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GAME DESIGN OF THE COMPUTER GAME *SYNC ERROR*

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This qualification thesis contains the results of the author's original research.
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referenced to the relevant sources.

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INTRODUCTION

The contemporary video game industry is undergoing rapid development not only in terms of technological advancement but also from conceptual and design perspectives. Particular attention has increasingly shifted toward the indie segment, which is distinguished by experimentation, authorial vision, and the pursuit of unique player experiences. It is within this context that the project *SYNC ERROR* was developed. Initially conceived as a game design concept, the project gradually evolved into a fully functional demo version of a video game featuring an integrated concept, a cohesive artistic style, and a clearly structured gameplay system.

The primary objective of this project is to investigate the impact of informational overload on an individual's psychological state while exploring pathways toward emotional balance through rhythmic interaction. At the center of the narrative is Yara, an operator of digital emotional states who stabilizes corrupted environments through music. The game world is constructed as a metaphorical representation of emotional disruption manifested through visual glitches, transforming gameplay into a symbolic form of "spatial therapy."

The choice of the rhythm-game genre is deliberate, as it enables players to directly experience the process of synchronization while integrating gameplay into the structure of emotional storytelling without relying on textual dialogue. As Koubek (2017) argues, indie game design differs from traditional industrial models through its emphasis on experimentation, personal creative expression, and flexible development approaches, including iterative prototyping. Such design principles are particularly important in projects seeking to prioritize emotional resonance and player immersion over standardized gameplay formulas.

The relevance of this project is reinforced by the growing prevalence of stress and emotional burnout in an increasingly digitalized society. Unlike traditional rhythm games, which primarily focus on reaction speed and mechanical precision, *SYNC ERROR* proposes an alternative approach in which musical mechanics function as instruments of emotional regulation. Research conducted by Freeman et al. (2019) further highlights the importance of understanding indie development teams as creativity-driven collaborative environments, where limited resources and distributed workflows actively shape design processes.

The scholarly contribution of this project lies in its exclusive reliance on audiovisual means to communicate both narrative and the condition of the game world. Dynamic color transitions, reactive interface elements, and the intensity of visual interference establish a feedback system between the player and the environment. One of the project's defining features is its integration of Y2K

aesthetics with contemporary procedural distortions, where glitches function not as technical malfunctions but as meaningful artistic devices. As Menkman (2011) demonstrates, glitch aesthetics can serve not only as indicators of technical disruption but also as expressive artistic forms capable of conveying instability, fragmentation, and emotional tension.

Indie game development is frequently characterized by the transformation of technical and creative limitations into opportunities for innovation. As Fabricatore (2007) emphasizes, game mechanics and interaction design play a central role in shaping meaningful player experiences, turning structural limitations into components of engagement. Likewise, Shedroff and Noessel (2012) argue that effective interaction design depends upon achieving a balance between recognizability, functionality, and visual identity, where each design element contributes simultaneously to usability and aesthetic coherence.

Within the framework of this project, a complete cycle of indie game design and development was implemented: from conceptualization and concept art production to iterative gameplay testing and the construction of an integrated visual and systemic architecture. Particular attention was devoted to the aesthetic dimensions of gameplay, including meditative engagement, emergent interaction, and emotional immersion. As Salen and Zimmerman (2003) suggest, meaningful player experiences emerge through the interaction between mechanics, systems, and player interpretation, highlighting the importance of atmosphere and emotional engagement within game design.

Therefore, this bachelor's thesis is aimed not only at the creation of a game product but also at a comprehensive investigation of indie game design as a means of shaping unique user experiences. The *SYNC ERROR* project serves as an example of integrating theoretical approaches from game studies, design research, and practical development methodologies, demonstrating the potential of the contemporary indie sector to produce innovative interactive solutions.

CHAPTER I. ANALYSIS OF ANALOGUES

1.1. Video Game *Gris*

Gris (Fig. 1.1)¹ is a platform video game developed by the Spanish independent studio Nomada Studio in 2018. The project represents one of the most compelling examples of how interactive media can communicate complex emotional states without the use of verbal language.

The visual style of the game imitates traditional watercolor illustration, while color serves as the primary vehicle for conveying the protagonist's internal emotional condition. The opening stage of the game is presented in a monochromatic palette, symbolizing emotional emptiness and the loss of inner rhythm. As the player progresses, colors gradually return to the environment, visually reflecting the protagonist's process of emotional recovery. Each color carries symbolic meaning, resonating strongly with the central concept of restoring synchronization explored in the *SYNC ERROR* project.

Particular attention should also be paid to the design of space within the game. The developers employ simple geometric forms and a minimalist visual language to construct environments that shift between chaos and harmony, reflecting the protagonist's changing emotional state. This approach is especially relevant to *SYNC ERROR*, where the stability of the environment is directly influenced by the player's performance and successful interaction with rhythm-based mechanics.

1.2. Rhythm Game *Muse Dash*

Muse Dash (Fig. 1.2)² is a music-based video game developed by the studio PeroPeroGames. The project is distinctive for combining traditional rhythm-game mechanics with the dynamic visual language of a two-dimensional action game.

The game's aesthetic is defined by bright, saturated colors and a highly detailed user interface (UI). In the context of developing *SYNC ERROR*, *Muse Dash* serves as an important reference for interface construction and systems of visual feedback. Player inputs synchronized with musical rhythm are accompanied by immediate visual responses, including particle bursts and color transitions, providing clear feedback regarding the accuracy of the player's performance (*Perfect*, *Great*, or *Miss*).

Music functions as the primary instrument of interaction, while player mistakes directly affect the character's health point (HP) system. This design principle

¹ <https://www.youtube.com/watch?v=BRiKQIVo7ao>

² https://www.youtube.com/watch?v=_twDDU9VBtg&list=RD_twDDU9VBtg&start_radio=1

closely aligns with the concept of *SYNC ERROR*, in which a reactive HP bar reflects emotional stability and dynamically changes according to the precision of player input.

1.3. Video Game *Sayonara Wild Hearts*

Sayonara Wild Hearts (Fig. 1.3)³, developed by Simogo, is a video game frequently described as “a pop album in video game form.” The narrative follows a young woman suffering from heartbreak, whose emotional imbalance disrupts the harmony of the universe. Through music and rhythmic movement, she gradually finds healing and restores emotional equilibrium.

The project is particularly distinguished by its vibrant neon palette, dominated by shades of pink, purple, and electric blue, which conceptually aligns with the Y2K-inspired visual language of *SYNC ERROR*. In addition, the game actively employs glitch aesthetics and abrupt cinematic transitions to convey anxiety, emotional instability, and shifts between psychological states.

This title serves as an important example of how rhythmic interaction can be used to explore themes of psychological disorientation and emotional restoration. Music functions not merely as entertainment, but as a therapeutic mechanism through which players experience recovery and regain a sense of internal balance.

1.4. Rhythm Game *Friday Night Funkin'*

Friday Night Funkin' (Fig. 1.4)⁴ is a widely recognized indie rhythm game built upon the traditional mechanic of pressing four directional inputs (left, down, up, and right) in synchronization with music.

This project was selected as an analogue due to its simple yet highly effective interface system. The screen is divided into player and opponent zones, while a dynamic progress bar positioned at the bottom of the screen shifts depending on the player's timing accuracy. Character icons simultaneously change emotional expressions in response to gameplay performance, reinforcing visual communication between the interface and the player.

A comparable reactive system is implemented in *SYNC ERROR*. Accurate note timing generates positive emotional responses within both the interface and character animations, whereas mistakes trigger negative feedback and intensify visual instability, reinforcing the atmosphere of digital disruption and emotional imbalance.

³ <https://www.youtube.com/watch?v=F-RyxYcxSQ4>

⁴ <https://www.youtube.com/watch?v=zHyt69mJnj8>

1.5. Animated Video *R O U N D 1 | Alien Stage*

Alien Stage (Fig. 1.5)⁵ is a series of music-centered animated videos distinguished by an exceptionally high level of emotional intensity and dramatic expression. Musical performances within the series are portrayed as emotional—and, at times, literal physical—confrontations between characters.

For the *SYNC ERROR* project, this reference is particularly valuable in terms of lighting design and the visualization of musical tension. Neon stage illumination, rapid scene transitions, and highly expressive emotional performances serve as key visual references for constructing moments of emotional climax and glitch escalation. This is especially relevant in scenes involving confrontations between Yara and the corrupted version of Aria, where emotional instability becomes visually embodied through distortion and audiovisual intensity.

1.6. Animated Video [*Messiah Project – Starshine Symphony*]

Messiah Project – Starshine Symphony (Fig. 1.6)⁶ is an animated music project centered around idol culture and live musical performances, incorporating futuristic and digital aesthetics into its visual language.

The video demonstrates the seamless integration of user interface (UI) elements directly into the artistic space of animation. In the context of *SYNC ERROR*, the analysis of this reference contributes to the development of a visual language in which holograms, digital overlays, and system notifications coexist harmoniously with two-dimensional character art. Such an approach reinforces the sensation of existing within a complex cybernetic network rather than merely observing it from the outside.

Furthermore, the project provides an important reference for balancing decorative digital aesthetics with functional visual communication, ensuring that interface elements enhance immersion without overwhelming the player's visual focus.

1.7. Animated Video *(I) msg from E.V.E.*

This conceptual animated video (Fig. 1.7)⁷ is built around the aesthetics of system terminals and retro computer interfaces. The narrative is communicated through textual system messages, software malfunctions, fragments of corrupted code, and glitch effects.

⁵ https://www.youtube.com/watch?v=qQIVtAiFARI&list=RDqQIVtAiFARI&start_radio=1

⁶ https://www.youtube.com/watch?v=28LMub_x5Io&list=RD28LMub_x5Io&start_radio=1

⁷ <https://www.youtube.com/shorts/b0BH1kET7q8>

This reference serves as a direct inspiration for the introductory cutscene of *SYNC ERROR*. The use of log files, warning messages such as “*Anomaly Detected*”, and the visual language of early operating system boot screens (Y2K terminal aesthetics) enables immediate immersion into the atmosphere of a fractured digital environment without relying on excessive exposition. Rather than explicitly explaining the world, the visual system itself introduces the player to the logic of instability and technological decay.

1.8. Video Game *Devil May Cry 5*

Although *Devil May Cry 5* (Fig. 1.8)⁸, developed by Capcom, belongs to the hack-and-slash action genre, it features one of the most sophisticated systems of audiovisual feedback in contemporary game design: the *Style Rank System*. Its defining characteristic lies in the implementation of an adaptive soundtrack, where the intensity and complexity of musical accompaniment dynamically evolve according to the player’s performance, aggression, and stylistic variation in combat.

The game interface continuously rewards player skill through bold typographic design and dynamically shifting style rankings, progressing from the basic *D* rank to the maximum *SSS* rank. This approach was carefully analyzed during the development of the combo multiplier system and gameplay feedback notifications (*Perfect / Great*) in *SYNC ERROR*, as it effectively demonstrates how an interface can positively reinforce player performance and encourage rhythmic precision.

From a technical perspective, the musical structure of *Devil May Cry 5* relies on a multilayered stem-mixing system. During the early stages of combat—or when the player sustains damage—the soundtrack remains relatively restrained, consisting primarily of foundational instrumental layers. However, as the player achieves higher style rankings, particularly *S* rank and above, the composition gradually expands: additional bass textures emerge, aggressive guitar riffs intensify, and, most importantly, vocal layers are introduced. The soundtrack subtly transitions toward its climactic refrain, generating a strong emotional response and reinforcing the player’s sense of mastery without distracting from gameplay.

In this context, music functions not merely as background accompaniment but as a narrative instrument that reflects both character identity and combat style. For example, Nero’s combat theme, “*Devil Trigger*,” employs an energetic electronic pop-rock structure that reinforces his youthfulness and impulsive personality. In contrast, Dante’s theme, “*Subhuman*,” adopts an aggressive and chaotic heavy metal soundscape that mirrors his destructive and forceful combat approach.

⁸ <https://www.youtube.com/watch?v=KMSGj9Y2T9Q>

When considering direct conceptual references for *SYNC ERROR*, one of the most significant examples of synergy between music and lore can be found in the musical theme of Vergil, “*Bury the Light*.” This monumental heavy metal composition places rhythmic emphasis not solely on guitar-driven melodies but also on highly complex percussion and synthesizer arrangements.

The lyrical content of the track operates as an independent narrative layer, reflecting the character’s tragic history, internal conflict, personal losses, and overwhelming obsession with power. In this case, music does not simply establish the rhythm of combat but actively contributes to the psychological construction of the antagonist. Such an approach—where rhythm, instrumentation, and lyrical composition function as tools of emotional storytelling—serves as a fundamental reference for the design of musical encounters and antagonist interactions in *SYNC ERROR*, particularly in relation to the corrupted form of Aria.

1.9. Video Game *Stellar Blade*

Stellar Blade (Fig. 1.9)⁹ is a contemporary action video game distinguished by highly detailed character design, science-fiction environments, and sophisticated work with particle effects and sound design. Although the game is not rhythm-based, its combat system is structured around a distinct internal rhythm, where sequences of attacks and evasive maneuvers resemble an aggressive choreographed performance in which every movement follows a specific tempo.

For the *SYNC ERROR* project, particular interest lies in the game’s multilayered implementation of audiovisual feedback during moments of player precision, especially in mechanics such as perfect parrying. In *Stellar Blade*, a successful perfect block does more than merely reduce incoming damage—it rewards the player through a coordinated system of sensory stimuli. This includes *hitstop* (a micro-delay effect that emphasizes impact), bright particle bursts, subtle spatial distortion surrounding the point of contact, and a sharp metallic audio cue that cuts through the surrounding combat noise and boss soundtrack.

This comprehensive design approach served as an important reference for the development of the *Splash* effect associated with successful note accuracy (*Perfect Hit*) in *SYNC ERROR*. Accurate player input is intended to function as more than a visually pleasing neon flash. It is accompanied by a clear, crystalline sound—such as a digital chime or synthetic beat—that integrates seamlessly into the harmony of the soundtrack while remaining perceptually distinct. As a result, the player experiences a sense of tactile precision, where every successful interaction becomes an organic contribution to the musical structure of the level itself.

⁹ <https://www.youtube.com/watch?v=DSznLWimMIU>

1.10. Animated Series *My Little Pony: Friendship Is Magic*

At first glance, this popular animated series (Fig. 1.10)¹⁰ may appear conceptually distant from the cybernetic atmosphere of *SYNC ERROR*. However, it provides a compelling example of color-coded character design and hyper-expressive emotional communication.

The series demonstrates a clear relationship between color palettes, character silhouettes, and personality traits, while the restoration of harmony in the face of chaos functions as one of its central narrative themes. Within the development of *SYNC ERROR*, this reference proved valuable for exploring methods of exaggerating emotional reactions and facial expressions in avatar-based interface design. In particular, it informed decisions regarding how character avatars should visually respond to player performance—celebrating successful rhythm sequences or expressing confusion and emotional instability in moments of repeated mistakes.

CHAPTER II. PROJECT DESCRIPTION AND JUSTIFICATION

This section provides a comprehensive description of the development process of the rhythm computer game "*SYNC ERROR*". The ideological basis of the project, the psychological subtext of the game lore, visual and architectural solutions, as well as the mechanisms of user interaction with the game system are examined in detail.

2.1. Project Concept

The concept of the computer game *SYNC ERROR* emerged as a response to a pressing issue within contemporary digital society: informational overload and emotional burnout. In a world where individuals consume vast amounts of information on a daily basis, the human nervous system often struggles to maintain equilibrium, resulting in emotional instability and psychological exhaustion. Within the conceptual framework of this project, this condition is metaphorically defined as a "*sync error*." The primary objective of the game is to create an interactive environment in which players can experience the process of restoring emotional balance through rhythm and musical harmony.

The narrative unfolds within an abstract cybernetic network known as *NeuroSync*, envisioned as a visualization of human consciousness. Within this digital dimension, emotional breakdowns, anxiety, and accumulated stress materialize in the form of corrupted code, system anomalies, and visual glitches. The central protagonist, Yara, is a specialist operator responsible for stabilizing unstable digital

¹⁰ https://www.youtube.com/watch?v=aeQe_mZcyf8

environments. She travels through fragmented sectors of the network with the goal of reducing informational noise and restoring systemic order.

The principal antagonist—or, more accurately, the subject of rescue—is Aria, an advanced artificial intelligence previously designed to support users’ mental well-being. However, after prolonged exposure to accumulated negativity, Aria transitions into a corrupted state. As a consequence, she generates instability throughout the surrounding environment, manifested through distorted rhythms, fragmented audiovisual signals, and malfunctioning interface systems.

A fundamental distinction between the concept of *SYNC ERROR* and traditional arcade-based experiences lies in its rejection of violence-centered gameplay paradigms. Rather than defeating enemies or destroying obstacles, the player is tasked with healing digital spaces, reorganizing chaos, and restoring damaged systems to functional stability. Narrative progression is communicated exclusively through environmental storytelling: shifts in musical tempo, changes in background color temperature, and subtle transformations in character expressions collectively communicate emotional struggle and recovery more effectively than conventional dialogue systems.

In this way, the act of gameplay synchronization becomes not only a mechanical challenge but also an instrument of empathy, emotional reflection, and symbolic digital therapy.

2.2. Stylistic Direction

The visual language of *SYNC ERROR* is deliberately constructed at the intersection of several key aesthetic frameworks, including Y2K visual culture, retrofuturism, and cyberpunk. The decision to combine these stylistic influences is motivated by the intention to evoke a simultaneous sense of technological nostalgia and emotional alienation—an atmosphere strongly associated with early digital interfaces and operating systems.

The project’s visual identity is fundamentally inspired by the aesthetics of a portable gaming console or an engineering terminal. Rather than functioning as a transparent “window into reality,” the game interface openly embraces its digital nature. The user interface (UI) incorporates design elements characteristic of legacy operating systems, including pixel-based typography, monochromatic system messages such as “*Anomaly Detected*,” loading indicators, and battery status displays. This design approach strengthens immersion by creating the impression that the player is directly interacting with Yara’s operational device rather than observing events externally.

Color palette design plays a crucial role in player orientation and emotional interpretation. The visual foundation of the project relies on a deep dark background composed primarily of *True Black* and *Dark Navy* tones, contrasted

with vivid neon accents. Healthy and stable system areas, as well as Yara's actions, are associated with colder color values such as *Cyan* and *Electric Blue*. In contrast, corrupted zones influenced by Aria pulse with aggressive shades of *Magenta*, *Crimson*, and deep violet. This system of color coding enables players to intuitively interpret environmental conditions without relying exclusively on numerical interface indicators.

One of the project's most significant stylistic instruments is *glitch art*. Within *SYNC ERROR*, visual distortions are not random occurrences but procedurally calculated effects integrated into the game's aesthetic logic. Techniques such as chromatic aberration (RGB channel separation), pixel sorting, and databending are employed to communicate instability and emotional disruption. Importantly, glitches function semantically: their intensity is directly proportional to the number of player mistakes. The less accurately the player synchronizes with rhythm, the more the screen begins to visually fragment, simulating a form of systemic panic and psychological destabilization.

2.3. Technical Characteristics and Features

The software architecture of *SYNC ERROR* is based on a component-oriented approach (*Component-Based Architecture*), which has become a widely adopted standard in contemporary two-dimensional game engines. One of the principal technical challenges in rhythm game development lies in minimizing *input lag* while achieving precise synchronization between audio playback and visual rendering. Even minimal desynchronization—within a range of 20 to 30 milliseconds—can significantly disrupt the player experience and compromise gameplay responsiveness.

At the core of the system is the *Audio-Visual Sync Engine*, responsible for processing track metadata, particularly *beats per minute (BPM)*, and generating an event array (*Spawn Map*) that determines gameplay timing. Each note displayed on screen is linked not to fixed spatial coordinates but to a precise timestamp within the audio track. This architecture ensures that notes remain accurately synchronized with rhythmic beats even in situations involving frame-rate fluctuations (*FPS drops*), thereby preserving gameplay consistency.

The graphical pipeline combines high-resolution two-dimensional sprites for interface elements and character assets with *particle systems* responsible for generating procedural visual effects. For example, the *Splash* effect triggered by precise note timing is generated dynamically, calculating particle trajectories based on player input and directional interaction.

The software structure is organized into a system of independent managers, each responsible for a specific gameplay function:

- **GameManager** — controls the overall game state, including initialization, pause functionality, and failure conditions.
- **UIManager** — manages interface updates, including score counters (*PTS*), stability indicators, and navigation menus.
- **InputManager** — processes keyboard input with maximum execution priority to ensure highly responsive interaction and minimal latency.

Such a modular system architecture enables efficient scalability, facilitating the integration of additional musical tracks, gameplay mechanics, and level structures without requiring substantial modification of the project’s foundational logic.

2.4. Gameplay Mechanics and Audio Design

The gameplay foundation of *SYNC ERROR* is built upon a traditional four-lane rhythm system (*4-Key Rhythm Game*). At the lower section of the screen, a designated *Hit Zone* functions as the player’s interaction area. Falling objects in the form of directional arrows correspond to four keyboard inputs (*left*, *down*, *up*, and *right*). The player’s objective is to execute inputs at the precise moment when the note aligns with the designated interaction zone.

The *Hit Detection* system relies on millisecond-based *timing windows* to evaluate the precision of player actions:

1. **Perfect** — timing deviation within ± 25 ms. Grants the maximum number of points, increases the combo multiplier, generates an enhanced visual *Splash* effect, and restores the highest amount of stability to the system.
2. **Great** — timing deviation within ± 60 ms. Provides a moderate score reward while preserving the current combo chain.
3. **Bad / Miss** — timing deviation exceeding ± 100 ms or failure to register the note. Results in the interruption of the combo multiplier and contributes to system destabilization.

One of the project’s defining original mechanics is the *Reactive Emotional Stability Bar (Reactive HP Bar)*. Unlike conventional health systems, this mechanic represents both the stability of the surrounding digital environment and Yara’s emotional condition. Every accurate input contributes to restoring stability and triggers subtle confidence-based animations within the protagonist’s avatar. In contrast, repeated mistakes rapidly deplete the meter: facial expressions shift toward anxiety, visual interference (*static noise*) begins to emerge, and screen instability intensifies through subtle distortions and movement.

If the stability meter reaches zero, the system transitions into a “*SIGNAL LOST*” state, symbolizing a complete breakdown of synchronization and the temporary loss of environmental control.

The project's sound design functions in close symbiosis with gameplay mechanics. Music operates not as background accompaniment but as an active gameplay participant. While the player maintains a high combo streak, the soundtrack remains clear and fully layered, revealing the richness of its instrumental composition. However, unsuccessful actions introduce sonic dissonance through low-pass filtering and muffling effects, simulating disorientation and cognitive instability. As a result, players are encouraged to actively rely on listening and rhythmic awareness in order to restore clarity and re-establish synchronization within the system.

CONCLUSIONS

The completion of this bachelor's thesis resulted in the comprehensive design, development, and testing of a demo version of the computer game *SYNC ERROR*, enabling an exploration of the potential of interactive media to represent complex emotional and psychological states. The findings of the project confirm the successful achievement of its primary objective: the creation of a rhythm-based game concept functioning as a medium for investigating emotional disorientation and the restoration of psychological balance.

A significant outcome of this research is the development of an innovative narrative system grounded in the principles of *environmental storytelling*. The study demonstrates that replacing traditional text-based narrative delivery with audiovisual feedback mechanisms contributes to the creation of a more universal and intuitive player experience. Narrative meaning is effectively communicated through dynamic color transitions, rhythmic structures, and reactive interface behavior, allowing players to interpret events within the game world through interaction rather than direct explanation. Consequently, gameplay functions not only as a form of entertainment but also as a metaphorical representation of emotional regulation processes.

Another important achievement of the project is the establishment of a distinctive visual identity that combines elements of Y2K aesthetics, retro-interface design, and glitch art. The research suggests that digital distortions, when implemented as meaningful artistic instruments rather than technical imperfections, significantly enhance emotional impact and player immersion. Within *SYNC ERROR*, glitches are interpreted as semantic design elements that communicate instability, emotional tension, and psychological disruption, thereby expanding the expressive potential of interactive game design.

From a technical perspective, the project successfully implements an effective rhythm-game architecture that ensures synchronization between audiovisual

components. Gameplay systems, including note accuracy evaluation and the *Reactive Emotional Stability Bar*, proved both functional and conceptually appropriate within the broader design framework. These mechanics contribute to a heightened sense of interactivity, responsiveness, and player engagement throughout the gameplay experience.

The conducted research further demonstrates that indie game design can serve as an effective medium for communicating complex emotional experiences even under conditions of limited resources. The integration of minimalist design principles with expressive visual and mechanical systems enables the creation of a cohesive and memorable user experience.

Overall, *SYNC ERROR* illustrates the capacity of contemporary indie game development to combine theoretical approaches from game studies, emotional storytelling, and interactive design practice into an integrated creative product. The project demonstrates how rhythm, visual symbolism, and player interaction may collectively function as instruments for constructing emotionally meaningful and aesthetically distinctive digital experiences.

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APPENDIX I. ANALYSIS OF ANALOGUES



Fig. 1.1. Screenshot of the gameplay of the game “Gris”, demonstrating the work with watercolor style and the transmission of emotional state through color

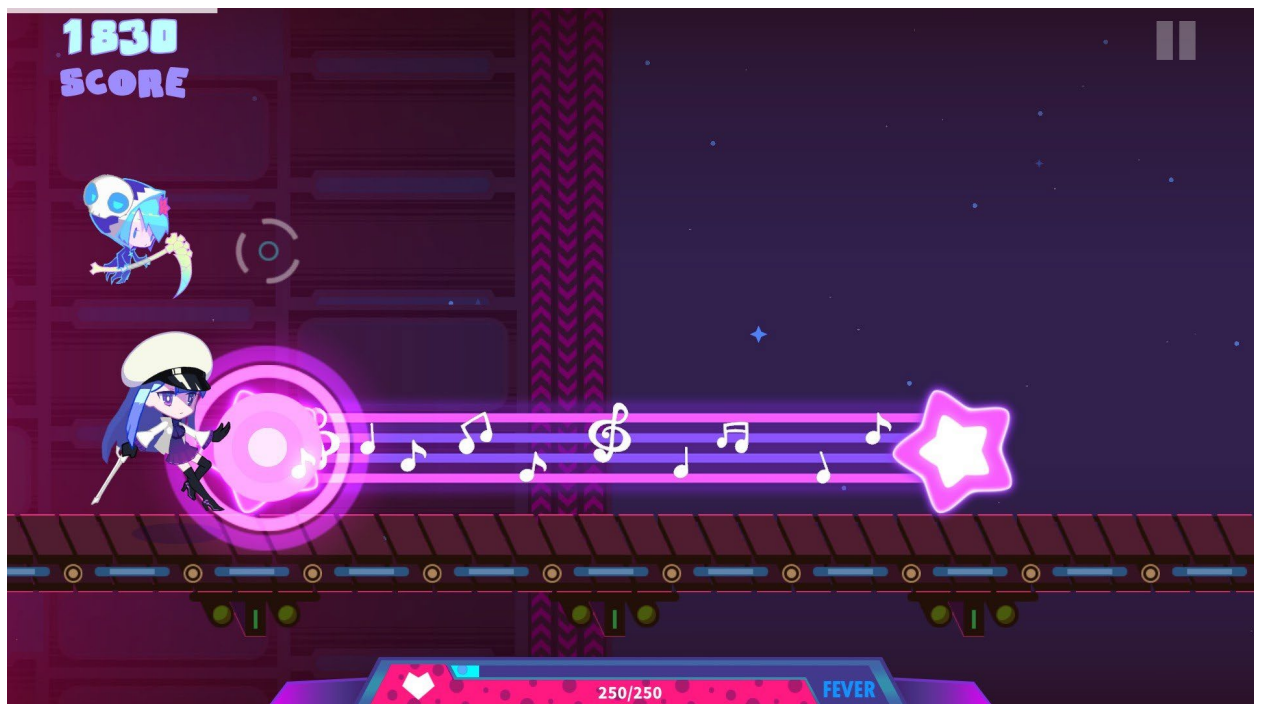


Fig. 1.2. Screenshot of the gameplay of the game “Muse Dash”, showing the rhythmic scale interface, combo multipliers and interactive elements



Figure 1.3. Screenshot of the gameplay of the game “Sayonara Wild Hearts”, illustrating the use of neon colors and dynamic space changes



Fig. 1.4. Screenshot of the gameplay of the game “Friday Night Funkin’”, showing the classic four-arrow mechanics and a reactive progress bar with emotion icons]

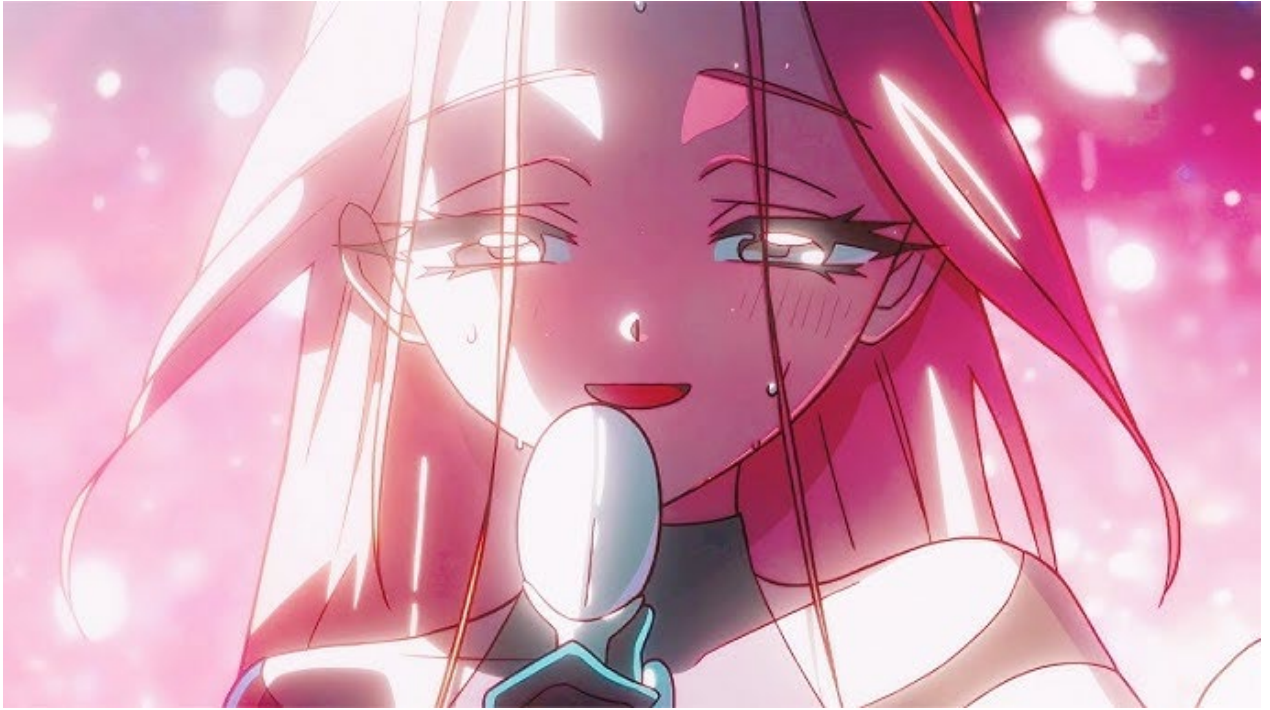


Figure 1.5. A frame from the animated video “R O U N D 1 | Alien Stage”, showing the characters’ expressions, dramatic lighting, and the tension of the musical performance.

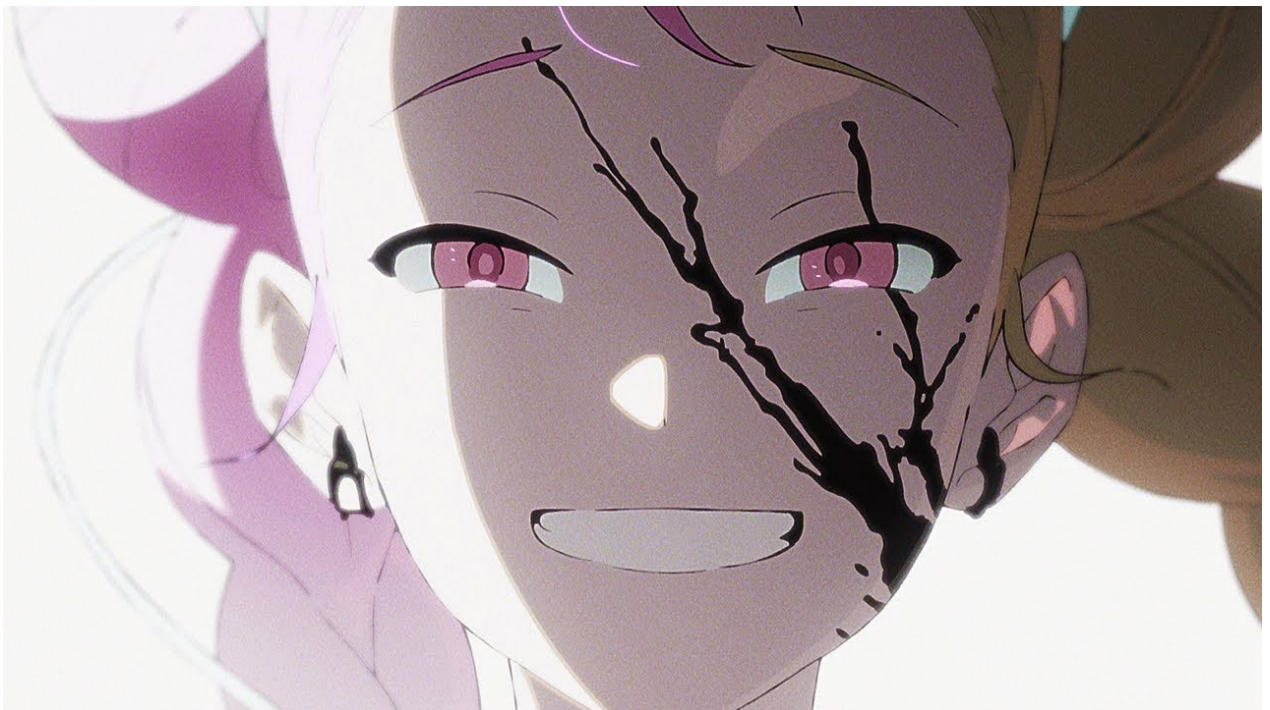


Fig. 1.6. A frame from the animated video “[Messiah project - Starshine symphony]”, which shows the integration of digital interfaces and holograms into the style of 2D animation.

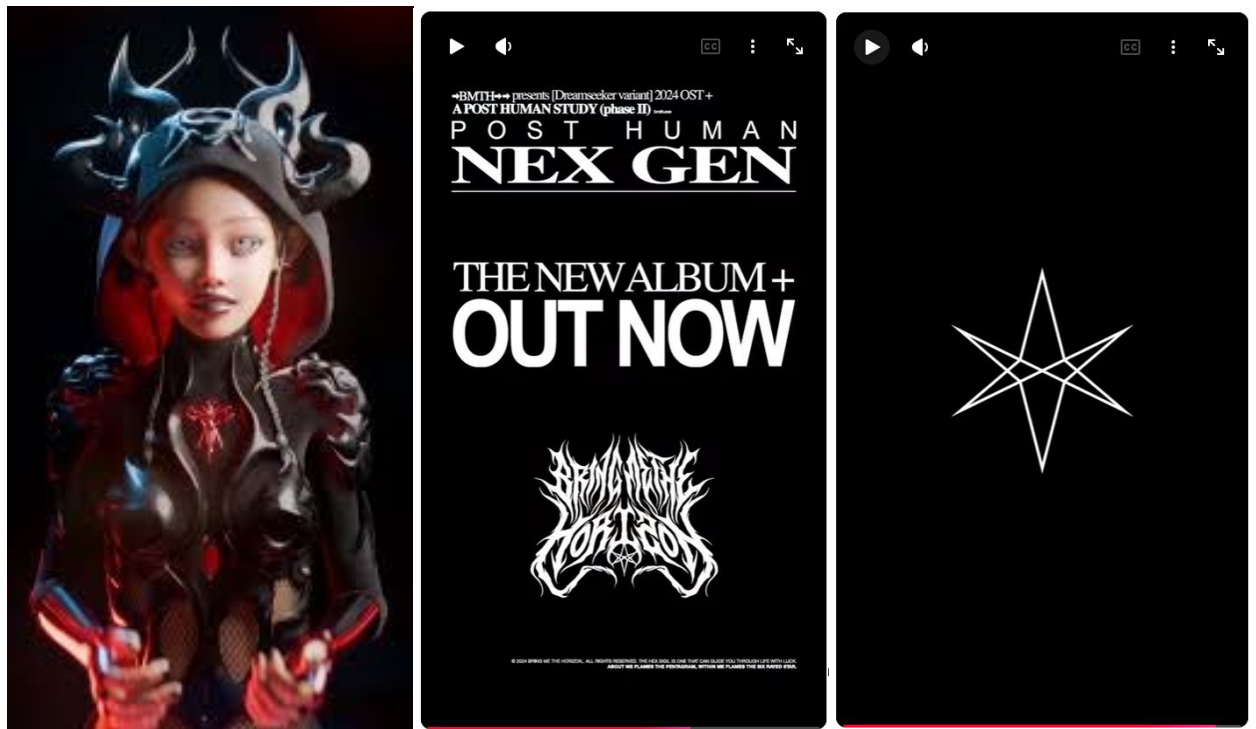


Fig. 1.7. Visual design of “(1) msg from E.V.E.”, stylized as a retro operating system interface with system errors and glitches.



Fig. 1.8. Screenshot of the gameplay of “Devil may cry 5”, demonstrating the work of the style ranking system (Style Rank) and the dynamic combo interface.



Fig. 1.9. Screenshot of the gameplay of “Stellar Blade” with an emphasis on high-quality visual effects (energy bursts) during accurate interaction with objects.

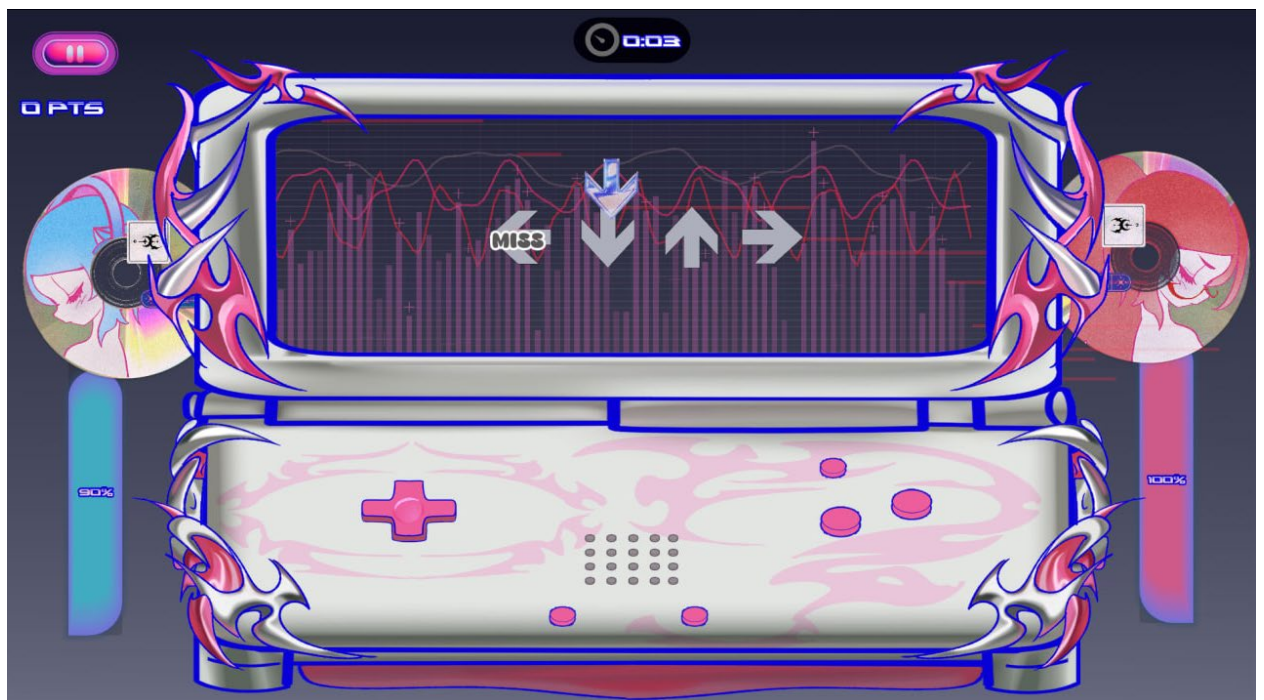


Fig. 1.10. Group image of the main characters of the animated series "My Little Pony: Friendship Is Magic"

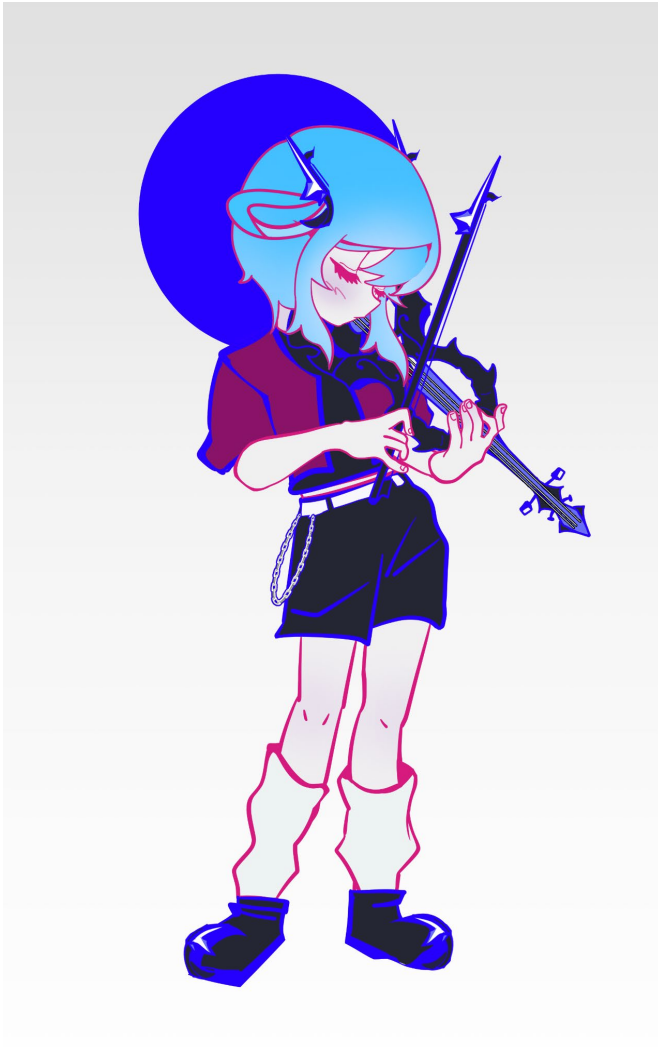
APPENDIX II. COMPOSITION OF THE PROJECT



2.1. Simulation of a portable game console in an inactive state



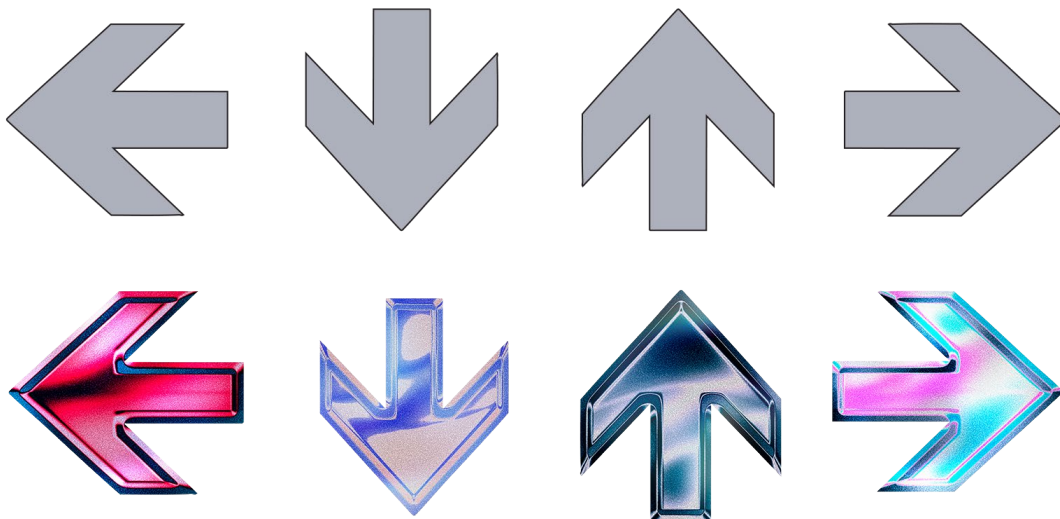
2.2. Emulating a portable game console in an active state



2.3. Main character Yara



2.4. Artificial intelligence Aria



2.5. Game elements are inactive and active



2.6. Main game screen



2.7. Settings screen



2.8. Cutscene stills