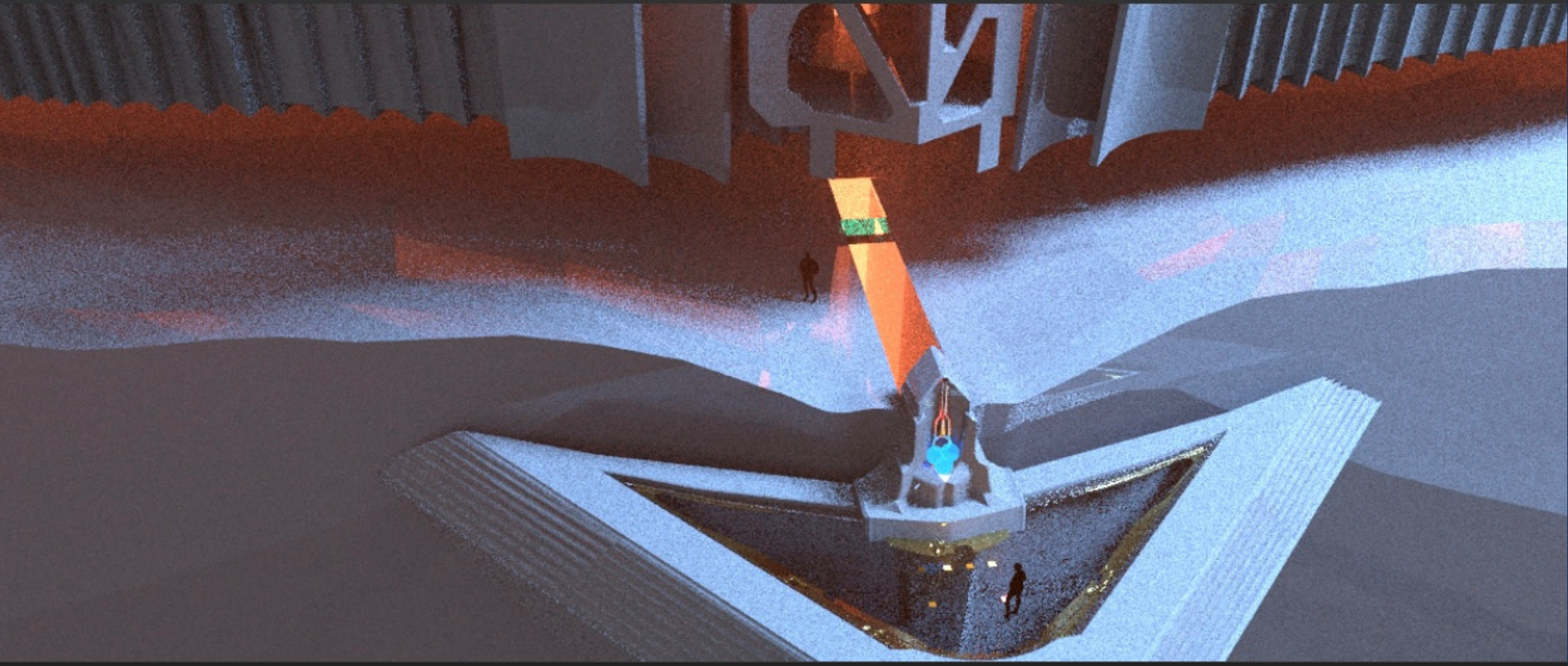


BABEL BINVERSE

Card-based Real-time Action Game

#Card #Action #RPG

My Role : Project Manager, Designer, Lead Programmer, UX

Game Information

Name: Babel Inverse

Keywords: Action, card, Xbox Controller

Development Engine: UE 4.27

Release Platforms: Windows

Development Team Size: 5

Control method: Controller_based input

Game Duration: 20~30min

Overview

The project aims to create a game that integrates the dynamic movement of a 3D action game with the strategic depth of a card game. The goal is to produce a rhythmical combat experience that alternates between fast-paced action and the slower, deliberate decision-making of card play. The challenge in design lies in balancing the need for quick reflexive attention demanded by the action gameplay with the cognitive load required for strategic card-playing decisions, thus presenting a comprehensive challenge to the player's overall response capabilities.

Leyan Wang: Project Manager, Designer, Lead Programmer, UX

Xicheng Su: Lead Designer

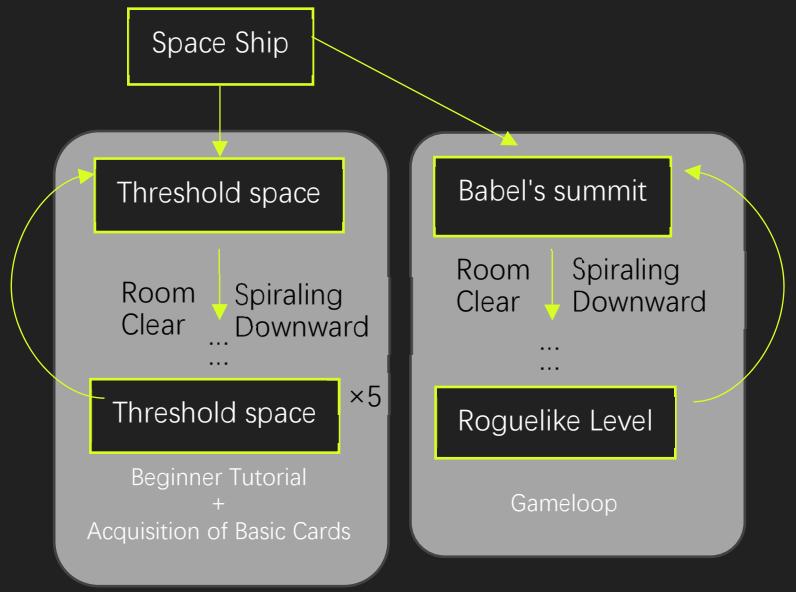
Shixin Liu: Environmental Concept Design, Enemy Character Design, Level Editing, UI Art

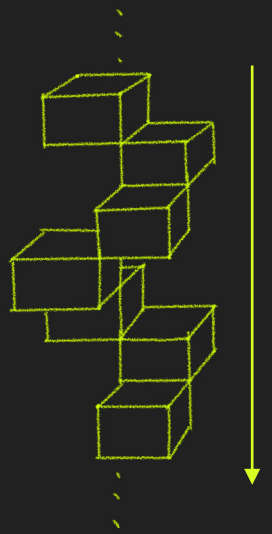
Chenyi Zhao: Protagonist and NPC Character Design, Combat Animator, Part of UI art

Haoyuan Li: Perforce Collaboration Workflow Setup, Technical Art, Worldview and Narrative Design, Dialogue Scripting

How To Play

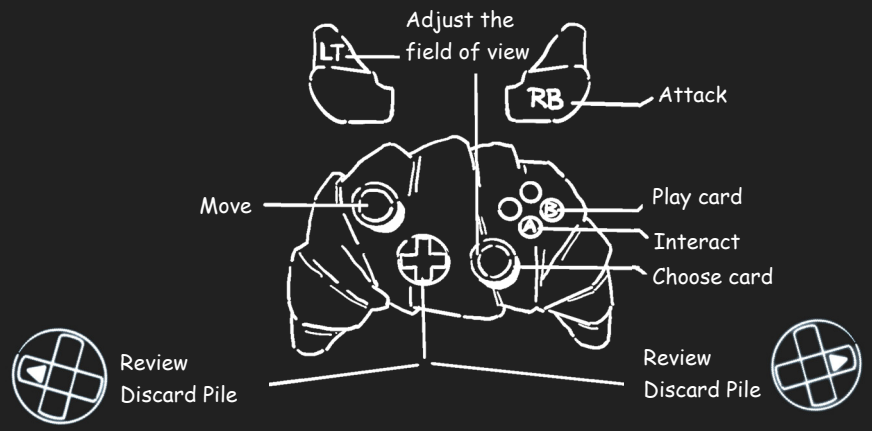
The game operates on a level-based system with different types of levels: reward levels, story levels, and combat levels. In combat levels, players must eliminate all enemies to advance. The spatial position of the levels spirals downwards, with players descending further into the depths of the Tower of Babel as they progress.





The game features a fixed 45-degree angled view, with player characters having three basic actions: move, attack, and interact. Each time a player's attack hits an enemy, their counter increases by one. When the counter reaches 5, the player randomly draws a card from the deck and places it in their hand (with a hand limit of 6 cards).

Players can play any card from their hand at any time, which goes to the discard pile. However, the effect of the played card isn't immediately triggered; instead, a "core" that contains the card's effect is placed in a wheel in the bottom left corner. This wheel can hold three "cores," and when full, the player cannot play any more cards.

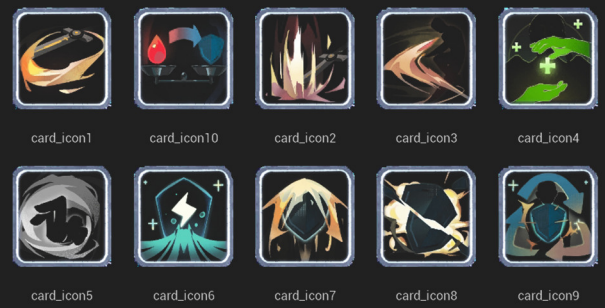


The wheel operates on a global timer, activating the first core every second. As the first core is activated, subsequent cores move forward to fill the space. When the draw pile is depleted, an automatic shuffler reshuffles the cards from the discard pile back into the draw pile.

Players deftly utilize cards while interweaving basic actions to defeat enemies and clear levels. If the player character dies, a death effect is played, and the player is transported back to the spaceship.

Card Design

Hand Pile



“Core”

NO.01 Sword Dance I

Attacks all enemies within 3 meters, dealing 35 damage.

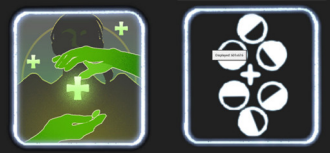
NO.02 Sword Smash I

Attacks the first enemy in the frontal rectangular range, dealing 60 damage.

NO.03 Swoop I

Quickly moves a distance in the opposite direction, dealing 25 damage to enemies in front.

NO.04 Spring of Life I



Restores 30 health points.

NO.05 Displacement α

Rolls towards the destination, invulnerable during the roll.

NO.06 Shield Charge I

Lasts for 5 rhythm durations, during which at the start of each rhythm duration, restores 40 shield points.

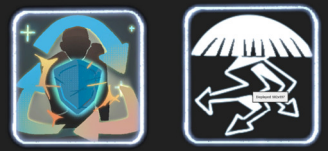
NO.07 Force Field I · Penetration

Charges forward for the duration of 1 beat, dealing damage to enemies hit on the path. Deals 1 damage to hit enemies for every 1 shield point owned.

NO.08 Force Field II · Burst

Consumes all shield points, dealing 3 damage to surrounding enemies for every 2 shield points consumed.

NO.09 Force Field III · Recharge



Lasts for 3 rhythm durations, during which each time damage is taken, restores 30 shield points.

NO.10 Force Field IV · Conversion

Health is reduced to 1 point, for every 3 points of health lost, restores 4 shield points.

Early Concepts

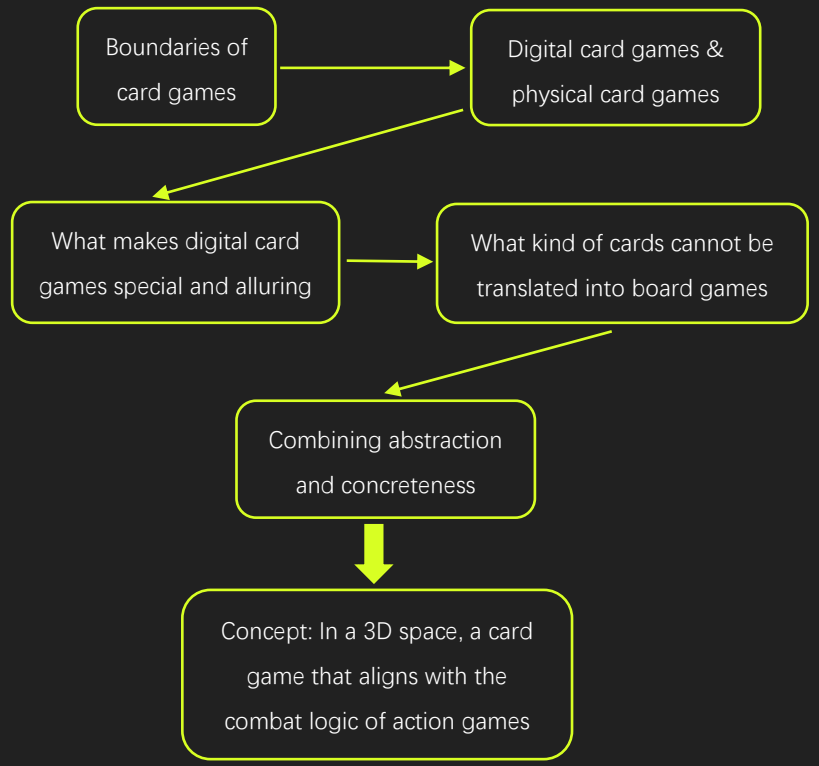
The core gameplay of the game stems from a reflection on the nature of cards. A card is an abstract representation that defines the basic elements of a complex system. In different types of card games or contexts, the role that cards play varies greatly.

For instance, in **"*Yu-Gi-Oh*"** cards contain various monsters and traps, represented by card type, attributes, levels, attack, and defense values. In **"*Slay the Spire*"** cards represent the player's possible actions, skills, etc., characterized by card types, costs, effects, and terms. Additionally, various mechanics surrounding cards come together to form a playable game.

Our concept originates from the question: Can the form of a card be used to express an action game, and in doing so, explore the boundaries of what a card can represent?

The operation and decision-making in action games are at a high and complex level. The essence of a "slash" lies not in how to exert force, but in how to utilize the character and features of the action.

Shooting games	Reliable 3D space + continuous operations	Concrete
Action games	Reliable 3D space + discrete operations	Concrete
Card games	Abstract space of card games + discrete operations	Abstract



In any game, abstract abilities can be expressed using cards—Regarding the core gameplay, our idea is similar—Expressing an isometric action game like Hades using the language of cards. Transforming actions like weapons, dodging, etc., into action cards, and creating new experiences using the nature of cards.

Therefore, our gameplay can be summarized as "expressing action through cards" or understood as "action + cards." It is a bold attempt at combining and innovating gameplay.

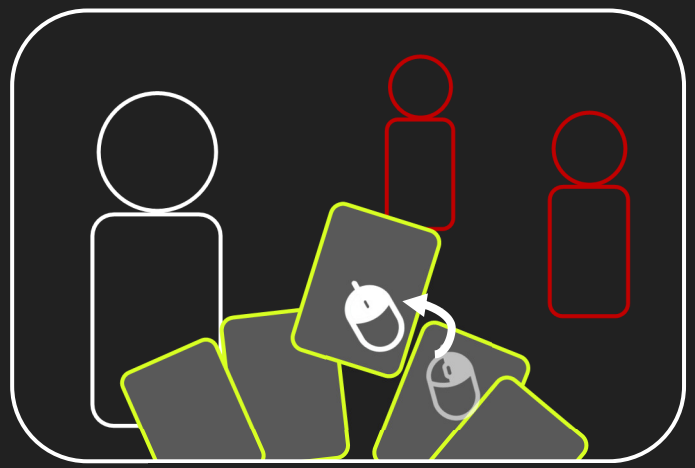
Gameplay Iteration

In the early stages of our brainstorming, we realized the profound differences between the two mature gameplay styles of "card games" and "action games." Most card games emphasize strategy and "Cool-Headed Thinking," while most action games emphasize real-time reactions and "Real-Time Action."

The challenge became how to ensure the fundamental feel and excitement of action games while retaining the depth and strategic elements of card games. This became a perplexing problem in designing the gameplay. At this stage, we conducted in-depth research and dissected works from mature categories such as "***Slay the Spire***" and "***Hades***" We also studied and drew inspiration from niche works attempting to blend these two elements, such as "***One Step From Eden***" "***UnderMine***" and "***Eden's Path***"

Ultimately, we discovered that achieving a seamless fusion of the two was challenging, as the conflict between strategic and action-oriented elements was always prominent. We needed to find our own solution. As the paper prototype indicates, one approach is to differentiate the action and card-playing segments by manipulating the speed of time flow.

Iteration Version A : Time-stop card play



In the regular state, the game adopts an over-the-shoulder perspective, with the mouse controlling the direction of the camera. When the player decides to play a card, they press the right mouse button, slowing the game time to 20% of the normal speed and bringing up a display of their hand of cards. In this "Time Stop" state, players can perform basic operations like moving, but the mouse no longer controls the camera direction. The player moves the mouse to select the card they wish to play and clicks the left mouse button to make the character play the card, immediately exiting the “Time Stop” state and returning to the regular state.

Challenges and Difficulties:

1. When selecting cards, the field of view is fixed, making it difficult for players to observe the entire battlefield. It might be necessary to adjust the enemies' attack intentions both inside and outside the field of view, or introduce a mechanism for players to perceive the battlefield.

2. Limited experience in the team's production of 3D combat games makes it challenging to support the more complex third-person over-the-shoulder combat design and implementation.

3. Incorporating directional card play, where players specify the direction or target of an attack, into the Time Stop state's basic operations is difficult. This adds redundant operation logic, making it hard to achieve a smooth combat experience.

Directions for Iteration:

Adopt a viewpoint similar to that of Hades to enhance the player's control over the battlefield, facilitating strategic deployment at the card level.

Simplify the card-playing operation and the direction specification for directional effect cards.

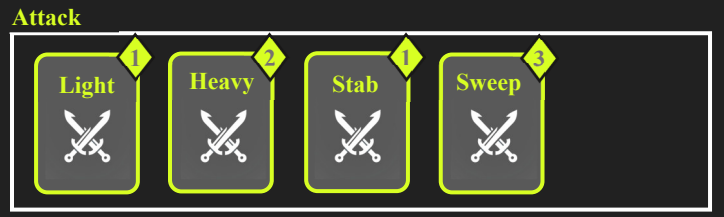
Develop interconnected effects for the cards.

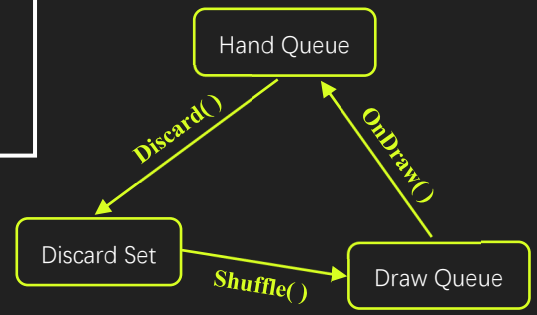
Iteration Version B : Discard? or Play a card?

The game adopts an isometric 45-degree angle view similar to Hades, and besides card playing, the player has only one ability: movement.

The top left corner of the screen displays the player's energy bar, which gradually fills up over time until it's fully charged.

The bottom left corner of the screen is the player's hand slot, divided into attack cards (top) and action cards (bottom). Players can choose to play or pass the frontmost card (leftmost) from either slot at any time (left click to play the top attack card, right click to pass the top attack card, Space to play the top action card, Shift to pass the top action card). Each card displays its effects and energy cost for playing and passing.





The casting direction of directional cards depends on the player's facing direction at the moment of playing the card.

The card drawing mechanics in the game are similar to those in Slay the Spire, with designated areas for the draw pile, hand, and discard pile.

Character Attributes:

- Maximum Health: 100
- Base Attack Power: 100
- Maximum Energy: 100

The early program prototype of this iteration version.

Validate the feasibility of the operation method
Test the combat fun and strategy

Name	Type	Skill Description	Cost to Play	Cost to Pass
Light Strike	Attack	A swift slash dealing 35 damage.	45	15
Heavy Strike	Attack	A powerful slash dealing 50 damage.	50	15
Frenzy	Attack	Increases attack power by 50, which decays at a rate of 12 attack power per second. For each card discarded before the bonus attack power decays to zero, recover 15 attack power.	30	20
Bomb Time	Attack	Throws two bombs on the spot, each bomb exploding for 20 damage. For the next 8 seconds after playing this card, throw one bomb on the spot for each card passed.	35	15
Mental Burst	Attack	For the next 5 seconds after playing, automatically recover energy at double the normal rate.	55	10
Roll	Action	Perform a roll that is invulnerable during the process.	25	10
Powerful Thrust	Action	Thrust forward, dealing 45 damage to enemies in the path.	30	10

Card Design Philosophy

We simplified the card-playing mechanics, shifting from a "time-stop" selection to a more fluid, dynamic way of choosing and planning card sequences. To balance the mechanics of passing and playing cards, we designed two sets of energy costs for using and passing cards. Continuous effects for passing cards have been incorporated into card functionalities.

Rogue-like dynamic deck building, enhancing strength and fault tolerance.

Combat Design

Souls-like combat with lower capability enemies, a slower pace of combat, providing players with ample time between actions to strategize with their cards.

Experience Design Guideline

Easy to Learn, Hard to Master

In action games, a mechanic that demands shorter passive reaction time from players signifies greater depth. The ability to read cards, choose strategies, and then respond to real-time combat is inherently a deep mechanic. Coupled with the design of the pigeonhole cards, this ensures skill depth and strategic space, thus fulfilling the "hard to master" aspect. The focus should be on the "easy to learn" design, to avoid exposing players to complexity too soon.

- Reduce Cognitive Load: Improve the readability of actions and cards, and ensure that combat is intuitive.

- Simplify Interaction Logic: Simple interaction logic.

- Lower Entry Barrier: Provide a sense of gratification through forgiving design, even when players are not familiar with cards and strategies.

- Reduce Action Challenge: Lower the capability of enemies, ease the difficulty of control.

Coupling Action with Strategy

Generally, action and strategy elements tend to conflict. Action is about quick reflex-based challenges, whereas complex strategies require time for contemplation. Strong action games usually set up most strategies before battle, with the fight serving to validate pre-battle plans. If strategies are incorporated during battle, they rarely coincide with intense action challenges. If complex choices exist in battle, additional forgiving elements might be included: for instance, pausing when switching weapons, pausing the game when bringing up interfaces, or enemies halting their actions when changing characters.

Coupling with lower granularity action can bring depth. For example, in GFTG, facing an enemy with the option to attack high, mid, or low already creates a complex experience.

Card construction can easily become overly complex, which should be avoided. Similarly, in terms of action, strong action challenges should be avoided. Balance and coexistence of both can be achieved through other means.

- **Action Performance:** Enhance action performance with high player capabilities, precision, and differentiation.

- **Strong Impact:** Enhance the visual and auditory feedback of actions.

- **Pigeonhole Combat Cardization:** Express the style and strategy of pigeonhole combat through a card deck.

- **Discard Mechanism Design:** The discard mechanism should be simple and clear.

Problems and Difficulties:

1. Players fall into a pattern of combat that involves tugging with enemies and accumulating energy, adopting a more conservative combat mode despite some cards encouraging a mix of discarding and playing for burst damage. This behavior, involving the use of cover and flanking enemies, deviates significantly from our initial expectations.

2. Players lack effective means for sustained output. When out of energy or cards, they indeed lack effective means to combat enemies.

3. Although the rotation of cards is predictable, in-game combat decisions remain chaotic. Players know they should discard cards after playing those with discard effects, but the gameplay heavily depends on the order of cards.Despite a high density of decision-making and coherent choices, each moment offers few strategic options, leading to a lack of depth in strategy.

4. Card effects mainly focus on three dimensions: energy, attack power, and health. Functions like grenade throwing are scattered and difficult to develop deeply, or, to put it another way, developing depth in these areas demands significant development effort.

5. The distinction between action cards and attack cards is unclear. As the game progresses, potential card fusion mechanisms could lead to confusion in card categorization.

Directions for Iteration:

1. Increase means for players to output and survive beyond their hand of cards.

2. Adjust the card selection and playing modes to deepen decision-making.

3. Consolidate the dispersed numerical dimensions within the combat system, designing more accessible value ports to develop gameplay depth, and providing players with choices of combat styles (such as bleeding, shield, strength, etc.).

Iteration Version C :
Attacks Accumulate Cards
Execute Card Functions at Rhythm Points

We've introduced the concept of "Rhythm," creating a semi-turn-based game pace. The game operates on rhythm-like "Rhythm Times," where players and monsters execute their cards and skills at specific "Rhythm Points." This aligns with our initial concept of "pausing time to play cards" — by partially separating the card gameplay, we allow for free operation while also providing additional reaction time. The rhythm mechanism serves as a unifying agent for both elements.

In this version, characters gain the basic ability to perform normal attacks. The mechanism of "hitting with five normal attacks to activate the last played card" encourages players to engage in close combat and intersperse card use during normal attack intervals.

Serial Number	Card Positioning	Card Name	Casting Time (in Beats)	Duration (in Beats)	Card Restrictions	Card Consumption	Card Effect
1	General-Purpose Filler	Sweep	1	N/A	None	None	Attacks all enemies within 3 meters, dealing 35 damage
2	General-Purpose Filler	Heavy Strike	1.5	N/A	None	None	Attacks the first enemy in a frontal rectangular area, dealing 60 damage
3	General-Purpose Recovery	Shield Increase	0.5	N/A	None	None	Gain 20 points of shield
4	General-Purpose Core	Blood Wind Slash	Continuous	N/A	(Blood+Shield) > 20	20 health/0.5 beat	Performs a whirlwind slash, consuming 20 health every 0.5 beats, dealing 40 damage to surrounding enemies
5	General-Purpose Recovery	Shield Recharge	0	5	None	Remove This Card	Lasts for 5 rhythm periods, recovering 40 shield at the start of each rhythm period
6	General-Purpose Recovery	Life Recovery	0.5	N/A	None	None	Recovers 30 points of health
7	General-Purpose Movement	Retreat Attack	0.5	N/A	N/A	N/A	Quickly move backwards and deal 25 damage to enemies in front

Serial Number	Card Positioning	Card Name	Casting Time (in Beats)	Duration (in Beats)	Card Restrictions	Card Consumption	Card Effect
1	Shield Core	Explosive Shield	0	N/A	None	All Shields	Consumes all shields, dealing 3 damage to nearby enemies for every 2 shields consumed
2	Shield Core	Shield Recovery	0	N/A	None	Remove	Recovers shield to the maximum level for the current rhythm duration when used
3	Shield Core	Flesh Weakness	0	N/A	Health > 1	Reduce Health to 1	Reduces health to 1 point, regaining 4 shield for every 3 health lost
4	Shield Core	Shield Counter	N/A	3	None	None	Lasts 3 rhythm durations, dealing 1 damage to nearby enemies for every shield lost during duration
5	Shield Core	Shield Charge	N/A	N/A	N/A	N/A	Charges forward for 1 beat, dealing damage to enemies hit. Deals additional 1 damage for every shield owned
6	Shield Core	Shield Smash	N/A	N/A	N/A	N/A	Smashes the ground, dealing 30 damage to enemies within 6 meters. Gains 1 shield for every damage dealt
7	Shield Core	Shield Renewal	N/A	N/A	N/A	N/A	Lasts 3 rhythm durations, regenerating 30 shield each time damage is taken

Serial Number	Card Positioning	Card Name	Casting Time (in Beats)	Duration (in Beats)	Card Restrictions	Card Consumption	Card Effect
1	Vampiric Core	Bloodthirst	1	N/A	N/A	N/A	Deals 30 damage to a single enemy in front, recovering 20 health
2	Vampiric Core	Blood Revenge	N/A	N/A	N/A	N/A	Deals 10 damage to nearby enemies. For every 10 health lost, the damage dealt by this card increases by 15
3	Vampiric Core	Last Stand	1	N/A	N/A	N/A	Deals 40 damage to a single enemy in front. When health is below 15%, damage is tripled
4	Vampiric Core	Blood Rain	1	N/A	N/A	N/A	Deals 50 area damage within 6 meters, recovering 20 health for each enemy hit
5	Vampiric Core	Blood Dagger	1	N/A	N/A	N/A	Shoots a blood dagger forward, dealing 20 damage. Restores 10 health and returns to hand upon killing an enemy
6	Vampiric Core	Blood Pact	N/A	N/A	N/A	N/A	Consumes 15 health for each card used during the rhythm duration. Recovers additional health at the end of the rhythm period based on the cards used
7	Vampiric Core	Blood Assault	N/A	N/A	N/A	Remove	Recovers 60 health. For every 20 health lost, additional 10 health is recovered

We have also designed card decks with different styles by reinforcing mechanisms such as enhanced benefits from normal attacks, converting shields to damage, and strengthening life-steal for sustained performance.

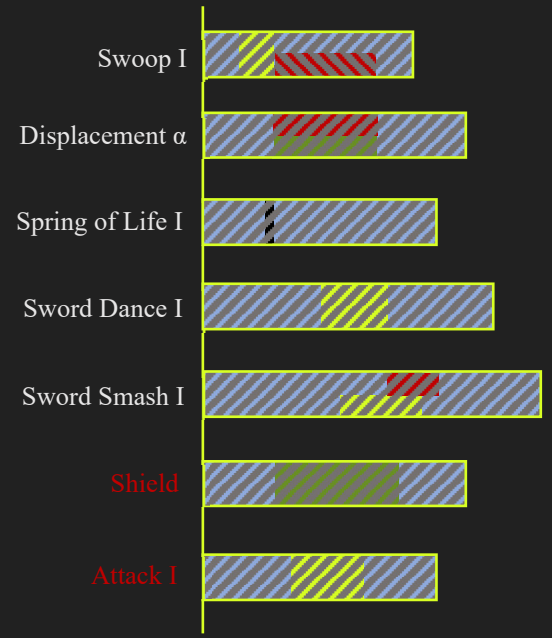
In the final implementation, we specifically refined the design of the shield aspect, a more fundamental element, and achieved a satisfactory strategic experience.

Enemy and Combat Design

The core mechanic of enemy revolves around "Intentions," which are expressed via UI during rhythm intervals, indicating the actions they plan to execute at the next Rhythm Point. Based on different monster intentions (like attack, pursuit, defense, etc.), the time players need to react becomes the interval of one rhythm. Players can respond through normal attacks, movement, or card abilities. This system allows players to anticipate and strategize their responses to monster actions effectively.

The intentions of the enemy and the player's card actions are executed simultaneously at the rhythm point, making their interaction independent of triggering and solely dependent on the relative timing of execution. Precise design has been applied to the timing and sequence of card actions and intention actions on the timeline following the rhythm point.

Action Timeline



In combat games, interactions between specific actions of the player and the enemy often have predetermined outcomes. For example, when an enemy performs Attack I and the player uses a Displacement move, the invincibility frames of the player's action entirely encompass the enemy's attack hitbox, ensuring that the player will dodge the attack.

However, there are scenarios where the outcome depends on the distance. For instance, when a player uses Swoop while the enemy performs Attack I, the player attacks first and then quickly retreats. If the player successfully moves out of the enemy's attack hitbox at a sufficient distance, they will avoid taking damage.

The content primarily focuses on the action perspective. The timeline schematic is not directly shown to the player, requiring players to continually explore the action characteristics of the cards during combat and discover the compatibility between different actions of enemies and allies. Beyond the action elements of the cards, players must also consider the sequence in which cards with numerical attributes are played. Cards that combine both action and numerical attributes enrich the game, offering significant strategic depth in card synergy, alongside a certain level of action challenge.

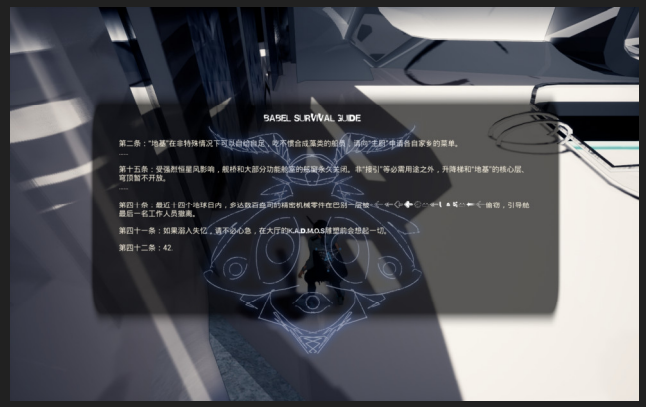
Narrative Design

Unlike traditional adventure games (AVGs) or 2D narrative puzzle games, 3D projects demand more in terms of storytelling and cannot rely on "forced" interactions. Therefore, in our game, we opted for environment-driven narrative deployment. We have moderately placed Points of Interest (POIs) within the scenes, with a tone of writing that leans towards the austere, aiming to guide players to understand the story through an "attractive but unexplained" approach. This methodology draws inspiration from the environmental storytelling seen in games like "Dark Souls".

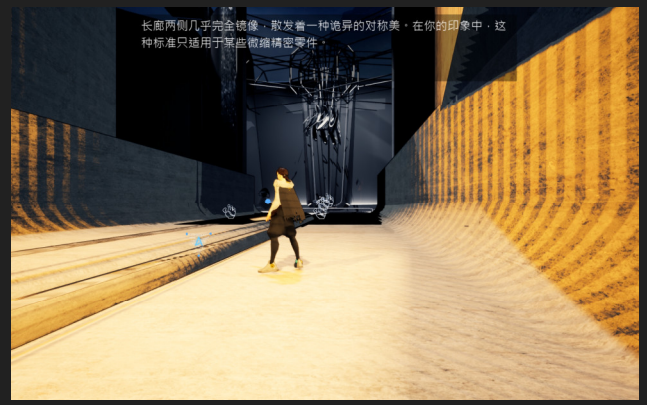
In our scenes, we have designed three main types of interactive states, each with corresponding interaction interfaces:

1. **Dialogues and NPCs**: These primarily guide players on necessary content, with the most engaging POIs and strong guiding content highlighting the importance.

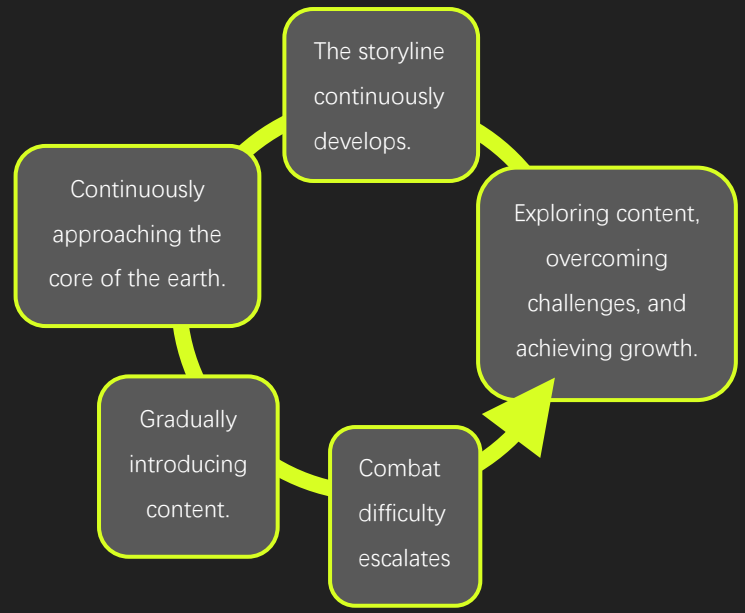
2. **Storyboards**: These are integrated into the scenes, carrying a substantial amount of narrative elements.



3. **Subtitles**: These are less crucial but serve to provide additional explanations.



We structured the player's journey based on the necessity of content, narrative completeness, and priority of player experience, deploying appropriate texts throughout the scenes.



Additional Explanation

The strategic importance of individual card choices for players diminishes as the number of hand slots increases. The Strategic Longevity of the game increases with more hand slots. The limit of six cards in hand was set based on experience and further validated through playtesting.

The design of the buffer wheel provides players with leeway for quick card passing and adds expandability to the gameplay. For instance, new mechanics can be introduced, such as a "core" that grows stronger the longer it remains in the buffer wheel, or triggering special effects when the buffer wheel is filled.

My Contribute to Babel Inverse

Design Part

1.Proposed the early gameplay concept of "combining cards with combat."

2.Assisted the lead strategist in refining and iterating the gameplay of the game's card and combat systems (see "Gameplay Iteration" for details).

3.As an execution planner, I determined the details of combat and card systems, including combat 3C, card effects, logic and process of combat action execution, card editor design, and table configuration.

4.Participated in designing the overall game flow, including the game loop and level pathing.

Programme Part

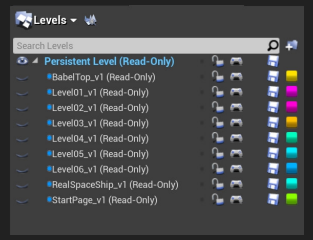
Early Stage: Iteration of the program prototype.

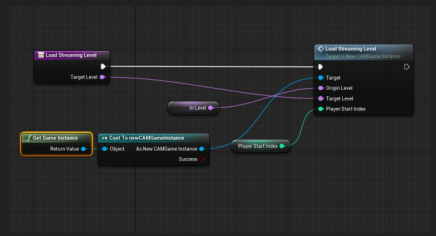
Final Version: I was responsible for all programming tasks except for the enemy AI behavior logic, including:

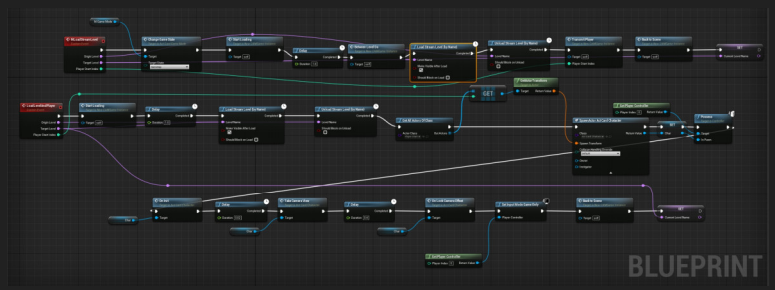
game flow, level transition framework, game 3C, player core logic, card/combat system, , combat combo system, numerical system programming, and scene interaction implementation, Animation System, Audio System.

I also worked on the UI animation effects in the programming part.

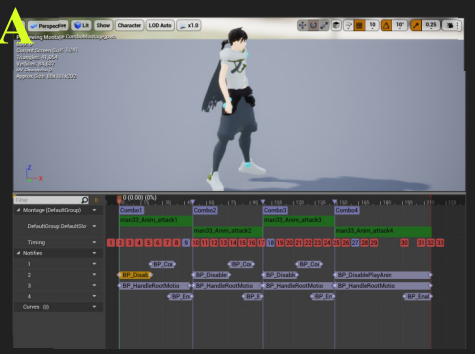
Following is a display of selected programming segments.



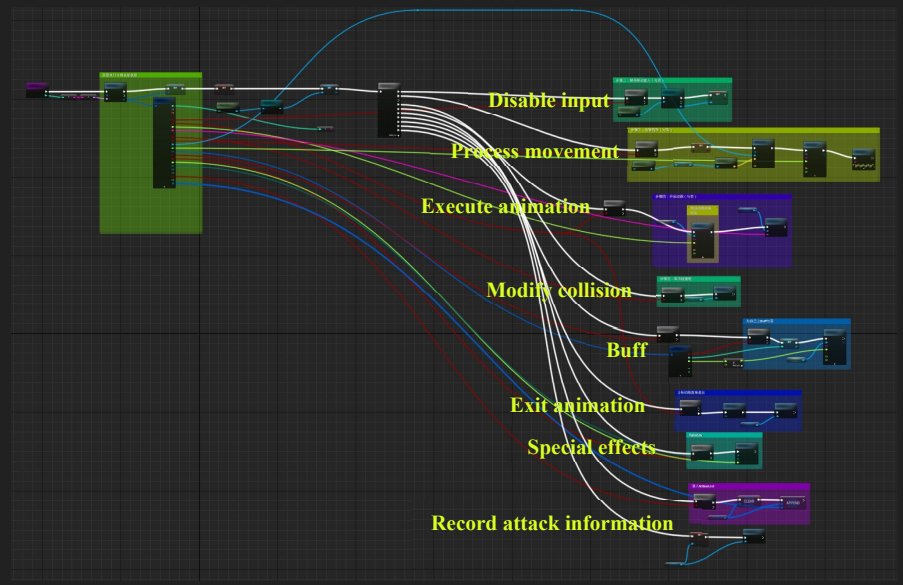




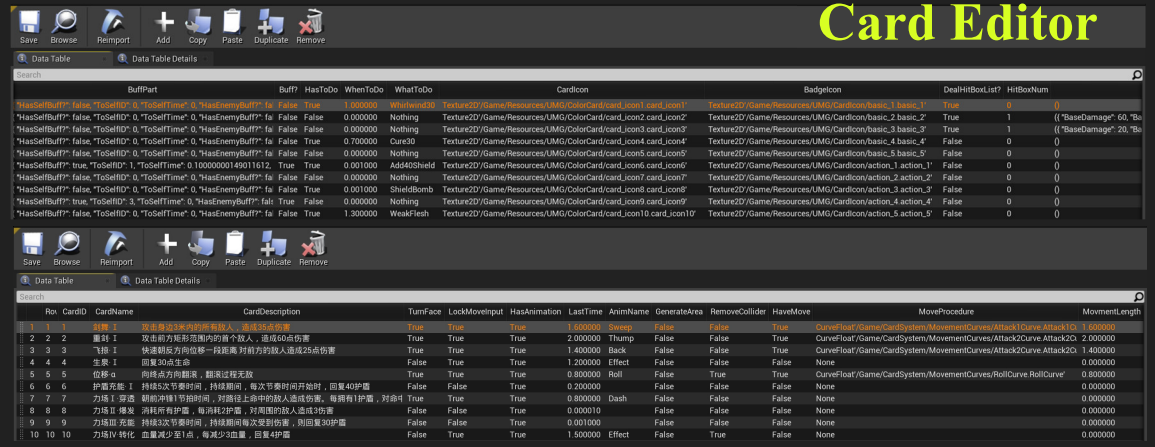
Persistent level asynchronous loading

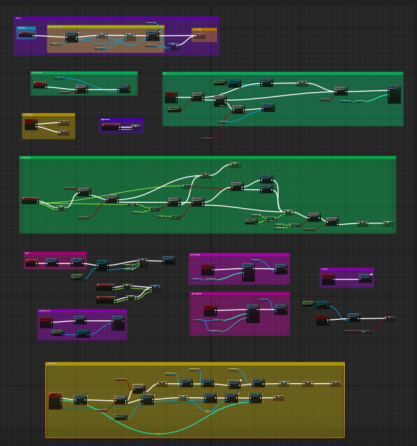


A & B: Use Animation Montage to edit and switch animations, achieving seamless combo animation transitions.
C: Utilize animation notifies to record action damage information and mark the cancellation of the action's recovery phase, optimizing the combat feel.



The program logic for a player executing a card.

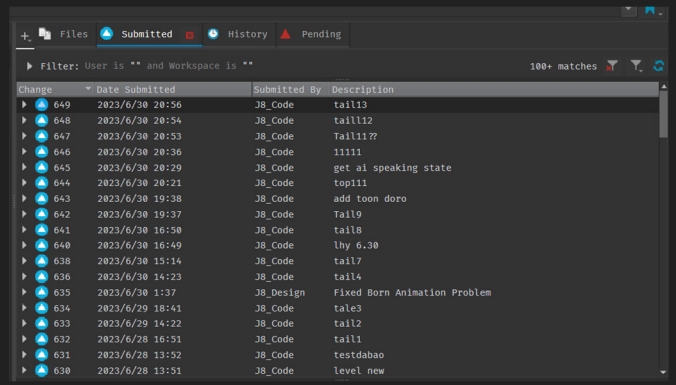




Player Contorller Event Blueprint

Player Character Event Blueprint

Project Management Part



1.Write the project management plan and project schedule.

2.Compile and maintain requirement tables for each department.

3.Assist in coordinating between departments.

4.Actively drive the progress of project development.

5. Use Perforce to maintain and manage program version branches.

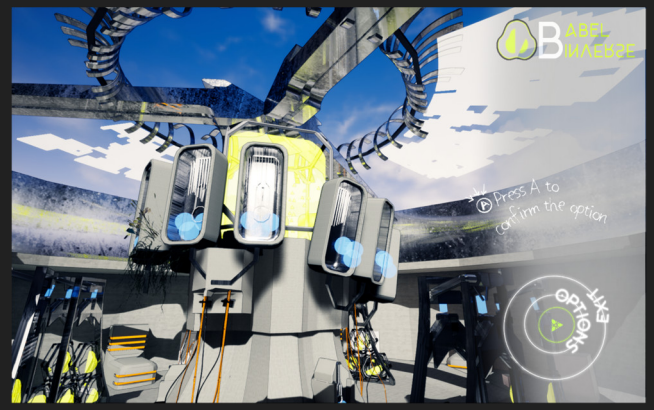
User Experience Part

Due to the unique gameplay of combat and card-playing, we initially considered using a game controller for controls. I designed the controller's layout based on the gameplay, enabling an operational method that allows for card-playing while facilitating combat.

During the development process, I designed and implemented using Unreal Engine (UE): the main page menu, pause page menu, a complete overview interface of the card pile, UI effects for displaying cards during combat, and the controller operation methods.

Below are some examples of these implementations:

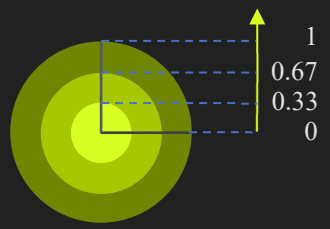
1.Main Page Menu



The option bar in the main menu was designed in a concentric circle arrangement. However, in reality, the inner circle rotates based on the outer circle's movement. The rotation is transmitted from the outer to the inner circle continuously, adding a certain degree of chaos to the entire rotation system.

The options Start, Option, and Exit rotate in a stationary, clockwise, and counterclockwise manner, respectively. Players select an option by moving the left joystick of the controller and press the A button to confirm their choice.

Initially, the mapping of the joystick movement amplitude to the options was as follows:

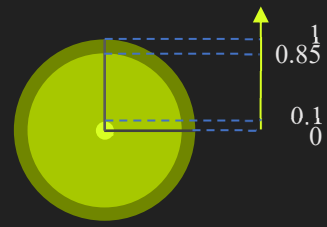


0 to 0.33 for Start

0.33 to 0.67 for Option

0.67 to 1 for Exit

Although this design seemed most intuitive, testing showed that it was challenging for players to select the Option in the middle. In reality, players' perception of the joystick's movement amplitude is not very sensitive, and it's hard for them to control the joystick to stay within the 0.33 to 0.67 range. Moreover, players typically do not move the joystick when they want to start the game. Therefore, I modified the mapping as follows:



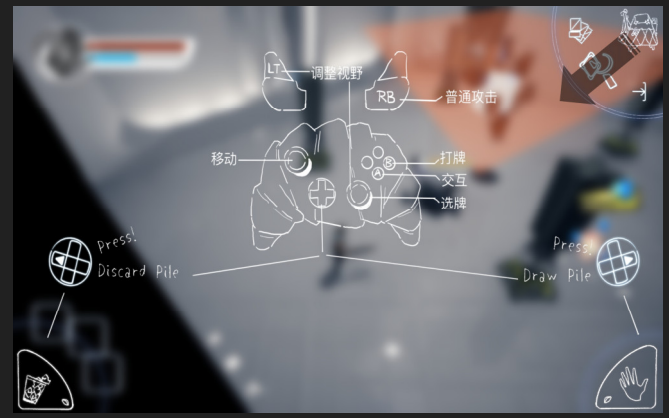
0 to 0.1 for Start

0.1 to 0.85 for Option

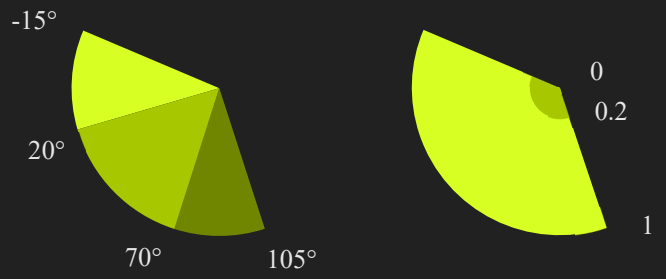
0.85 to 1 for Exit

While this mapping is not numerically uniform, it aligns more closely with intuitive physical perception.

2.Pause Page Menu



The design of the wheel in the top right corner of the pause page also follows a similar mapping to what was previously mentioned: with 0° being horizontally left from the center of the wheel and the degree increasing counterclockwise, the mapping is as follows: -15° to 20° displays all hand cards, 20° to 70° opens settings, and 70° to 105° exits the game. The size of the option and the wheel increase synchronously as the player moves the joystick. When the joystick's movement amplitude exceeds 0.2, the options begin to respond to the player's selection. Afterwards, the player can press the A button to select the desired option.



3.Card in Combat

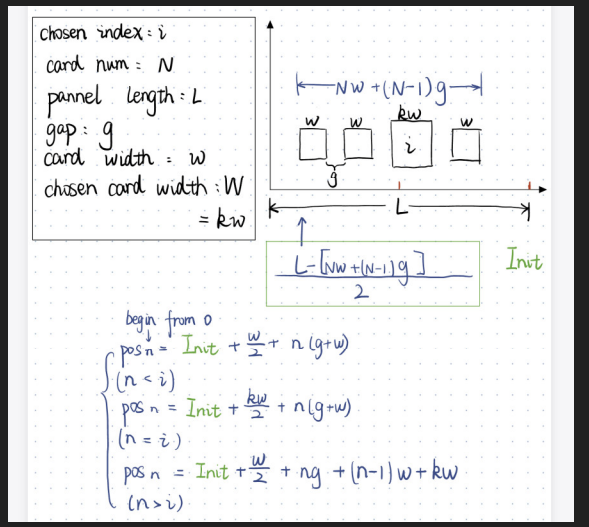
The movement trajectory of the cards drawn by the player and the operation of the "core" in the buffer wheel are illustrated as follows. The movement path of the cards aligns with the spatial logic of the player's interface: cards drawn from the right-side deck move left into the hand area, used cards from the hand move left into the buffer wheel, and the "core" cards executed in the buffer wheel move downwards into the discard pile.

To ensure the recognizability of the cards and the readability of their descriptions, we extracted the card skill descriptions and placed them separately in a card description panel. This panel displays the corresponding text description based on the card selected by the player.

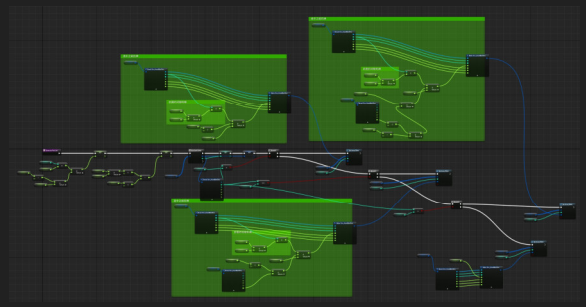
4.Card Pile

Press the right direction on the D-pad to browse the cards in the draw pile (in random order).

5.Card in Combat



Display the cards using the method of "fixed card edge spacing, enlarging the selected card, and centering the cards as a whole." Ensure a smooth transition of card Transform changes when drawing new cards, playing hand cards, and switching the selected card.



Feedback

B · Liu ★★★★★

The gameplay is innovative, exploring a combination of card and combat mechanics. Looking forward to the official launch.

T · Chang ★★★★★

I noticed there is a certain deck system among the cards, and I'm eager to see more combat styles in the decks.

Z · Zhao ★★★★★

Great concept, the combat scenes are very sci-fi and atmospheric, but the combat feel could be further optimized.

H · Ge ★★★★☆

The performance of the enemies is weak, and the strength of the player's normal attacks is too high, indicating a need for improvement in combat design.

Insights and Reflection

To create an excellent game that fuses various gameplay styles, a comprehensive understanding of each type of gameplay included is undoubtedly required. During the development of our card combat game, we researched many outstanding combat and card games, as well as some competitors that attempt to blend these two gameplay types. This research revealed many design details that are often overlooked in everyday experiences, such as intricacies in action games to optimize feel (input buffering, hitstop, hit feedback, canceling the recovery phase of combos, automatic attack targeting, etc.), and common card game elements like operational, offensive, defensive, and other numerical or functional card categories.

Since the fusion of card and combat gameplay is inherently challenging, our initial design was redundant and lacked simplicity and elegance. Through iterative design, we applied a subtractive approach, removing superfluous mechanics and operations while retaining the game's fun elements. This gradually adjusted the game's operational burden to an acceptable level for players.

In combat, we experimented with using cards to construct offensive and defensive scenarios. The mechanism of card effects triggering at rhythmic points significantly reduces the demand on players to precisely control timing in action games, shifting their focus to maintaining an appropriate distance from enemies and using the right combination of cards.

Many people have asked us: How does this type of card-based combat differ from MOBA games with cooldown-based abilities, and why use cards? Indeed, cardifying player abilities is a design choice that turns action points into a resource for players to strategically allocate. From this perspective, our game shares some commonality with MOBAs. However, in Babel Inverse, skill cardification means that skill rotation is not just a simple cycle of use-cooldown-availability, but rather involves the randomness of shuffling and drawing cards, compelling players to implement inherent strategies against randomness. Cards, as independent entities, allow players to granularly possess and combine them and their corresponding effects, encouraging players to build decks and explore different card combinations to form corresponding combat strategies. All designs are not achieved overnight but through an iterative process of identifying problems and solving them using design theory.

This project was also my first formal use of the Unreal Engine (UE) for game development, providing me with a preliminary but comprehensive understanding of UE blueprints, widget usage, programming frameworks, and rendering pipelines.