor 9: The lighting system consists of 6 point lights spread evenly through the corridor. The lights are different colours, creating a rainbow pattern with red being closest to the player. Once the player enters the corridor, the lights begin to cycle smoothly through the rainbow colours. This corridor is not meant to match the other corridors, it was added to show a different lighting technique, with the colours chosen for pride month.

**Testing**

Players were asked to rate each corridor based on their likelihood to want to walk down each one in a horror game, with 1 being least likely and 10 being most likely. Players were asked about their preference for the horror genre before viewing the corridors, and gave general comments afterwards.

**Table of ratings out of 10 and comments for each passage**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **Comments** |
| 7.5 | 10 | 3 | 5 | 1 | 8.5 | 9, 5, 2 | 1, 5 | 9, 9 | Likes horror.  Context matters. Would feel bolder with a weapon.  Rainbow corridor only makes me feel differently but would not make a different choice. |
| 5 | 3 | 7 | 6.5 | 5 | 8 | 5, 7, 6 | 5, 6.5 | 8, 10 | Depends, thriller is better than gore.  Flickering lights liked best, darker ones better too for horror games. Brighter corridors not as interesting in horror games.  Rainbow one very cool, love rainbow lights. Good as party lights, but could make nice twist in a horror game. |
| 10 | 8 | 10 | 10 | 8 | 10 | 10, 10, 10 | 8, 10 | 12, 10 | Neutral.  Good lighting, nicely spooky, ominous feelings. All gave eerie vibes. Liked progression as they got spookier. Rated high for interesting ones.  Love rainbow one. Fun, inviting and gay. |
| 10 | 8 | 6 | 6 | 3 | 8 | 10, 8, 5 | 3, 8 | 9, 10 | Love.  Static light seems safe, flickering creates suspense, darkness feels unsafe and unpredictable.  Rainbow: static was overwhelming because of intensity, changing was more gentle on eyes and trippy. |
| 10 | 10 | 7 | 5 | 3 | 9 | 10, 7, 5 | 3, 1 | 7, 7 | Neutral.  Rating based off previous horror games. Visuals are less important than audio, audio would put off walking down a corridor. Corridor 8 is the worst corridor to move through because you can’t see anything.  Rainbow felt trippy. In a horror game it feels like you would definitely die. Flickering lights in horror games are overused so you know you will die. |
| 7 | 10 | 3 | 5 | 4 | 8 | 7, 5, 4 | 4, 4 | 10, 10 | Like.  Compared to existing games. Flickering lights remind me of sci-fi horror. Flickering lights are most scary, brightly lit is least scary.  Rainbow one was very cool and felt fun, like something interesting would happen. In context could be scary, but not by itself. |
| 5 | 7 | 8 | 6 | 7 | 5 | 6, 8, 8 | 7, 7 | 8, 9 | Like.  Favourite was corridor 8. Darker ones were more creepy  Rainbow one looks fun, would walk down it in real life. |
| 7 | 8 | 3 | 4 | 1 | 7 | 8, 6, 4 | 1, 1 | 10, 10 | Love even though horror movies scare me.  Seeing the completely dark corridor just made me say “nope”. Flickering lights are scary, so would approach cautiously.  Rainbow corridor is fun. Even if something scary was going to happen it would be worth it. |

\*Note: for the interactive corridors (8 and 9) the first number is the initial rating and the second is the final rating. For corridor 7 there are 3 ratings: the initial rating, first event rating, and final rating.

\*\*Note: the player’s personal like/dislike for horror/thriller games/movies is included in the comments column.

Based on the experience of each player, certain patterns were found in the impression of each corridor, but the reactions of players were different. In general, players found corridors with flickering lights to be more creepy, as well as very dark corridors. Well-lit corridors were less scary as everything can be seen. The interactive corridors (7 and 8) had a much bigger effect on the player. In corridor 7, the initial impression was that there was nothing scary about it. Once the player had moved down far enough to start the flickering of the end light, it became more creepy. Once the light turned off, players said they would have expected something to happen in a horror game. In corridor 8, players were generally put off by the fact that even though the light followed them, their vision was still very limited and could still not see what was in the corridor.

Even though corridor 9 was meant to be a separate experiment, some players still said that if it were in a horror game they would be most scared because of its warm appearance, which they think would be deliberately misleading. Other players loved the way it looked and would walk into it regardless of whether it was in a horror game or not.

The ratings were quite varied, as each person has different play styles. Some players said they would be too scared to move down one corridor, while others said they would move down it because of the creepiness they felt. Some players had little interest in some corridors as they did not feel the corridor was interesting enough to draw them in.

Although I was not able to find someone who doesn’t like horror to test my game, a few players said that even though they like horror it still scares them, and so didn’t want to move down corridors that scared them most.

**Reflection**

I believe I managed to create a good variety of lighting types, and was able to create different atmospheres because of it. Players had stronger reactions to the interactive corridors, as they reacted to the player movement.

The ratings and comments on each corridor are very feeling-based, especially because of the genre chosen. The corridors I felt would be scarier were generally scarier to other players. I think that for most of the corridors, it is because of the stereotypes created in horror movies. For example, when there are flickering lights or darkness it is likely that something bad is going to happen. Even when a person likes horror, they may still follow their instincts to avoid the potential danger within scarier places. Some people enjoy the thrill of danger though, and don’t hesitate to walk into scarier places.

There are many other types of lighting found in horror games/movies, which could be added in the future. It would also be interesting to experiment with sound, and how sound or the lack thereof would affect player experience.