Five Nights at Cloney's: Game Design Document

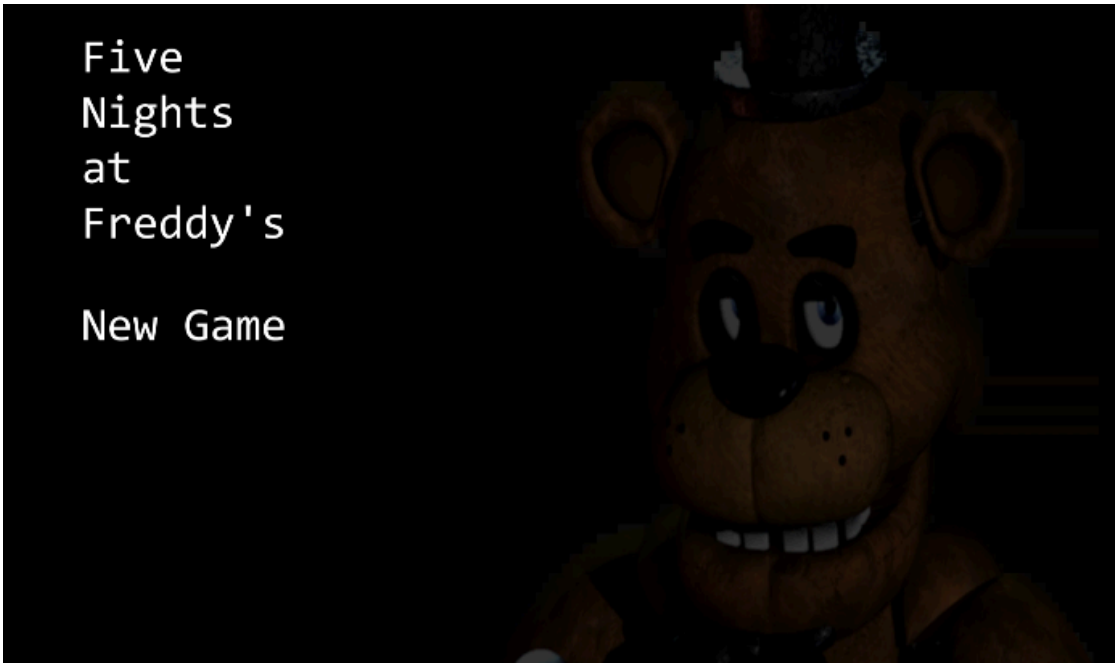

Figure 1: Start Menu of our Clone

1. Introduction

This document serves as a detailed overview of the creative and design process and Game-Design centric aspects of Clone-Group-Two-7's game. This document contains an overview of our original plan, design goals and how they changed during development, an analysis of the original game we are cloning, extra design notes as well as **reflections** from each team member.

2.The Team - Clone-Group-Two-7

Mikhail Govind	**Jean-Francois Retief**	**Malakai Braam**
➢ Sound Design ➢ Main Menu (Night Selection) ➢ Attack AI(Power out) ➢ Jumpscares ➢ Q/A tester	❖ Movement AI ❖ Camera Navigation ❖ Lead Documentation ❖ Attack AI ❖ Q/A tester	★ Office POV ★ Doors and Lights ★ Power System ★ Attack AI ★ Q/A tester

3. Game Overview - What is FNAF?

The game we decided to clone is FIVE NIGHTS AT FREDDY'S 1 (commonly abbreviated to "FNAF1"). FNAF was a very popular indie game released in 2014 by Scott Cawthon. While there are 9 main-line games, more than 20 books, one spin-off RPG-lite and one mobile game in the FNAF franchise (with a 10th game and a movie on the way later this year), we decided to clone the first one.

3.1 Interrogation of genres

3.1.1. Main Genre Analysis - Horror

Five Nights At Freddy's 1 is foremost a horror game, which means a scary atmosphere is needed for the game. This can be achieved by sound design, and mechanics that put stress and tension upon the player. In horror games, the player is quite often in a position where they are in danger of a game over (accompanied by a jumpscare).

3.1.2. Subgenre Analysis - Resource Management

In FNAF, the player must manage or keep track of the following resources:

- Power
- Enemy Distance from the Office

These are the main sources of stress within the game (the power value slowly counting down and the animatronics slowly getting closer to the player's position) which contributes to the horror main genre of the game.

4. Our Plan / Process / Hypothesis / Design Goals

We cloned Five Nights at Freddy's 1.

- The original plan was just to clone the "custom night" of the game, but upon the deadline extension and further inspection on the game systems, we decided to increase our scope to all 7 nights.
- Our Design Goals were to **recreate** the following features, and **understand the original creator's design decisions and process** for these features:
    - The Office Power Management system, as well as other functionality that comes with that system, such as the security doors and lights.
    - The Camera System and the Enemy Movement AI (based on random number generation)
    - The different Enemy Attack AI for all four animatronics
    - The sound cues for each of the above mentioned elements
- We initially decided to split the work in the following sections: Camera/Enemy-Movement System, Office/Player-Interaction System and Sound Design, since for a few days it allowed us to work fairly separately and concurrently.
- After our original sections were in a semi-working states we came together to integrate the systems and work on Enemy Attack AI (which required the camera/movement-AI script and office/player-POV script to work together)

5. Inspiration

5.1. Why FNAF?

We were inspired to do a FNAF game, since we had little experience with the horror genre (and games where sound is a major part of the experience). This genre requires the designer to look at mechanics through a different lens.

For example, every system does not need to be perfectly efficient, in fact a system that is not efficient, like a limited power supply (that drains power when doors are closed), contributes heavily to the feelings of stress we want the player to have.

Another reason we chose a FNAF game is because most of them are relatively small in scale. We chose our game before the submission deadline was extended, and we wanted to make sure we were able to recreate a substantial amount of a game, thus we needed a short game. *Also, Jean-Francois Retief is a fan of the franchise.*

5.2. Why the first FNAF?

We decided on the first game in the franchise because of the following reasons:

- This was back when FNAF was just made by one person, thus it would be easier to clone within 1 to 2 weeks (this decision was made before the deadline extension)
- It has the most recognisable and iconic game, and brought feelings of nostalgia for us as designers.
- This game was Scott Cawthon's first horror game, and ours as well. We were able to learn the same lessons he did when he created this game, just with the benefit of hindsight.

6. Design Notes and Processes

- Very early on in our planning we realised the game is best split into the "camera / enemy movement" systems, the "office / player interaction" systems and the "menu systems" for early parallel development.
- This decision allowed us to have a working build with rough versions of every system in the original game within a few days of development. After the planning phase, we started proper development on 14 Aug, and our first major build with the main menu, office and camera systems integrated together was on the 17 Aug. Although not every system was feature complete, they all had the base functionality each member could add in isolation.
- After the initial isolated parallel workflow, we needed to have the various systems to be integrated and working together to make the following features:
    - Enemy Attack AI (need Office and Camera/Movement systems to work together) - Done by 19 Aug Build
    - Jumpscares - Done by 20 Aug Build
    - Power Outage Event - Done By 24 Aug Build
    - Sound Design (needed versions of every script in order to play sounds at correct times) - Done throughout development as other features were added
- For more information on the technical aspects of our game, please refer to the Technical Document [1]

7. Reflections

7.1. Mikhail Govind's Reflection

Cloning Five Nights at Freddy's is quite the divergence from what I am usually interested in cloning or even mechanics that I would normally sway towards but I think that's why it also intrigued me. JF suggested FNAF and after doing some research on it, I found the game to be quite documented. FNAF fans, even more so, than fans of other video games seemed to be very interested in how the AI and other mechanics of the game functioned so there was a lot of material to source and study, allowing me to really understand the breakdown of this game and the systems I cloned.

My main role within this project was to develop all the sound in it. This role was listed but the reason I was so eager to take it on was firstly, I never really had the chance or found the importance to work on sound within any of my previous games so I was intrigued to go into this new territory and secondly, for a game like FNAF where sound is integral, I thought, “No better time to work on sound than now.”

Luckily, as explained above, there were many videos to source my information on how FNAF handles sound. I watched videos, wrote notes about what sounds there were, how they worked within FNAF, why they would do it that way and what was their purpose within the game.
The sound in FNAF could be broken down into certain categories:
Firstly, advantageous sounds These are sounds that help the player out in some way. The interesting thing with these sounds is how they mesh with the actual gameplay. For example, once the player realises that sounds of pots banging plays when Chica is in the kitchen then they do not have to use the camera to always determine her location.
Then environmental sounds that are diegetic and would occur within the setting of the game. Some of the other sounds are even quite disruptive, used to throw the player off or muddle out the advantageous.

One of the most interesting aspects that sound plays within this game and other horror games is how sounds, like the environmental ones in this game, are just used to immerse the player more and make them feel a part of the virtual space to effectively portray the ambience and plot of the game.
Along with adding to ambience, sound just mixes into the other gameplay mechanics, like muddling out advantageous sounds meaning the player gets a thrown of the path or in FNAF where they cannot move from place to place but are reliant on their sight and hearing to try and get through a night. There are sounds like the fan which is always running and messes with the player’s constant grasp for perceiving as much as they can. Even once the camera is pulled out, the fan’s sound reduces but the power being consumed is increased, thus the senses are treated like some sort of currency with this game which I found to be really interesting.

I really enjoyed working on this game. It was my first time dabbling with horror games and games in this genre have new mechanics and conventions that I’ve never really studied until now. My group was also really great, everyone was motivated, determined and just pushed their own intrigue meaning that we kept perfecting our clone.
I’m also really proud with how much playtesting we did. This was the first game that I dedicated time to just playtesting and tweaking. We even called in some FNAF experts to review our clone.
Another small detail where I think my organisation skills improved, which I will also have to credit my group for, is constantly integrating our different parts together and making different builds.

7.2. Malakai Braam’s Reflection

Jean-Francois initially suggested the game, which I was sceptical of cloning. The daunting nature of this viral game and its creation in 3D was quite pressuring. I agreed to clone this game on a personal basis to understand what makes this game so popular and how creating a clone of this game in 2D would impact the outcome of the clone. To reassure me of the potential of successfully cloning this game, my teammates reiterated that Five Nights At Freddie’s was the third game that the creator, Scott Cawthon, had ever created. As much as it was an experimental learning experience for him, we could utilise it as an experimental learning experience as a team.

I suggested working on the power system and the office because I was curious to understand how the power system is measured. I initially thought the power system included the door, lights, and cameras. However, there is additional general power drainage from the office light and fan which the player has no control over but is aware of. I initially struggled to formulate an equation for how much power is drained per powered item per time in the game. The documentation of how the drainage is calculated in real-time seconds, so after Mikhail created a system of in-game time with frames I was able to calculate that per an in-game hour, 9% of power must be drained and that that amount of drainage per unit is consistent with all of them. Through this process, I realised the importance of the visual representation of power drainage and how a small visual animation of the fan is essential for the player to understand that there is a general drainage.

There are many critical details in the game, such as the fan, sound, and characteristics of the enemies, that add to the storyline of the game and allow the player to understand that even though there is not a written-out story or cut scenes of the story for the game, there is still a story and progression of it as the difficulty increases. Working on the enemies attacking inside the office also allowed me to understand more of the story and the game's systems, such as that Bonnie attacks on the left and Chika attacks on the right. This is because the two enemies work together to confuse and stress the player, and this small detail enhances the gameplay.

Through playtesting, the team realised how important visual and audio cues are to enhance the atmosphere of horror games. Initially, I thought audio cues add ambiance. However, it is used to aid the player through cues such as the volume of Foxy’s laugh, the initial phone call in the original game, and the sound that plays when an animatronic is spotted inside the Office.

I’ve never appreciated horror games until working on this project. Through the detail in gameplay, sound and visual cues, and storyline of Five Nights at Freddie's, I can understand the importance of setting a specific mood within a game and that a story does not need to be written or depicted directly to the player but through gameplay.

I loved working on this game and working with the people on this team. From JF’s organisation skills to Mikhail’s small details, such as the fan and Main Menu slideshows, to my desire to learn and teach arrays and for loops, this team worked and communicated exceptionally well with each other. We learned a lot about ourselves, the game, and from each other in the process.

7.3. Jean-Francois Retief's Reflection

I was the one to suggest Five Nights at Freddy's 1 to the group for the reasons mentioned above in section 5. Inspiration. I had a lot of feelings of nostalgia while making this clone, since I've been watching playthroughs of FNAF games since 2014. I was also very excited for the upcoming movie, and thus these games were on my mind, so I suggested it. From the start I was confident we could definitely recreate a substantial portion of the game (we ended up recreating the entire game) and that we could learn the same lessons that the original creator did, during the course of development.

In terms of things I wanted to learn from this assignment, I was very interested in the way the animatronics moved in these games (i.e., teleporting between camera views via a d20-dice-roll skill-check) and how it contributed to the horror tone of the game. Since the animatronics movements are inherently random, they're movements are somewhat unpredictable, which places the player in more danger, which increases the tension and stress the player feels. This game is also interesting, since the enemies can move, but the player can not. The player is stuck in place as the enemies come closer and closer to the player's locations.

While I was recreating the camera navigation, at first I was just recreating the functionality of the map and the camera buttons, just to have it working and so I can move on to the Enemy Movement AI (what I wanted to focus on). However, while playtesting, I noticed how much small visual elements, such as the "YOU" indicator on the map, contributes to the tension in a horror game. While the more tangible power-left number slowly counting down to 0% creates tension pretty easily, the simple realisation that players have when an animatronic is now closer to the "YOU" indicator, creates intense spikes in stress and fear. It really made me appreciate how even static text on the UI can have a large effect on a player.

I also wanted to work on a horror game, since I've never worked on one before. As mentioned above, the priorities for us as designers were completely different from our previous project, just because of the tonal/narrative-theme of the game (not the mechanical-theme like in my previous projects).

All in all, this was one of my favourite projects to work on so far, not just because I worked very well with this team, but also since I got to recreate one of my favourite games, learn more about that game and it's genre, how tone can affect game design decisions and goals and it gave me perspective on how the original creator learned the same lessons in game design as us, during the process of making Five Nights At Freddy's.

References

[1] M. Govind, J-F. Retief, M. Braam, 25 Aug 2023, "Five Nights at Cloney's: Technical Document", Unpublished Internal Development Document