

Daoithm

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A rhythm action game
Game Design Document

Game and Project Design Challenge - Daoithm



||DAOITHM||



Concept art of NeoMeejing

Generated by **DALL-E3** use prompts as follows:

- Chinese style, modern city, more modern, less Chinese, more Chinese a little.

Overview

Genre: Action+Music

Player: One player

Platform: PC

Theme: Urban Myth Tales + Traditional Remake

Background Story

In a modern city named NeoMeejing (新密京), there's a rumor going around: In dark alleys that no one knows about, mysterious and terrifying presences are harming innocent passersby. Zhong Liang, a new hunter-Z (the 96th generation of Zhong Kui) following the traces of his missing Shifu (master), is ready to face uncharted danger from eras ago. Use Rhyme to defeat Eguis the ghosts in intense, fast-paced battles and save Shifu.

Schedule

Timeline:

- Sep. 5-Sep. 19:
 - Initial constructions;
 - Game design research.

- Sep. 12- Oct. 10:
 - Game Experience Design;
 - Characters Design;
 - Key Mechanics;
 - Core Gameplay loop;
 - Accessibility Plan.
- Oct.11-Oct. 31:
 - Gameplay Iterations;
 - Combo system initial;
 - Music and Sounds Design;
 - Storyboards;
 - Assets Collection.
- Nov. 1-Nov. 30:
 - Storyboards Iterations;
 - UI Initial;
 - Level Design;
 - Combo system Iteration;
 - Programming;
 - Whitebox.
- Nov. 15-Nov. 30:
 - User tests;
 - Iterations;
 - Milestone 1 - A playable scene with
 - Player with combos (3+)
 - A city street / square scene
 - A scene for the boss fight
- Dec. 1- Dec. 5:
 - Documents work;
 - Ready for Milestone 1 presentation.

Influencer Matrix Model

Go to the Google Docs Form:

https://docs.google.com/spreadsheets/d/1xhULcnXIm7_iMQr-FM-iHnf7QsC5lY8R/edit?usp=sharing&ouid=118327469178654343301&rtpof=true&sd=true

DEI Analysis

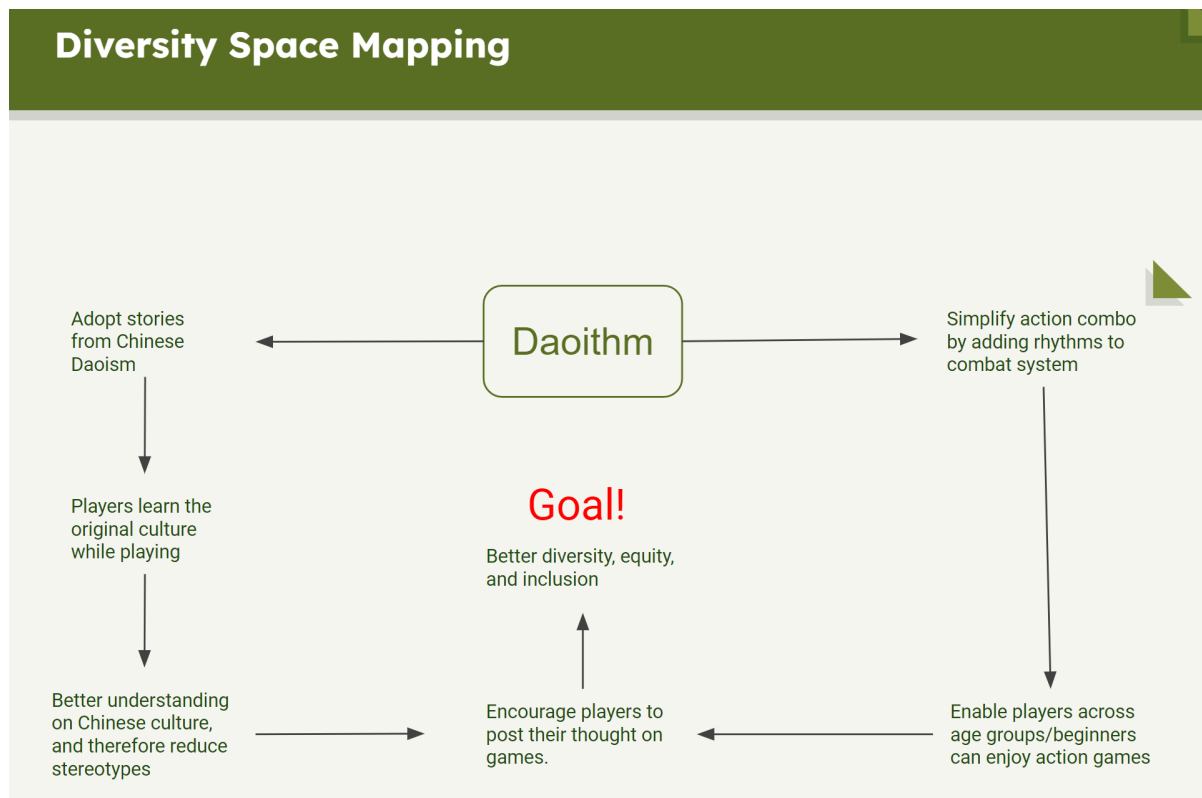
Problems

- Asian representation in U.S. mainstream media and the game industry remains significantly underdeveloped. Although the population of Asian

Americans is increasing, they are often marginalized or stereotyped in films, TV shows, and video games. In the U.S. gaming industry, there is a lack of Asian characters that reflect the diversity and depth of Asian cultures, with many games relying on shallow depictions.

- Older players of action games often face unique challenges and experiences compared to younger players. As a result, many games may overlook older players during the design process, making games more difficult for them. However, many older players are still willing to play action games.

Solutions



Ethnographic Observation Research

In ethnographic research, we concentrate on two areas, gameplay and culture.

Gameplay Observation

Questions

For the gameplay area, we want to know the following questions:

- How will the core mechanics be?
- How do you design a combo system?

Subjects

We choose players' reviews on Steam, Epic Store, and a digital product review site named Metacritic.

To fit the genre more specifically, we chose three kinds of games: action games, music games, and crossover (action+music) games.

Each kind has three games. They are:

- Action games
 - Devil May Cry 5
 - God of War (2018)
 - Elden Ring
- Music games
 - Muse Dash
 - A Dance of Fire and Ice
 - Musynx
- Crossover games
 - Hi-Fi Rush
 - Crypt of the NecroDancer
 - Mad Rat Dead

Cultural Observation

Questions

For the culture area, we want to know the following questions:

- How do you make a storyline to fit our themes?
- How do you design characters with a combined cultural background?
- What to do with scene design?

Subjects

Design of Eastern-based games from...

- Original (Chinese)
- East Asian (Sinosphere)
- Others (western, middle east, etc.)

Three games with a combined cultural background were chosen for the research.

They are:

- Black Myth: Wukong by China
- Wo Long: Fallen Dynasty by Japan
- Ghost of Tsushima by the US

Findings

- Action gamers are more concerned about the smoothness of the action system and whether the blows in the game are crisp.
- Music gamers are more interested in the music quality, whether the tempo matches the graphics, and the availability of complex inputs.
- Gamers from these crossover areas demand complexity in the combo system and a variety of background music.
- Games by China have a more solid storyline accompanied by partially counter-conventional adaptations. For characters, they are usually exquisite, but kind of less DEI design.
- Games by Japan add fantastical details to tell the original story. Character designs are often used with Western elements that largely conform to Eastern elements.
- Games by the US is committed to restoring historical and cultural details with a story that is sophisticated and easy to develop. Characters are designed to be as authentic and realistic as possible from a cross-cultural perspective.

What can be iterated ?

Original

To design a game with action parts and rhythm parts well combined.

Iterated

- The combo system design should focus on fluidity and hard-hitting effects.
- Sound and picture design, especially the feedback should be in concert.
- Character designs involving traditional culture refer to different benchmarks so that they are easier to understand and accept by different audiences.

Character Development

Main Character - Zhong Liang

Main Features

Zhong Liang is the protagonist. One day, his Shifu suddenly disappeared without a trace. Since then, Zhong Liang has started a journey to find his Shifu. Recently, he heard rumors from the ghost market that someone had seen his Shifu in NeoMeejing, so he came to NeoMeejing. Following the rumor, he found cryptic

marks only ghost hunters can understand with a piece of cloth matched with his Shifu's robe.

His name is a pun with the same pronunciation of the Mandarin word "loyal and good".



Concept art of Zhong Liang

generated by **DALL-E3** with the prompt as follows:

Draw a male character based on traditional Chinese clothing, combined with modern wearable design clothing, incorporating elements of the Bagua symbols and Taoist motifs. Compare mysterious, powerful, handsome, cool, modern, neo-Chinese, functional style.

Benchmarks



Zhu in GuiLongChao



Jianxin in Wuthering Waves

Animation List

Attacks List

The combat system(attack animation) is going to be highly based on Bagua and the Peach Wood Sword. It refers to the eight trigrams that symbolize fundamental principles of reality, representing natural forces and phenomena. These trigrams are a component of the **I Ching (易经)**, an ancient Chinese text used for divination, philosophy, and cosmology. And there are **2 basic attack animations: short-note and long-note attack**.

Players can attack with Bagua by combining short-note and long-note attacks to create **8 special attacks** with trigram. Each trigram comprises three lines that can either be broken (representing yin, 阴, the long note) or unbroken (representing yang, 阳, the short note). These attacks are:

1. **Qián** (乾) – Heaven, sky, creative force(3 Longs)
2. **Kūn** (坤) – Earth, receptive force(3 Short)
3. **Zhèn** (震) – Thunder, movement(2 Short + 1 Long)
4. **Xùn** (巽) – Wind, gentle force(2 Long + 1 Short)
5. **Kǎn** (坎) – Water, flow, danger(1 Short + 1 Long + 1 Short)
6. **Lí** (離) – Fire, brightness(1 Long + 1 Short + 1 Long)
7. **Gèn** (艮) – Mountain, stillness(1 Long + 2 Short)
8. **Duì** (兌) – Lake, joy, openness(1 Short + 2 Long)



Skills List

Traditional Chinese tricks will be utilized as the character's special skills.

1. Fire-breathing (噴火)



2. Face Changing (变脸)



3. Lion Dance (舞狮)



4. Molten Iron Fireworks (打铁花)



Other Animations

Idle

Walk

Jump
Run
Dodge

Other Characters

Main Concepts

Egui (the evil ghost) comes from human beings' grievances, obsessions after death, and negative thoughts. Obsession prevents the souls of the dead from dissipating. They refuse to enter the underworld(冥界), drink Meng Po's soup, which lets them forget about their past, and move on to the next life, thus becoming wandering ghosts in society. The most powerful among them are called Eguis, who typically have far greater resentment than ordinary souls due to the reason for their death or are the embodiment of human negative emotions.

Guide: Hei/Bai Wuchang

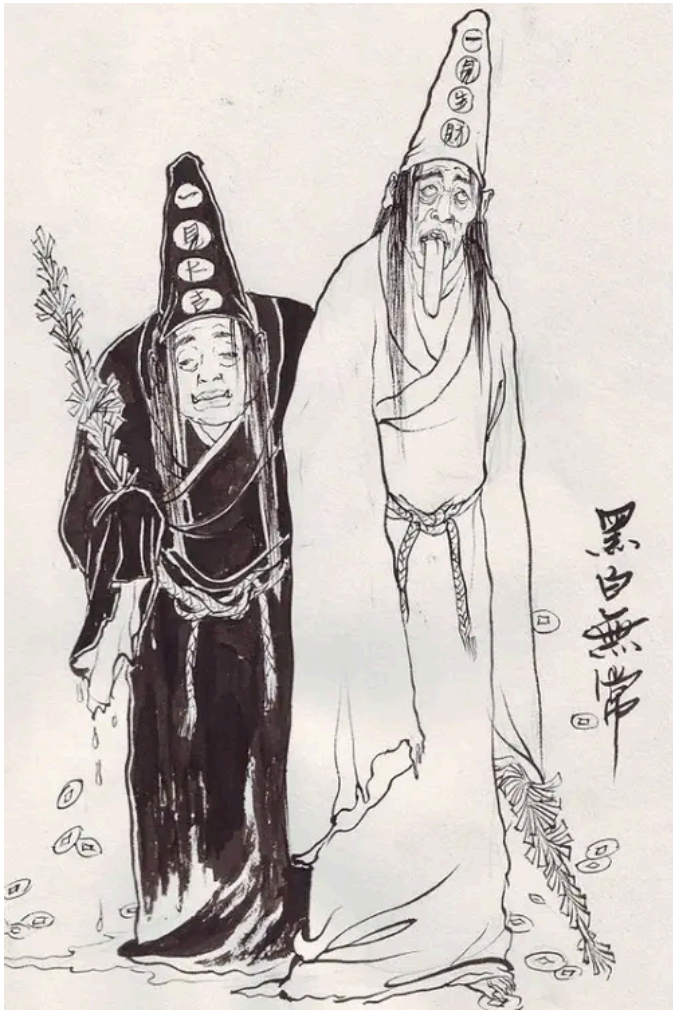
Main Features/Concepts

- Hei Bai Wuchang (Black and White Impermanence) are divine gods from Chinese folklore and Daoist beliefs, serving as underworld guardians and soul guides. They have to escort the souls of the deceased to the afterlife for judgment. Hei Wuchang is dressed in black(Hei means black), with a stern expression representing death and shadows, while Bai Wuchang wears white(Bai means white), with a calmer expression symbolizing purity and death's lighter side.
- One significant feature is the contrast in their tongues—one long, one short—symbolizing their different approaches to guiding souls. They are seen as enforcers of justice, rewarding the good and punishing the wicked. In modern stories, they often appear as guides or judges in supernatural plots.
- For your story, Hei Bai Wuchang will guide the protagonist, and teach him the short and long tunes to fight against enemies with rhythm combat skills.

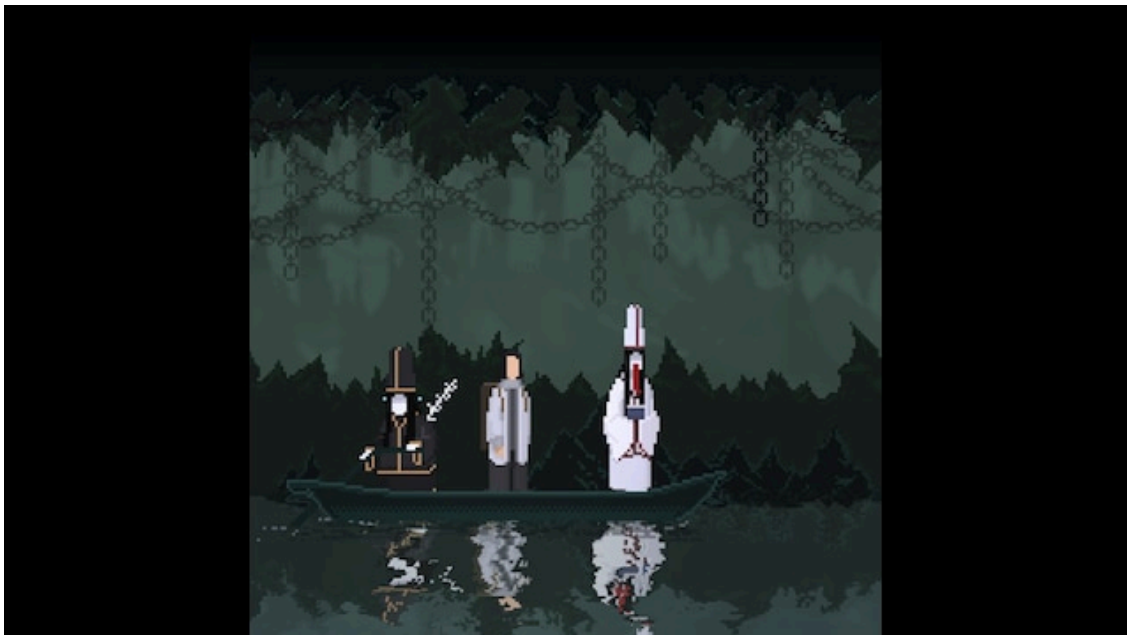
Animation List

Idle

Benchmarks



HeiBai Wuchang in ancient book.



HeiBai Wuchang in The Rewinder



Hei Bai Wuchang in 神都夜行录

Enemies

饿鬼(Hunger Ghost)

Key Concepts

Poverty -> Hunger, Freezing -> Extreme eagerness for Money, food, clothes.

Instrument

Erhu(benchmark: [小白菜 \(二胡独奏\)](#))

Main Features

Big mouth with plenty of copper coin on the body and was extremely skinny and small body size, with ragged clothes.



Animation List

Attack List

1. Basic Attack: Uses claws to scratch enemy.
2. Heavy Attack: Head attack.
3. Range Attack: Throw copper coins toward the enemy.
4. Special Attack: Long casting time, eat the enemy inside, and chew it out.

Other

Idle

Walk

战争鬼(War Ghost)

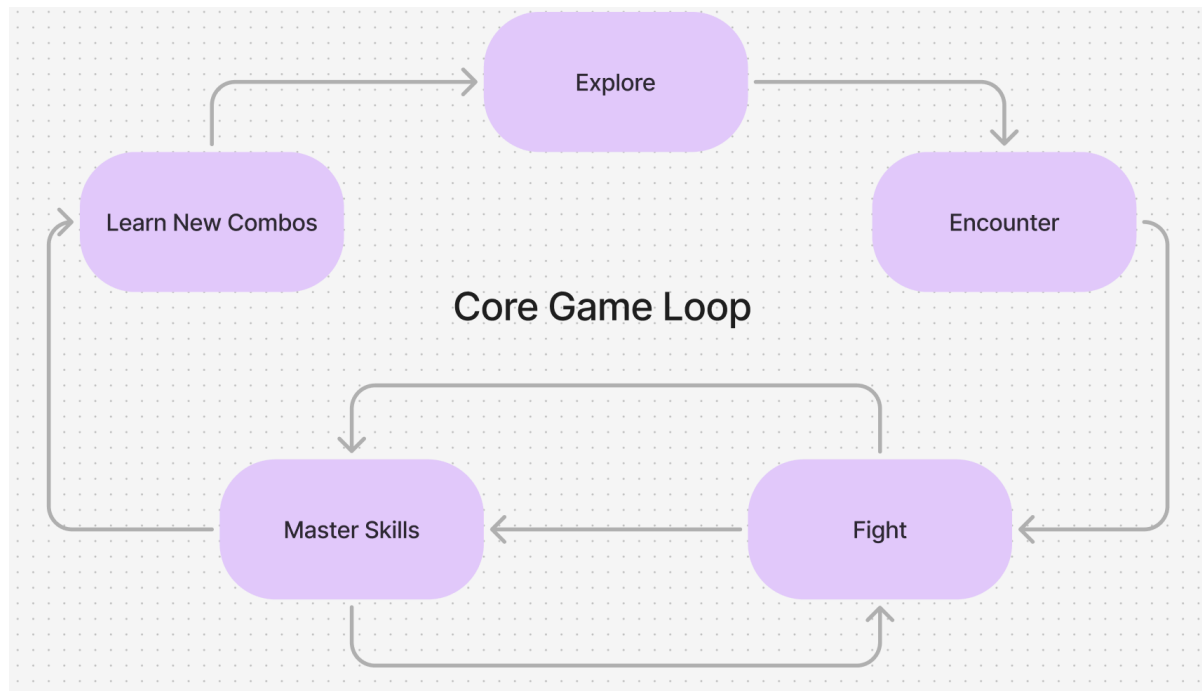
Key Concepts

Wars -> Separation of families, unborn children, physical mutilation, -> Pregnant ghost / Infant ghost 产鬼, 婴鬼 Misaligned limbs, bullet holes, large scar

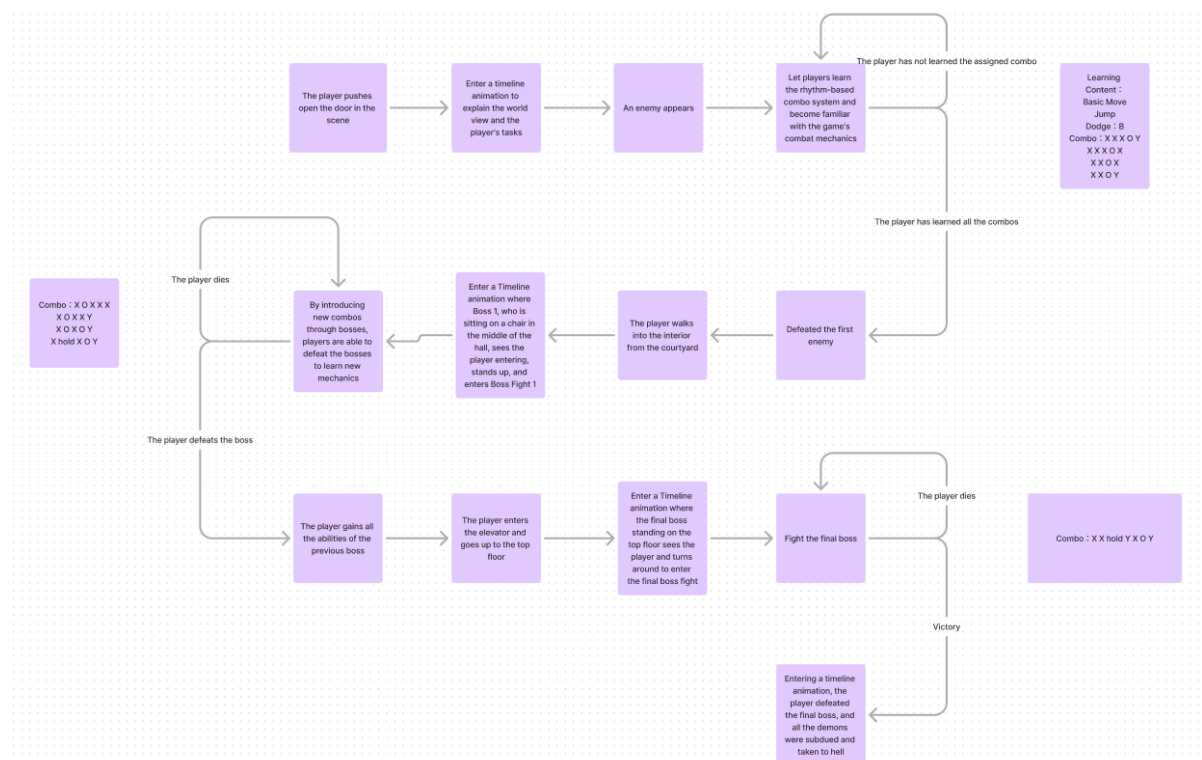
Instrument

Pipa

Gameplay Synopsis



GameFlowChart



Links: <https://www.figma.com/board/cUruCTigrY1WPYI6akq5WE/Game-Flow-Chart?node-id=0-1&t=yyXMyJvM6euoCI62-1>

Accessibility Plan

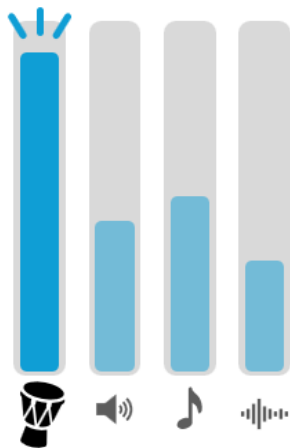
Since Daoithm is a rhythm action game, the accessibility design starts from the most important experience of this game: **hearing, vision, and motion**.

Hearing Accessibility

Rhythm Filter

part of Ready, set, go! Mode

This extra sound filter turns all other sound effects and music down, but remains the rhythm. It can help the rhythm to be more clear so that the players can concentrate more on it.



Visual Feedback of Music

part of Ready, set, go! Mode

Provides rhythmic blinking cue signs on the outer edges of the screen. Designed for players who do not use game controllers.



Haptic Feedback of Music

part of Ready, set, go! Mode

Two methods are provided to give feedback:

1. Use the included controller for musical tactile feedback.
2. Develop an APP that uses Bluetooth connectivity for musical haptic feedback.
Designed for players who don't use game controllers.



Vision Accessibility

Reduced VFX

Reduced visualization for a group of players who are visually sensitive or potentially at risk for photosensitive epilepsy. When this mode is turned on, most visual effects and possible flashes of light will be filtered.



Screen Reader

The screen reader provides the player with menus, options, and in-game text to read aloud. The reading-aloud element will be highlighted when activated.



Motion Accessibility

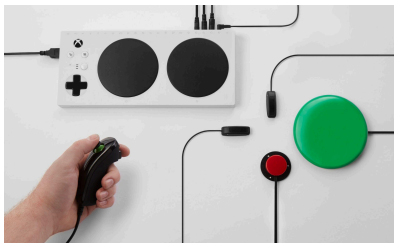
Easy Motions

part of Ready, set, go! Mode

A simplified version of the combo experience for players with mobility issues or those unfamiliar with action games. When this mode is turned on, the tolerance for key detection rises, with fewer control keys required, or a single-button-triggered combo mode is provided.

Accessible Controller Support

The game supports the Assistive Controller suite from PlayStation or XBOX.



Ready, Set, Go! mode



This mode is a **one-click-to-open mode** for enhanced accessibility. It includes all three areas mentioned above.

The features that are turned on by default are:

- Rhythm filter
- Visual / Haptic Feedback of Music (Depending on the device the player is using, turn on one of these)
- Easy Motions

A wizard will be launched the first time the mode is turned on, allowing the player to experience all the accessibility features of the different realms and configure the parts they need to turn on.



the on/off design of buttons with high contrast.

Combat+Combo System

Weapon: Peachwood Sword

- Stage I: Players start with normal attacks, no combos are available in the first stage
- Stage II: By reacting to the music tempo(basic attack with the beats), players get buffed physically(higher dmg) and unlock the combo system. Extra musical elements will also be added to the background(more powerful).

Sketches

战斗系统

主角基础武器是桃木剑(sword)

- 基础为一个传统的ACT游戏战斗系统, 不align到节奏中
- 主角在攻击fit到节奏的过程中, 会有加成
- 加成包含
 - 放大招动画?-一次性
 - Buff-持续一段时间
 - 二级连招-持续一段时间
 - 游戏的音轨会“切换到”更激昂的
- 主角拥有:
 - 普攻
 - 重击
 - 特殊攻击(连招)
- 敌人/Boss在

连招系统

主角的连招

Boss的状态

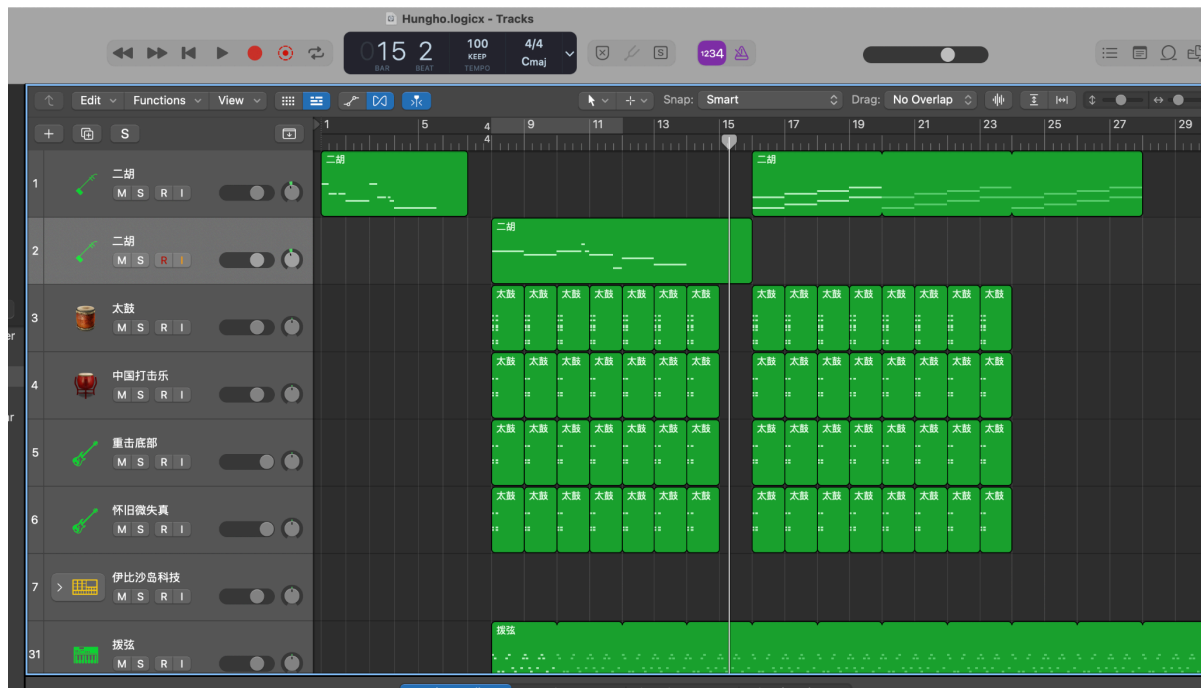
- Idle
-

【现在的问题】

- 鼠标左右键输入调不出来, 识别不了?(已解决))
- 动画没有拆出来
- 不知道怎么踩节奏(已解决))
- 动画的打断顺序
 - 动画的覆盖

Music & Sound Design

Demo



Branding & Style

Color Scheme

Cyberpunk + EastAsia



Magenta + Blue + Violet



Red+Blue +Yellow+White+Black

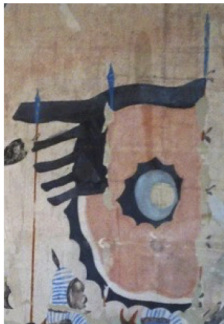


Logo

Claw
Ghost
City
Fulu



道教, 太极 Taoism Taichi
现代, 都市 Modern City
钟馗捉鬼 Ghosts Catching
音乐+动作游戏 MUG+ACT



Claw
Ghost
City
Fuzhou



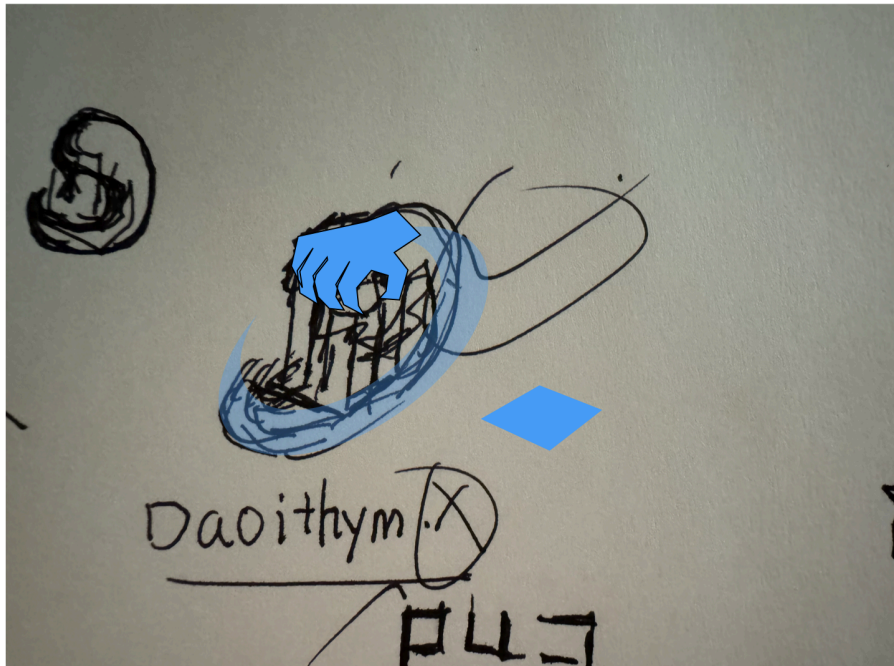
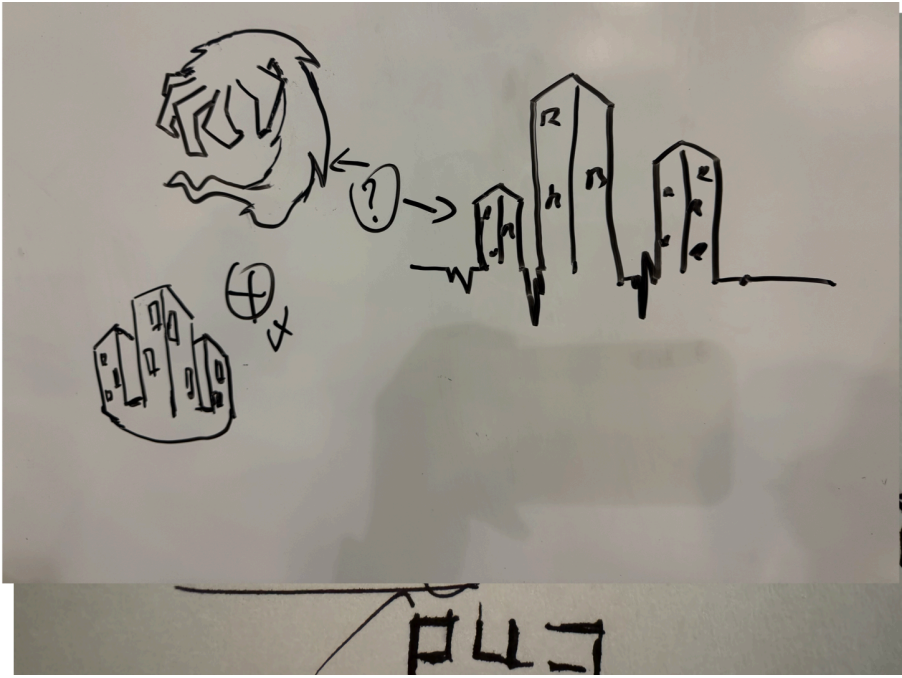
三辰旗
Flag of three celestials
Sun / Moon / Stars

符箓

Fulu

Taoist magic scripts







||DAOITHM||

GamePlay



Credit

Zhen Luo

- Combat design
- Story Writing
- DEI Analysis
- Gameplay Synopsis
- Enemies Design

Qixuan Huang

- Programming(3C & AI & Combo System)
- Influencer Matrix Model
- GameFlowChart

Tianjian He

- Combo System Design
- LOGO & Promo Design
- World Settings
- Music + Sound FX

- Ethnographic research