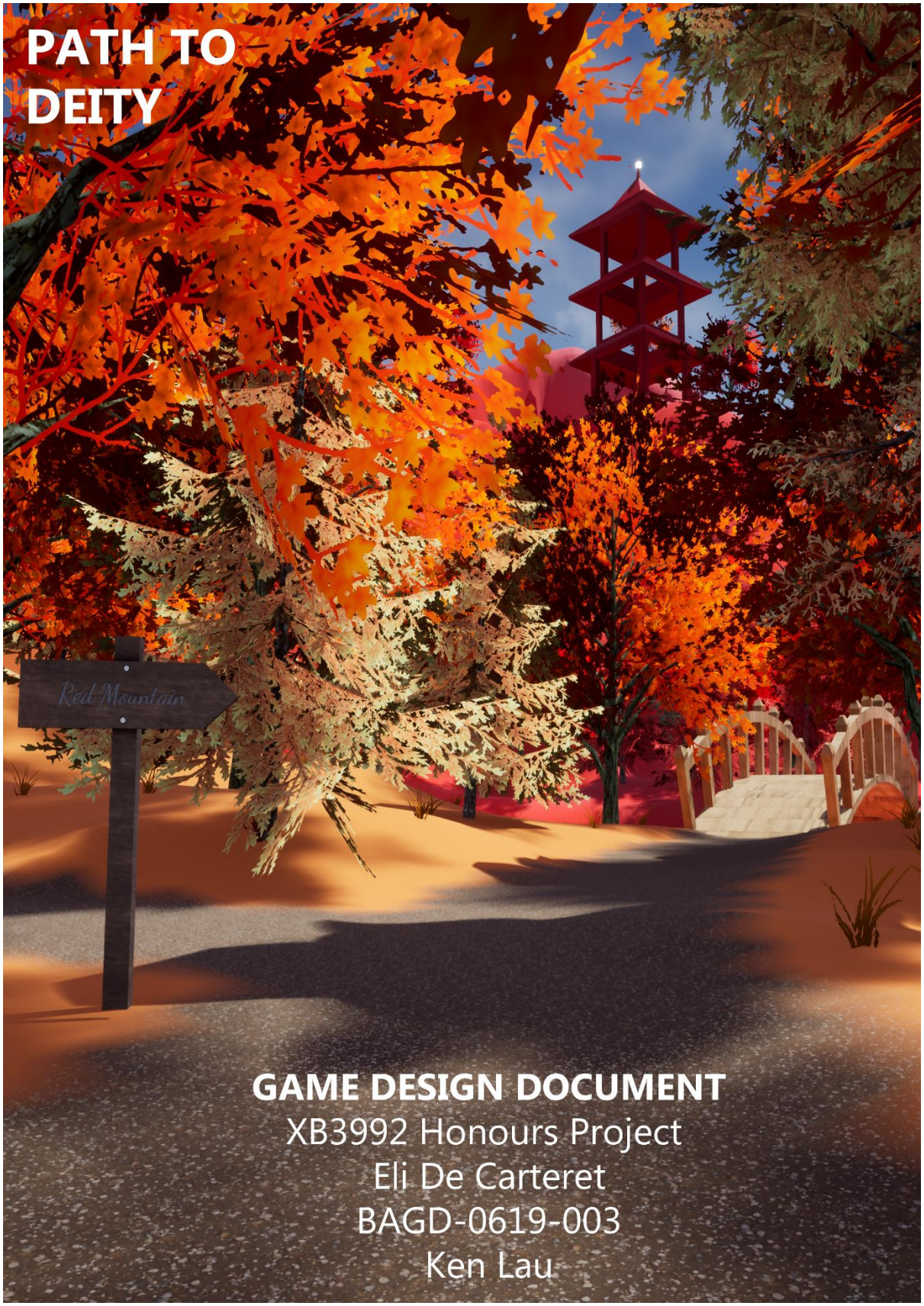

GAME DESIGN DOCUMENT

XB3992 Honours Project

Eli De Carteret
BAGD-0619-003
Ken Lau

INTRODUCTION

The core purpose of this document is to outline the game's design in depth and cover key rules, layouts, maps and important design elements which are important to follow throughout the development of Path To Deity.

CONTENTS

Version 1.00

Revisions: Added information and imagery into GDD, moved from Word to PS.

INTRODUCTION

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Version 1.00

Revisions: Added information and imagery into GDD, moved from Word to PS.

PROJECT OUTLINE

This page is to serve as a reminder, from the Pre-Production document and Project Plan, as to some of the key aspects of the project as a whole, outside of the gameplay. For more information into this area, visit the Project Plan or Pre-Production Document.

GAME OVERVIEW

Title: Path To Deity
Genre/ Type: Puzzle, Exploratory, Adventure, Fantasy, Narrative
Perspective: First Person, Single player

PROJECT OVERVIEW

Project Scope: 26 weeks (September 2018 - May 2019)
Timescale: Pre-Production (W1-8), Production (W6-24), Post Production (W22-26)
Team Size: 1
Average Gameplay Completion Time: 15 minutes - 4 hours (Depending on ability, exploration, amount of times played etc)

HARDWARE AND SOFTWARE

Game Engine and Version: Unreal Engine 4.19
Software: UE4, Photoshop, Maya, Substance Painter, Microsoft Office products, RPG Maker
Legalities: Wherever possible, self made and royalty free material/ packs should be used. Ensure all NONE SELF MADE ASSETS are listed in the bibliography and referenced.

AESTHETIC TYPES

Referencing the 8 aesthetic types (MDA Framework) stated by Hunicke, LeBlanc and Zubek, the game's aesthetics will aim to cover:

Sensation (Sense-pleasure): Player should experience something sensory satisfying.
Fantasy (Make-believe): Player should experience and believe in an imaginary world.
Narrative (Drama): Game should have a story that drives the player to explore and return.
Challenge (Obstacle course): Player should have the urge to master the game/ puzzles.
Discovery (Uncharted territory): Player should be made to want to explore and discover.

DISTRIBUTION

The game will be placed on Itch.io for download and will appear on my personal portfolio website: www.elidecarteret.com.

Trailers will be placed on social media such as YouTube and Twitter. Any merchandise, e.g. controller stickers, physical game copies and canvas' will be created and shown at the Degree Show.

CORE GAMEPLAY

The core gameplay for Path to Deity is primarily about exploring an open world using starting mechanics and solving puzzles using an additional 6 abilities picked up along the way, before completing the final puzzle tower.

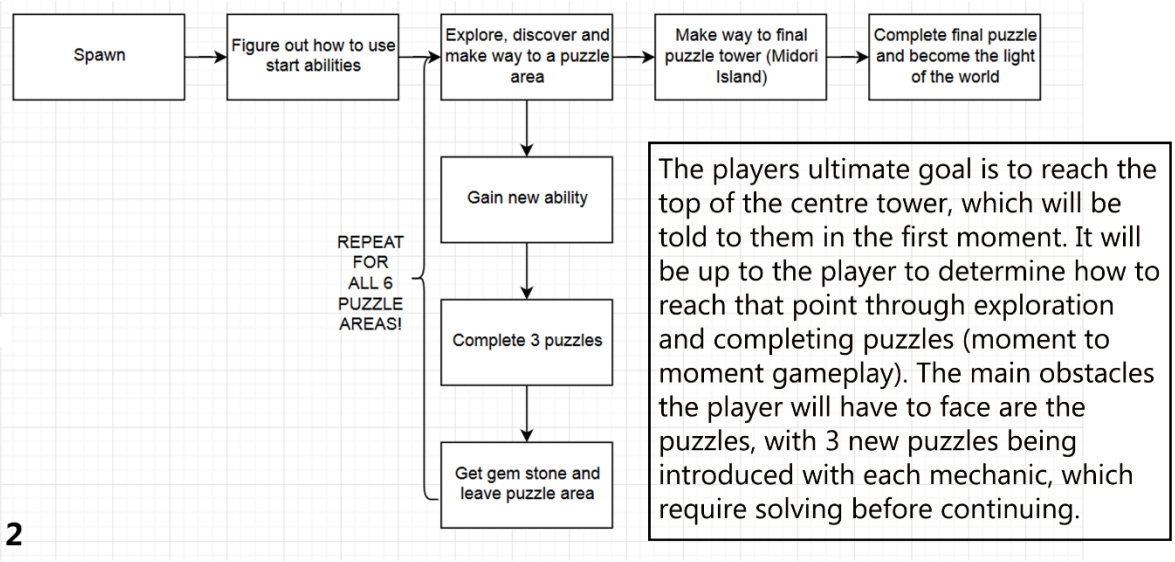
GOALS

The core gameplay should be engaging to experience, whether solving a puzzle or just exploring the landscape.
The core mechanics should feel clean and interesting to use.
The puzzles should increase in difficulty, whilst being challenging but fun to complete.
The core gameplay should allow players to feel a sense of wonder and mastery over the game as they progress and get more powerful.
The gameplay should be responsive and clear, allowing players to know exactly what is happening at all times.
The landscape should give players an opportunity and 'playground' to practice using their newly found abilties.
The player should always be using the surroundings to guide them rather than using a waypoint system, as this will cater to a more explorative experience.

PROGRESSION SYSTEM/ CHALLENGE DESIGN

Path To Deity will serve as an unfolding game, meaning players will start small and over time begin to see what is really happening as they progress. Players will start with barely any power or abilities, but as they explore they will see glimpses of new aspects, such as a new mechanics or areas, which will peak their curiosity.
Players will be introduced with new mechanics relentlessly, giving the impression that there is always more depth to be discovered. Players will also be given the opportunity to go at their own pace, as they can wander wherever they like and choose whether to continue to a new puzzle area or continue practicing with the abilities in the landscape.

GAMEPLAY LOOP



The players ultimate goal is to reach the top of the centre tower, which will be told to them in the first moment. It will be up to the player to determine how to reach that point through exploration and completing puzzles (moment to moment gameplay). The main obstacles the player will have to face are the puzzles, with 3 new puzzles being introduced with each mechanic, which require solving before continuing.

CORE MECHANICS

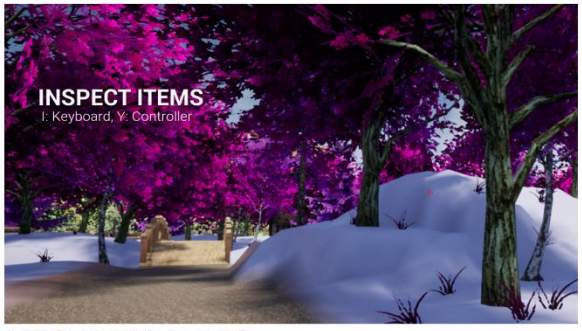
Overall, the game will consist of 10 core mechanics, 3 starter mechanics and 7 pick up mechanics, disguised as abilities, in order to complete the puzzle areas. The core mechanics will be broken down to provide more depth over the next few pages.

CORE MECHANIC BREAKDOWN

Technical element/ Ability	Sprint	Inspect	Jump	Carry items	Triple Jump	Time Manip	Freeze	Reverse	Grapple
Starter ability	YES	YES	YES	NO	NO	NO	NO	NO	NO
Mixes W/ others	YES	YES	YES	YES	YES	NO: Freeze, Reverse, Grapple, Other TM	NO: T.M, Reverse, Grapple	NO: T.M, Freeze and Grapple	NO: T.M, Freeze, Reverse
UI icon		NO: Locks player to position	NO: Obvious when jumping						
Particle used	NONE	NONE	NONE	NONE	NONE	P_Ky_Flash_1 Par_KineticForce_ 01	Par_ HealTrine_ 01	Par_ Voltcore_ 01	NONE
Audio name	Footsteps_ Running_ SFX_01	NONE	Whoosh_ 01_SFX	NONE	Whoosh_0 1_SFX	Slowdown_sfx SpeedTime	Freeze	Reverse TimeSFX_ Cue	Whoosh_ 01_SFX Metal_Ping_ 01_SFX
User skills required	Coordination (Mixing with other mechs) Multitasking	Visual Mouse input skills Linguistic	Dexterity Multitask Reflex	Hand- Eye Coordination Logical Accuracy	Dexterity Decision making	Coordination, logical skills, reflex skills, multitasking	Logical Reflex Dexterity	Logical Reflex Problem solving	Reflex Accuracy Logical Coordination

ATTAINING MECHANICS

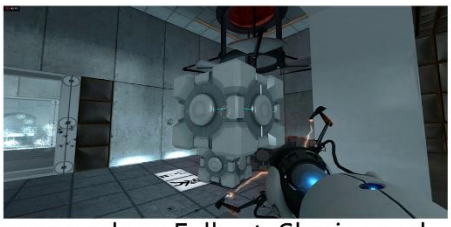
All none starting abilities are picked up by entering into a puzzle area. The ability name and controls should then shown through pop up UI. This needs to be completed with EVERY mechanic picked up by the player and will be activated through a trigger box at the beginning of a trial area. The next 3 puzzles will be based around this ability and the player will not be able to leave this area until the puzzles are completed.
When using the ability, a UI pop up MUST be shown whenever the ability is active, showing the abilities' icon (above) and name on a highly transparent background.



MECHANIC RULES

- Mechanics should feel clean, interesting and fun to use.
- Mechanics should be useable and consistent within the game world.
- Mechanics should be dynamic enough to build challenging but fun puzzles around.
- Mechanics should add to and fit with the gameplay.
- Only gained mechanic should be available in that puzzle area, rest should be disabled.

CARRY

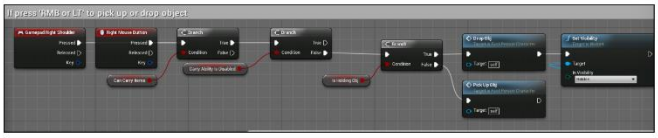


CARRY (**RMB** MOUSE, **RB** CONTROLLER)

The Carry ability, found in Sunny Sands (Beachy area), allows the player to pick up, carry and move items from one place to another at their leisure (if meets requirements). Influences for this mechanic include games such as Fallout, Skyrim and Overcooked, with the biggest inspirations coming from Portal's Portal Gun and Half Life's Gravity Gun, where the player can pick up and carry items from distance.

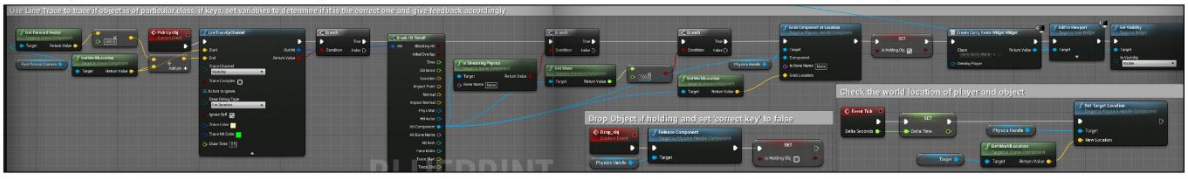
DESIGN AND FUNCTIONALITY

The Carry ability works through a line trace by Channel and can only be picked up if:
- Carry ability is active (through entering the puzzle area).
- The players forward vector is aimed at the object and it is in the range of 600 units.
- The player is not currently holding a different item and ability is not disabled by other.
- The mass of the attempted pick up item is under 100 units AND is simulating physics.



RULES

Pick up/ drop time: Instant
Delay time between pick ups: None
Amount: Player can only carry **ONE** item at a time
Consistency: ANY item matching the above criteria can be carried and dropped
Information: Players will know if in range through the line trace being shown, will know if using through the feedback UI and will know if carrying through the item being lifted and coming closer to the screen (item will move to physics handle location).

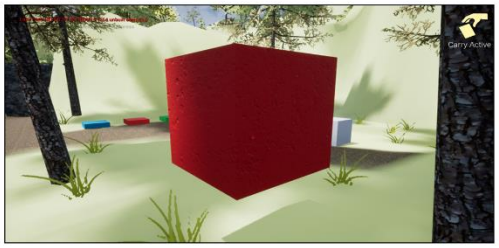


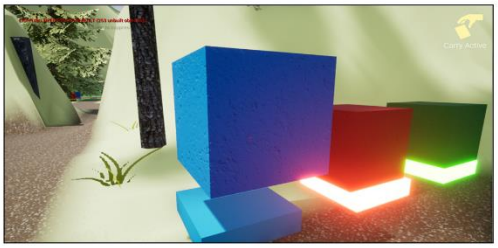
EXPERIENCE

When active, players should feel as though they are moving items freely within the world space, which the mechanic should allow for. They should feel as though they are impacting world by modifying the location of different items.

DYNAMICS

This mechanic can lead to players moving, throwing, launching and placing items into new areas of the world space and should be catered for when attempting to do so. Players can also use this mechanic with all other abilities to create new dynamics.





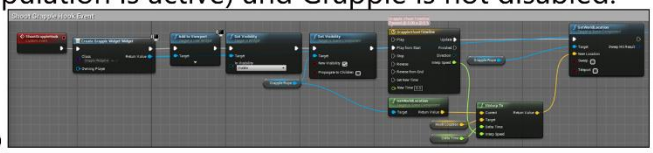
GRAPPLE

GRAPPLE (**G** KEYBOARD, **LB** CONTROLLER)

The Grapple ability, found in Rocky Greys (Grey area), allows the player to grapple to surfaces of different heights in mere seconds (if meets requirements). Influences for this mechanic include games such as Far Cry 4, Worms and the biggest inspiration being drawn from the Just Cause franchise, where players can fire their grapple towards a surface and if connected, can launch themselves at speed.

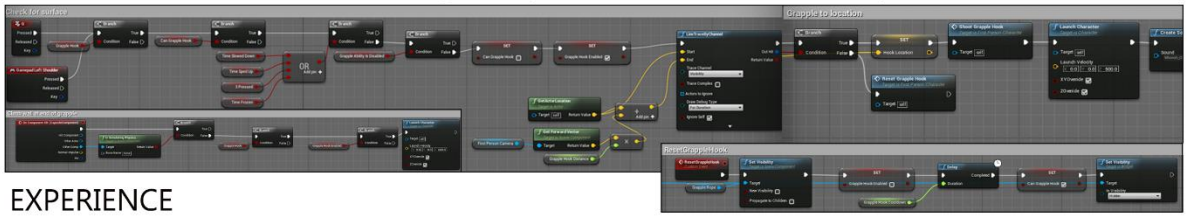
DESIGN AND FUNCTIONALITY

Grappling works through a line trace by Channel and players can only grapple if:
- The Grapple ability is active (through entering the puzzle area).
- The players forward vector is aimed at a valid surface (any surface not a blocking volume or landscape) and it is in the range of 2,000 units.
- Time Dilation equals 1 (No Time Manipulation is active) and Grapple is not disabled.
- Grapple is not currently active.



RULES

Grapple time: 0.5 secs + 0.5 secs Jump
Delay time between grapples: 1 second ('Grapple Hook Cooldown' Float value)
Launch: The Grapple wire will launch at 500 units (Z axis). When connects, the player will be launched towards the end point at 2.5 x walk velocity (600). The player will then climb/ jump at the end of the grapple at a velocity of 600 in the Z axis to get them onto the ledge.
Information: Players will know if in range through the line trace being shown, will know if using through the feedback UI and will know if grappling as they will be launched towards the aimed ledge at speed and will have their input disabled.



EXPERIENCE

Players should feel as though this ability makes them a lot faster when moving around. The mechanic should give them even more freedom and verticality in the world space.

DYNAMICS

The main dynamic of the game should be that the player uses the mechanic to move around the world a lot faster and in more unique ways than they could before and they should feel free to explore more areas than they could previously.

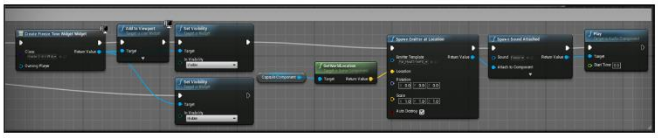
FREEZE TIME

FREEZE (**4** KEYBOARD, **D-PAD RIGHT** CONTROLLER)

The Freeze ability, found in Red Mountain (red area), allows the player to freeze time, allowing them to get past moving obstacles and bring the world to a stand still, whilst themselves moving at normal speed. Influences include SuperHot, Quantum Break and whilst talking to NPCs in Oblivion. The main influence is the film X men: Days of Future Past, with QuickSilver freezing everyone, whilst remaining unaffected by the transition himself.

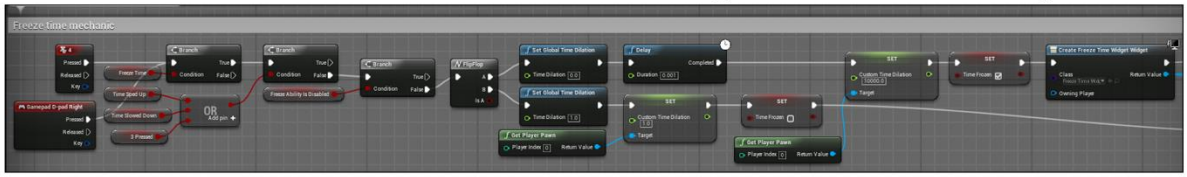
DESIGN AND FUNCTIONALITY

The Freeze ability works by setting the Global Time Dilation to 0 and can only work if:
- Freeze ability is active (through entering the puzzle area).
- Time is not already frozen, in which case, time will be set back to present time.
- No other time manipulation is active and freeze ability is not disabled by other.



RULES

Freeze time: Instant
Delay time between freezes: None
Amount: Ability freezes everything in the world other than the player character.
Consistency: Everything will be frozen EXCEPT for items being carried and the player.
Information: Players will know if time is frozen as every object which should or was moving, will now not be moving and will be frozen. The player will also have the freeze UI on the screen, with a blue snowflake and the background will be tinted a light blue.

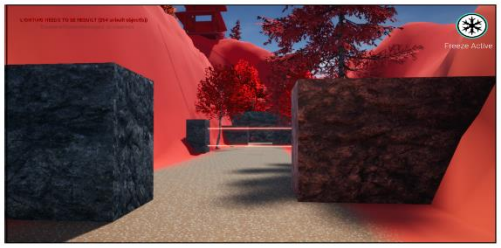


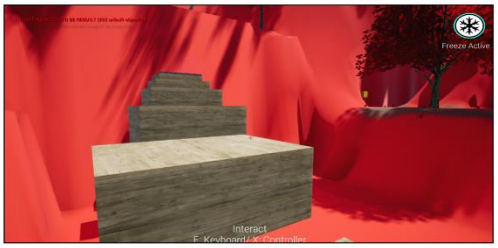
EXPERIENCE

When active, players should feel as though they have frozen the whole world and that they are the only movable object in the space. This should make the player feel quite powerful, as they can stop time and bend the game and game world to their will.

DYNAMICS

This mechanic could lead the player to completing the final tower a lot easier, as they can stop the timer by freezing time at the correct moments. This power could also allow them to have some unique experiences with the physics of items upon freezing.





REVERSE TIME

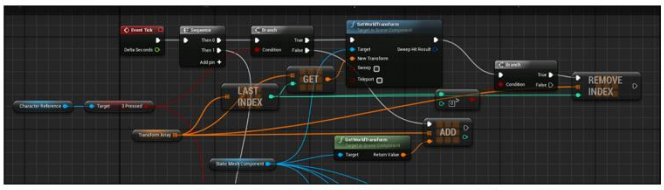
REVERSE TIME (**3** KEYBOARD, **D-PAD LEFT** CONTROLLER)

Reverse time, found in Cherry Blossom (Pink area), allows the player to reverse time, which in turn makes eligible objects move back to previous transforms, so the player can move them again, hoping for better results or use them to their previous positions to their advantage. Influences include games such as Braid and Blinx 2 (2004), with the key influence, Life is Strange, allowing players to remake previous decisions.

DESIGN AND FUNCTIONALITY

The Reverse ability works through a Last Index Array and can only be picked up if:

- Reverse ability is active (through entering puzzle area) and player is HOLDING reverse.
- The attempted reverse item HAS changed transform.
- No other time manipulation ability is active
- The ability is not disabled by other.



RULES

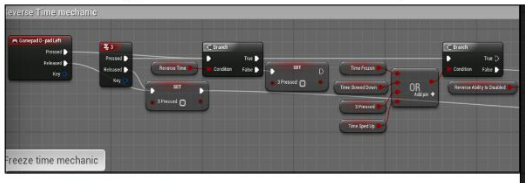
Reverse Time initiation: Instant

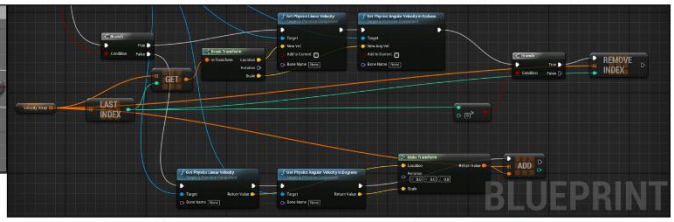
Delay time between uses: None

Amount: During reverse, eligible objects will reverse back to last SAVED/ START location.

Consistency: Only objects with the above code AND a modified transform will be affected for the duration of the time that the reverse button is held/ until back at start.

Information: Players will know if the object is eligible by trial and error, as the object will change back to a former position. UI and feedback will tell when reverse is active.





EXPERIENCE

This mechanic is one of the more rare ones when it comes to researched games, so players should feel a sense of wonder and uniqueness when using this ability. They should feel like they can rectify their mistakes and so become more adventurous.

DYNAMICS

Once realising their mistakes can be fixed, the player could begin trying new things using the eligible blocks, such as moving them to new locations with carry, pushing blocks into unexplored territory without the worry they will get stuck etc.

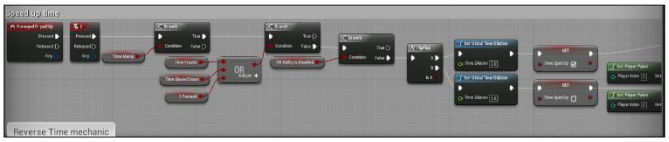
SPEED UP TIME

SPEED UP TIME (**2** KEYBOARD, **D-PAD UP** CONTROLLER)

Speeding up time, found in Orange Sunset (Orange), allows the player to speed up time to twice the speed of present time. This allows the player to get the game moving faster in moments of waiting, e.g. waiting for a slow moving platform. Influences include games such as NBA (changing game lengths) and the main example being The Sims, where players can speed up the game to see events unfold faster.

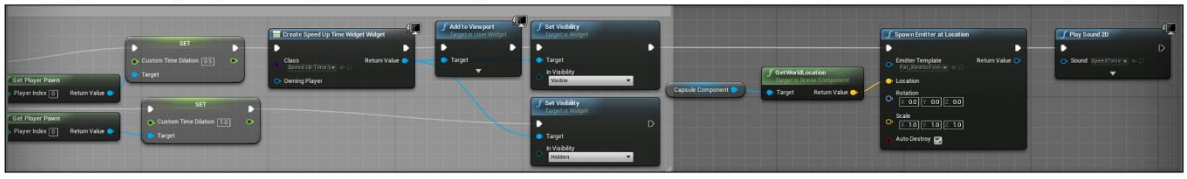
DESIGN AND FUNCTIONALITY

Speeding up time works by setting the Global Time Dilation to 2 and can only work if:
- The Time Manipulation ability is active (through entering the puzzle area).
- Speed up time is not already active, in which case time will return to normal (TD: 1).
- No other Time Manipulation is active and T.M is not disabled by other ability.



RULES

Initiation time: Instant
Delay time between uses: None
Amount: Everything in the world space is set to double speed except for the player.
Consistency: Everything but the player, including timers and cinematics will speed up.
Information: Players will know if time has been sped up as every moving object will be moving at double the speed bar the player character. The player will also notice a set of arrows in the top right corner, as this is the speed up time icon and a mostly transparent grey background, along with a set of sound and particle effects on press.



EXPERIENCE

When active, players should feel as though the world around them is running a lot faster and they are the reason for that. Players should feel that they are not having to wait around for the game in 'slower' portions of the game, as they can speed it up.

DYNAMICS

This mechanic can lead to players using it in order to speed up downtime or whilst waiting for objects, such as slowly moving platforms, to reach them. This could be useful for 'Speedrunner' gamers or players who want to cut straight to the action.

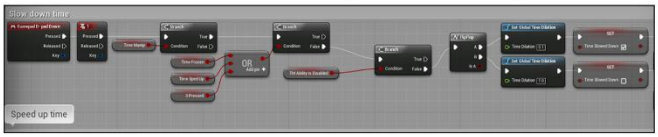
SLOW DOWN TIME

SLOW TIME (**1** KEYBOARD, **D-PAD DOWN** CONTROLLER)

Slow Down Time, found in Orange Sunset (Orange), allows the player to slow time down to a tenth of the normal speed, allowing them to be a lot more precise when it comes to tasks involving jumping onto platforms or past fast moving objects. Influences include games such as Fallout through Jet and V.A.T.S, with the main influence being Red Dead Redemption's DeadEye, allowing for more precise shots.

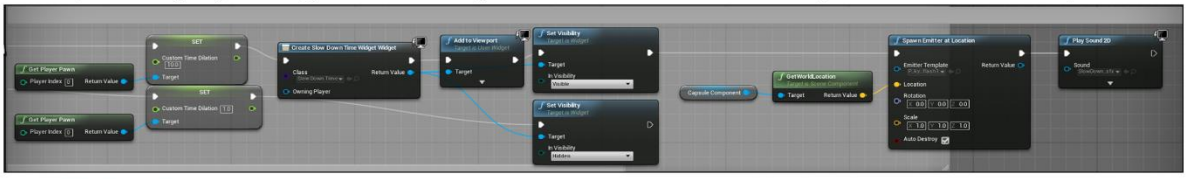
DESIGN AND FUNCTIONALITY

Slowing Down Time works by setting the Time Dilation to 0.1 and wil only work if:
- The time Manipulation ability is active (through entering the puzzle area).
- Slow down time is not already active, in which case time will return to normal (TD: 1).
- No other Time Manipulation is active and T.M is not disabled by other ability.



RULES

Initiation time: Instant
Delay time between uses: None
Amount: Everything is set to a tenth of normal speed except for the player.
Consistency: Everything but the player, including timers and cinematics will slow down.
Information: Players will know if time has slowed down as every moving object will be moving at a much slower speed bar the player character. The player will also notice a set of arrows in the top right corner, as this is the slow down time icon and a mostly transparent grey background, along with a set of sound and particle effects on press.



EXPERIENCE

When active, players should feel as though the world around them is running a lot slower due to their actions. Players should take the opportunity to slow down time when they are feeling slightly overwhelmed or objects are moving too quickly.

DYNAMICS

This mechanic can lead to players using it in order to slow down the game speed so that they can get their bearings better and not have to rely on their own skill when platforming. This could be useful for players who are not very skilled to practice timing.

TRIPLE JUMP

TRIPLE JUMP (**SPACE** KEYBOARD, **A** CONTROLLER)

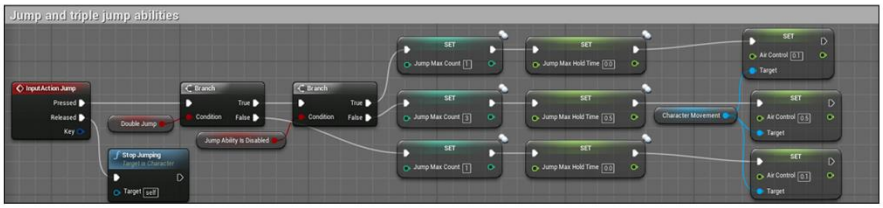
This ability, found in Muddy Ruins (Brown area), allows the player to jump an additional 2 times to their base jump and allows for more air control in the process. Influences include games such as Team Fortress 2, Destiny, Halo and Overwatch, with the biggest inspirations coming from Titanfall, where players can jump multiple times to reach huge heights with ease and freedom of movement in the air.

DESIGN AND FUNCTIONALITY

The Triple Jump ability works through a increasing the Max Jump Count and works if:
- Triple Jump ability is active (through entering the puzzle area).
- The player presses the jump button 2 or 3 times in a row, with very short pauses.
- The ability is not disabled by other (e.g. player is in a different puzzle area).

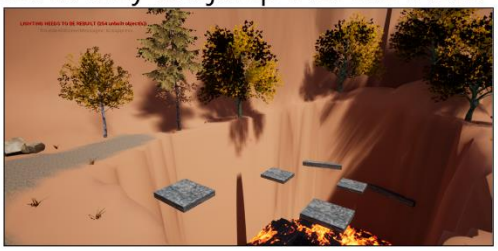
RULES

Jump Time: Instant
Delay time between jumps: 1 sec (or resets)
Amount: Player can only jump up to 3 times in a row and has to land on a surface.
Consistency: Player can jump once, twice or 3 times and will ALWAYS have air control.
Information: Players will know if they are using it through the fact they are jumping and a 'Whoosh' sound effect will play on press. Players have 0.5/ 1 in terms of air control float value when triple jump is active, a 0.4 increase from the base of 0.1, allowing for more freedom in the air and mistakes to be rectified when jumping.



EXPERIENCE AND DYNAMICS

When active, players should feel as though they have more freedom in their verticality within the world space and that they can go higher than every before, without being restrained to just going one direction whilst in the air too, as this can limit the jump mechanic and cause frustration if players are heading in the wrong direction.
This mechanic could lead players to explore more vertical peaks and climb up more adventurous areas which they would not have managed to climb prior, e.g. steep hills or mountains and get to other areas/ islands quicker as they can jump over the rivers.



SPRINT

SPRINT (**L. SHIFT** KEYBOARD, **LT** CONTROLLER)

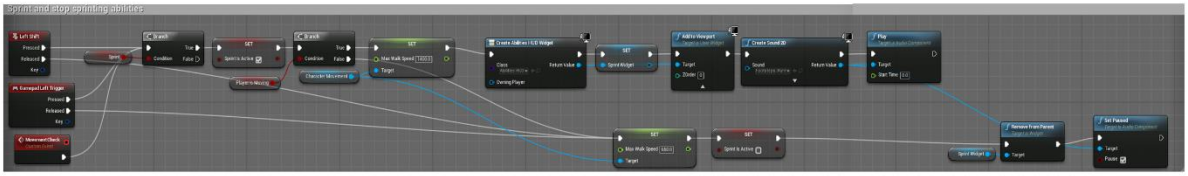
The Sprint ability, found in Violet Village (start area), allows the player to move at an increased rate whilst exploring the terrain and landscape. This increase letting the players get to the key locations faster than purely walking. Influences for this mechanic include games such as Fallout, The Witness, Overcooked, and FIFA, with the closest relation being The Witness, as players are traversing a similar environment.

DESIGN AND FUNCTIONALITY

The sprint ability works by changing the Max Walk Speed and will work if:
- Sprint ability is active (becomes active from spawning into the game).
- The player holds the sprint button IN CONJUNCTION with a movement key.

RULES

Initiation time: Instant
Delay time between uses: None, but, have to release Sprint button and repress upon stopping.
Amount: Player can sprint as much as they like as long as they are HOLDING BOTH the sprint ability key and a movement key (W, A, S, D or left stick in a direction).
Consistency: The player can sprint at all times, it is always active for them to use.
Information: Players will know if they are sprinting as they will see the Sprint icon appear in the bottom left corner of the screen.
Average walk speed is set to 650 units, meaning that as the players Sprint speed is at a value of 1,400, they will move over double their base speed, which is a lot faster.



EXPERIENCE

When active, players should feel as though they are a lot faster than they are during their basic walk speed, both through visual and audio, as the standard walking footsteps will change into a sprinting/ running footsteps SFX for the duration of sprint.

DYNAMICS

The player should use this mechanic to allow them to explore the world faster and in order to get from one place to another, e.g. from one puzzle area to the next, a lot quicker than their basic walking. They can also use it to their advantage in puzzle areas.

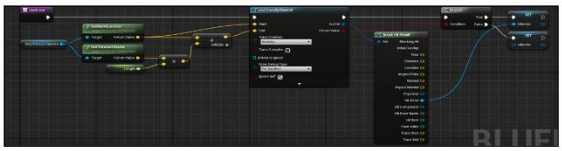
INSPECT ITEMS

INSPECT (**I** KEYBOARD, **Y** CONTROLLER)

The Inspect ability, found in Violet Village (start area), allows the player to pick up and rotate items, in order to get a better look at it's design and/ or narrative, usually used for letters hidden around the world. Influences for this mechanic include games such as Fallout, Skyrim and Borderlands 2, with the main influence being L.A Noire, as players have to pick up and carefully examine objects to collect evidence.

DESIGN AND FUNCTIONALITY

Inspecting items works through a line trace by Channel and will only work if:
- Inspect ability is active (gain near spawning into the game).
- The player's forward vector is aimed at a MASTER ITEM and is in the range of X units.
- The player is not currently inspecting a different item (Player locked in position).
- The attempted inspection is a Master item child and is then marked as a 'Hit Actor'.



RULES

Pick up/ drop time: 2 seconds (each way).
Delay time between pick ups: None
Amount: Player can only inspect **ONE** item at a time
Consistency: ANY item matching the above criteria can be inspected (mostly letters).
Information: Any item which can be inspected MUST be within a range of 450 units (length float value). The object will then move to within 100 units of the player's screen (First Person Camera) as it moves to the 'View Location sphere' set up in the character.

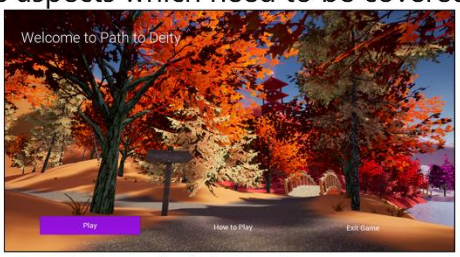
EXPERIENCE AND DYNAMICS

As the player can pick up and analyse items, through interacting with it and rotating the item, they should feel a sense of wonder and as most of the items which can be picked up are notes, explorer and achiever players should feel more fulfilled with the game world and narrative, as they can learn more about where they are and stories of the people and history of times before they arrived into the game.
This mechanic should lead to people spending more time learning about the game, if they choose to and gaining a richer experience from the game as a whole, as they will understand why it is that they are there and what they have to do from the first minute.

LEVEL DESIGN

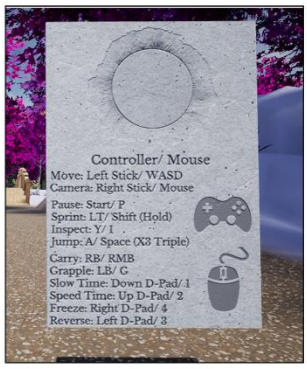
LEVEL OVERVIEW AND CONSIDERATIONS

Before delving into the level design, there are some aspects which need to be covered.



PLAYABILITY

This will be covered more in the UI and gameplay sections, however, testing needs to be completed into the playablity of the game AT ALL STAGES, running from the title screens, menus, UI, level design, controls etc. The playability MUST match with industry standards, ensuring everything is clean and clear in it's design, e.g. buttons are easy to find and text is easy to read. Industry defaults should be used where possible, e.g. left stick on the controller to move, space to jump etc to avoid confusion for the players.

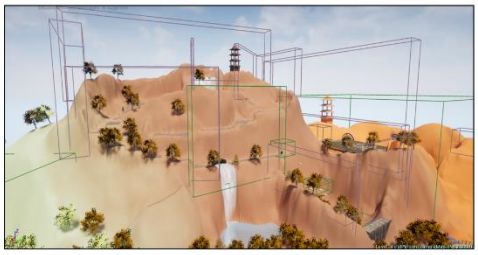


ACCESSIBILTY

Leading on from playability, the game should attempt to cater for as many people as possible, including players who are left handed or have impairments. To attempt to counteract this, a number of actions have been put into place, such as:

- Controller support is enabled for left handed/ players who cannot use a keyboard.
- Auditory and visual feedback, such as SFX and subtitles, have been used when possible for visual and auditory impaired players.
- Players with cognitive impairments, such as trouble learning or remembering new things, can visit the 'How to Play' menu in either the Main or Pause Menus, to recap the control system. They will also be taught the controls in stages, meaning they do not need to remember every control at once.

BOUNDARIES AND COLLISION



As the mechanics allow for a lot of freedom in the player's movement, strict boundaries and collision needs to be established in the following ways:

- Players MUST NOT be able to use outside abilities inside other puzzle areas.
- Blocking volumes and landscape steepness MUST be placed in a way to stop players from being able to leave the current puzzle area and map itself, ESPECIALLY when all abilities have been unlocked.
- Puzzle areas MUST have blocking volumes and other methods (e.g. walls), to stop players from being able to get inside from anywhere other than the main doors.
- ALL assets must have AT LEAST simple collision applied to them when imported into the project, especially if being used for boundaries and MUST be set to a collision type which blocks the player, e.g. BlockAll (note: ensure correct collision type is used as to not distrupt gameplay, e.g. items used for animations and cinematics).

LEVEL DESIGN

LEVEL DESIGN OVERVIEW

By the end of the project, the level design should ensure the game:

- Is visually striking.
- Is fun and interesting to explore.
- Is well balanced.
- Is well lit.
- Utilises the mechanics given to the players.
- Is optimimised where possible.
- Contains level specific scripting, such as switches, levers and events.
- Has good pacing, level flow ad composition (guiding the player through the map).

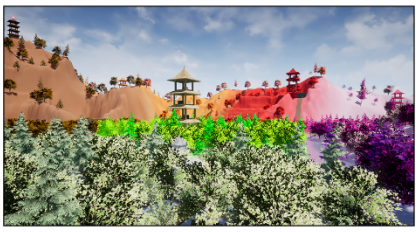
To be hired as a single player level designer, you should be able to demonstrate:

- Creating a visually striking level
- Creating a fun to explore level
- Pacing, level flow
- Level composition, and how to lead the player through a level without using explicit cues like signs
- Utilizing the mechanics of the game in your level
- Level-specific scripting - switches, levers, events
- Setting up basic AI and pathfinding
- Setting up optimization where applicable
- Basic knowledge of lighting
- Appropriate balance of loot and enemy placement

GAME FLOW

The game should feel like a continuous experience from spawning in, through to the final cinematic, this way, the player is always interacting with the game for maximum engagement. The full game flow is described in the map overview section, with the core gameplay loop shown in the mechanics section.

LEVEL COMPOSITION



The players will be guided in a number of ways. Firstly, the environment is created in a way so that each puzzle area is set within a new terrain. This provides the player with instant feedback, as they know which areas they have been to before even stepping into the section of the map. Secondly, focal points, such as the towers outside each puzzle, will guide the player towards the puzzle areas, as they will realise their symbolism for puzzle areas very early on. Thirdly, notes laid around the landscape will subtly guide the player to different areas and tell them what they need to keep an eye out for. Finally, the use of pathways, signs and a long render distance (allowing players to see new areas far away) will also be used to guide the player.

ATMOSPHERE

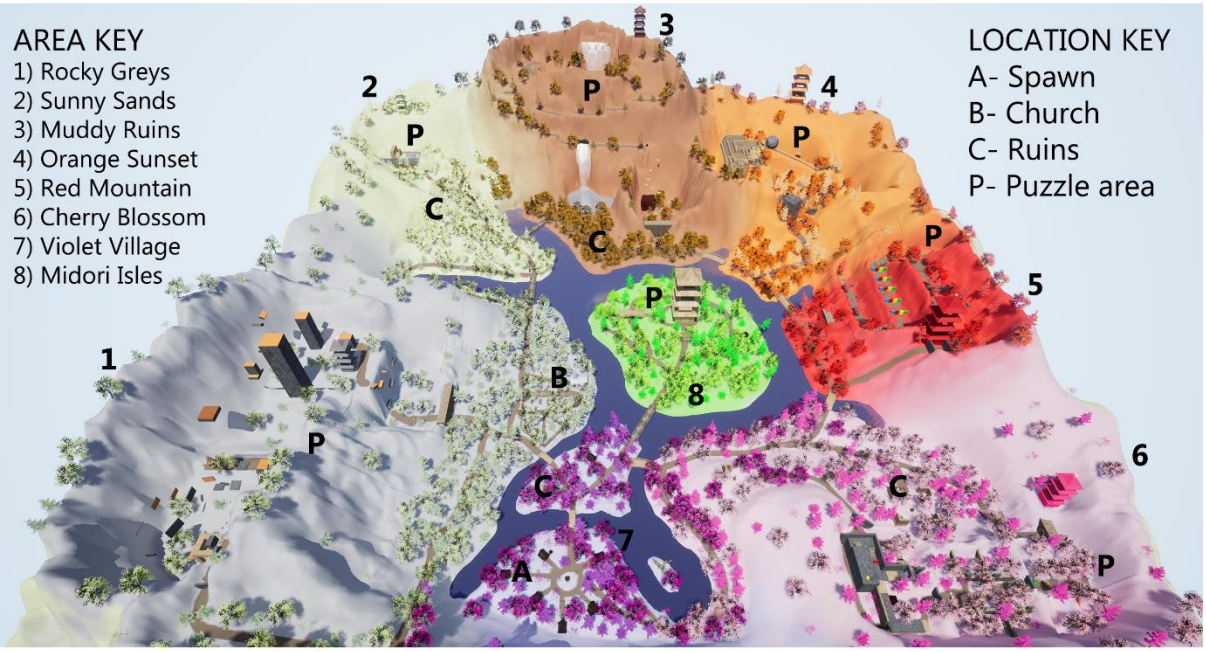
Whilst wandering and exploring, the level should make the player feel at ease, through peaceful music and environmental SFXs. Whilst in the puzzles, the player should feel more tense and thoughtful, as they attempt to solve the challenges.

INFLUENCES

The major influence for the level design is The Witness, which allows players to explore and discover on their own, without being specifically told what to do or subdued to 'hand holding'. However, the player MUST be guided, through the environment as much as possible, but also through the use of CLEAR feedback such as UI and SFX.

LEVEL DESIGN

MAP DESIGN



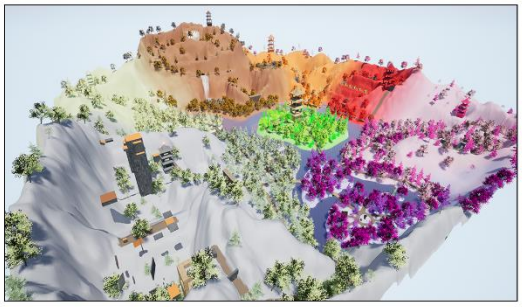
GOALS

The main goal of the map is:

- To provide a space for players to test out their new found abilities.
- To provide a more relaxed atmosphere between intense puzzle areas.
- To provide more freedom to explore than a linear puzzle game
- To allow players who wish to spend longer learning about the world space and narrative chance to do so, but not forcing players who want to just complete puzzles.
- To allow players to move at their own pace by not forcing them to the next location.
- To allow the player to visit the puzzles in any order they wish.

NAVIGATION

In order to navigate, players will start off by just walking and sprinting around the map. As the player gains more abilities, they will be able to use these abilities, such as jump and grapple, to move around the world faster. As mentioned in the previous page, the player will use signposting and their long and short term memory to remember which coloured areas they have visited before, as well as map routes (paths) and exploration.



LINEARITY: **SAWTOOTH, SEMI LINEAR**

As the puzzle's linearity is sawtooth, this means that the player can complete the puzzles in any order, with one section not affecting the next. However, there is also a sense of semi-linearity to the map flow, as the player has to complete all the puzzles in order to progress to the final tower puzzle.

LEVEL DESIGN

SUB SECTION DESIGN

GOALS OF THE SUB SECTIONS

- To guide the player (instantly know if been there).
- Other than violet, to hold a puzzle area.
- For violet, to hold the player spawn/ start area.
- To give players a range of spaces to explore.
- To hold narrative and reasoning for the world.
- To each have it's own unique layout.
- To provide map routes for the player so they can choose their own path when exploring the world.
- To each hold a tower which will be used as a focal point for players to follow to guide them to the different puzzles.
- To provide scenery both inside and outside of the puzzle areas, making each puzzle feel more unique.
- To give more consistency to the assets used in the puzzles, e.g. walls and trees, in a larger setting.

INTERACTIONS AND POIs

Within the sub sections will be interactable letters which the player can interact with in order to expand their knowledge, using the Inspect Items ability gained at the beginning of the game, some of which, requiring gathered abilities to get to. Other POIs, such as ruins and the church, are there for both cosmetic and architectural reasons, in order to keep the landscape from being repetitive.

NAVIGATION

Players can navigate from one section to the next by either crossing bridges, using their abilities to move across, e.g. grappling across or entering the water and walking across.
Players will spawn within Violet Village, where they will see engraved rocks, each telling the player a new control, which will become vital knowledge.

LEVEL DESIGN

PUZZLE DESIGN OVERVIEW

GOALS

- To provide obstacles based around mechanics
- To provide a challenge for the player which gives the player satisfaction upon completion.
- To provide the player with an 'Ah' moment when it click in the player's mind.
- To provide a range of logic and reflex puzzles
- To create interesting HAND CRAFTED puzzles, providing a more unique experience.
- To test the players skills (e.g. logic, cognitive, reflex, twitch, visual, auditory etc).
- To get the player used to the mechanics/ abilities over through the difficulty curve/ progression of the puzzles.
- To provide puzzles which build off the previous one to make players have to think.

THE THEORY OF FUN

Raph Koster said: 'In the theory of fun, we play games because we seek to master the patterns- learning is fun and interesting then using the mastered skills creates more fun.'

PUZZLE SIMPLICITY

The first puzzle should be an introduction to the mechanic.
The second puzzle should build on the first one, challenging the player to think more.
The final puzzle should use the mechanic in a new way, providing a twist, challenging the player's previous and first way of thinking.

TUTORIAL

As the player will only be told how to use the ability through UI before trying the ability out for themselves, the first puzzle should be logical and FAMILIAR (e.g. red cube goes in red gap). Throughout the course of completing the puzzles, players should start discovering new ways to use the ability, giving them a deeper understanding of how to solve problems.

FEEDBACK AND GEM STONES

The game needs to ensure players have the best possible chance of solving the puzzles without getting stuck, therefore, all Momentary feedback stimuli, e.g. icons, VFX, SFX etc) needs to be clear, rapid and frequent. Once a puzzle is complete, the overlooking tower's light will change from flashing red to green and the player will gain a gem stone, correlating to the colour of the sub sections, with a counter of how many the player has gained. This follows a Pokémon style gym structure, where the player MUST gain all 6 gems before they can take on the final puzzle.

LEVEL DESIGN

CARRY PUZZLES (SUNNY SANDS)

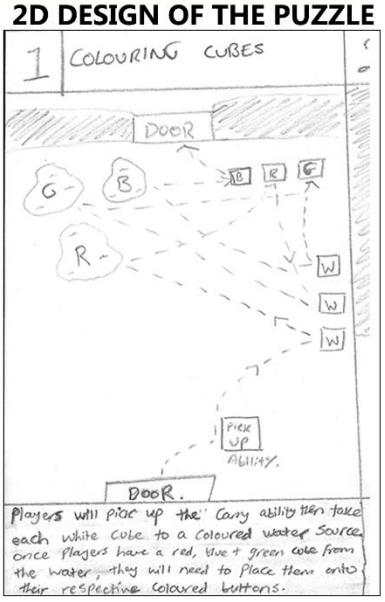
PUZZLE STATS
Difficulty level: EASY
Skills required: Logic/ cognitive, visual
Puzzle type: Logic
Typical completion time: 30 secs - 2 mins
Number of checkpoints: 0

PUZZLE 1: Carry the white blocks to the water, change their colours and place on the 3 buttons.

PUZZLE BREAKDOWN

1) Player will grab one of the white cubes (e.g. 1).
2) Player will put this cube into one of the colours (e.g. A).
3) The cube will change to this colour (e.g. 1 will turn red).
4) The player will then take this cube to the correlating button (e.g. cube 1 will be taken to Y, as the button is red).
5) The player will do the same process with the other 2 white cubes with the remaining 2 colours, (e.g. 2-B-Z and 3-C-X).

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

The player can do this in any order and can recolour any cube by placing it into the coloured water, e.g. a white cube can be placed into red to make it red, then this red cube can be placed into green to make it a green cube. As it is a first puzzle, it is primarily to teach the player how to use the mechanic.

FEEDBACK

If the player places the cube into the water, it will change to that colour immediately.
If the player places the correct coloured cube onto the button, the button will glow.
If the player places all 3 onto the correct buttons, they will see and hear the door open.

LEVEL DESIGN

CARRY PUZZLES (SUNNY SANDS)

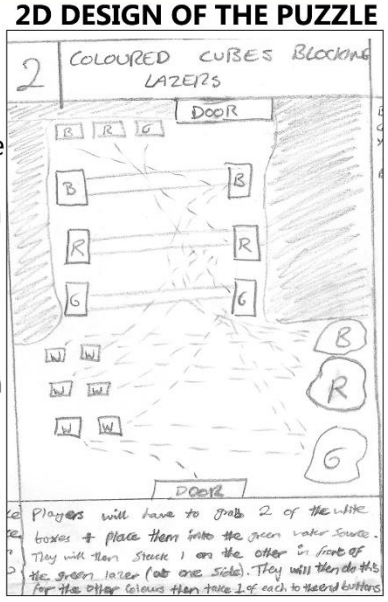
PUZZLE STATS
Difficulty level: MEDIUM
Skills required: Logic/ cognitive, visual, twitch
Puzzle type: Logic
Typical completion time: 1 min - 5 mins
Number of checkpoints: 0

PUZZLE 2: Change cube colours, place in front of corresponding laser to take other colours through.

PUZZLE BREAKDOWN

1) Player will grab one of the white cubes (e.g. 1).
2) Player will put this cube into THE GREEN pool (**B**).
3) The cube will change to green.
4) The player will then take this cube and place it in front of the GREEN laser (G). This will block the laser.
5) The player must do the same process, placing another green block on top of the previous GREEN cube, creating a gap.
6) The player can now do the same progress to make a RED cube and take it to R, by carrying it through the gap between the centre and the GREEN cube which is blocking the laser.
7) Player will place this RED cube in front of the RED laser (R) in the same way as did with G, then do the same with BLUE at L.
8) Players will then grab one of the GREEN cubes from G and take it past all other colours to get it to the GREEN button at Z.
9) Players will grab one of the RED cubes at R and take it to Y.
10) Players will grab a BLUE cube from L and take it to X.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTES

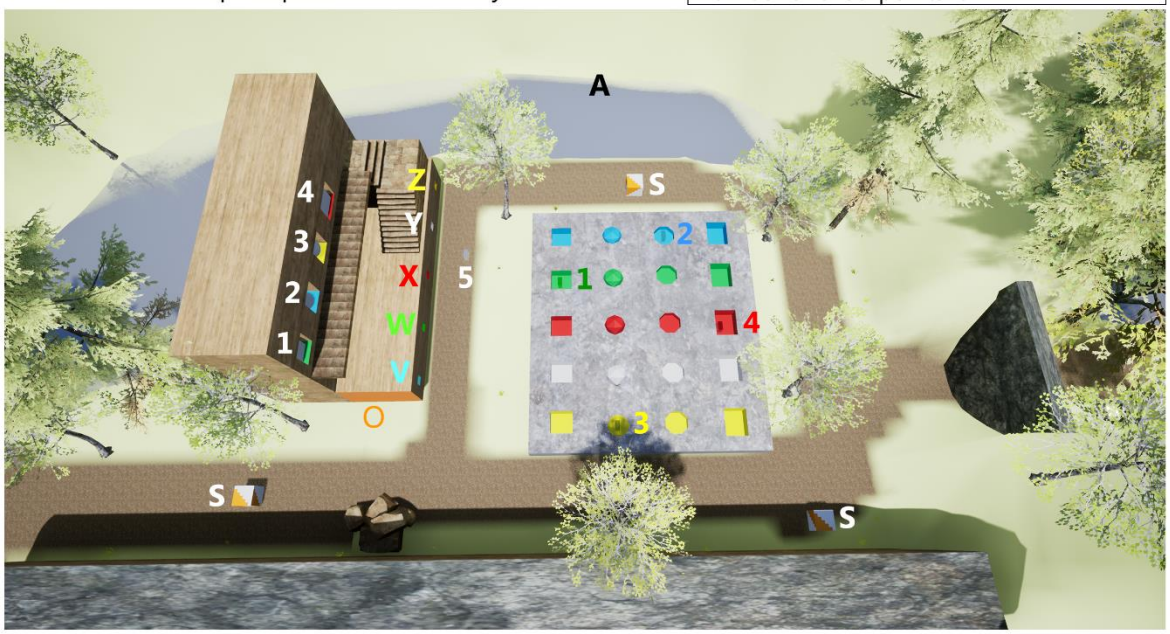
The player can recolour any cube by placing it into the coloured water (as previous).
If a white cube/ cube of wrong colour HITS a laser of a different colour, e.g. White cube hits the GREEN laser, it will be destroyed and will respawn at R (with SFX for feedback).
Builds on the previous puzzle as this time, players have to use the colour changing to their advantage in order to progress the puzzle, over just using the carry ability to get from start to finish.

LEVEL DESIGN

CARRY PUZZLES (SUNNY SANDS)

PUZZLE 3: Take button to correct holder, change water colour with 'E', drop shape into water, carry to correct slot.

PUZZLE STATS
Difficulty level: HARD
Skills required: Logic/ cognitive, visual, twitch
Puzzle type: Logic
Typical completion time: 2 min - 10 mins
Number of checkpoints: 0

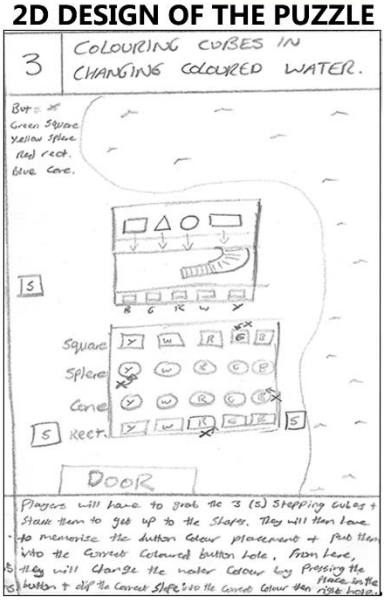


PUZZLE BREAKDOWN

1) Grab the 3 stepping cubes (S) and stack next to O to climb.
2) Walk up the stairs, grab the 4 shapes (1-4) and throw down.
3) Grab the button at: 1 and place into W, 2 and place into V, 3 and place into Z, 4 and place into X and finally 5 and place into Y (placed by walking up to the slot when carrying button).
4) With the buttons placed (V-Z), players need to remember the projected shape colours (on the floor of 1-4) to gain the answer. If they forget, they can climb back up and look again.
5) Players need to walk up to W and interact with the button, ('E' on PC, 'X' on controller). This will turn the water (A) green.
6) Players will place the cube (1) into this green water to turn the cube green. They will need to place this cube into 1. (The slot where they found the button/ colour seen in slot 1).
7) The same process will be done for 2, 3 and 4 in this order:

2-V-A-2 3-Z-A-3 4-X-A-4

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTES

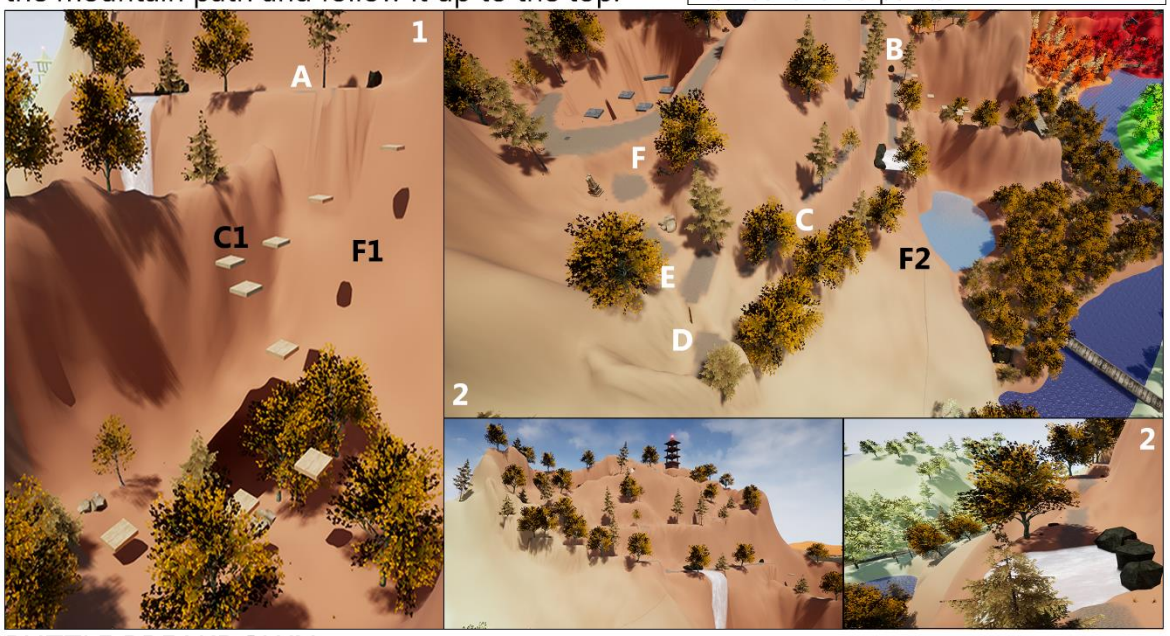
The player can recolour any cube by placing it into the coloured water (as previous).
If the player puts the correct coloured shape into the correct slot (e.g. 1 into 1), the slot with glow an emissive version of that colour and play a 'Ping' SFX.
Builds on the previous puzzle as this time the player has to set the water colour to match their needs at the time. Also relies on them to be aware, to know which shapes goes into which colours and uses different shapes than previous puzzles.

LEVEL DESIGN

TRIPLE JUMP PUZZLES (MUDDY RUINS)

PUZZLE STATS
Difficulty level: EASY
Skills required: Visual, twitch, reflex
Puzzle type: Reflex
Typical completion time: 1 min - 3 mins
Number of checkpoints: 2

PUZZLE 1: Jump up the floating platforms, get to the mountain path and follow it up to the top.



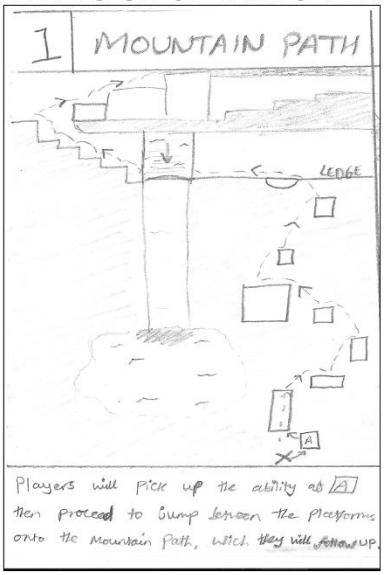
PUZZLE BREAKDOWN

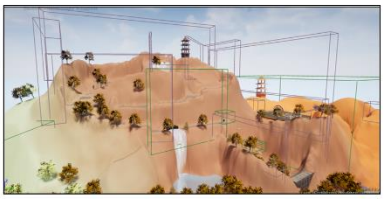
1) Player will jump up the floating wooden platforms (1).
2) Upon hitting the ledge (A), they will continue up the path (2) starting from B.
3) The player will then jump up onto the ledges flowing from the path (from C-E) until they reach the path summit, where puzzle 2 lies at F.

ERROR RECOVERY/ NOTE

There are 2 checkpoints in this puzzle. If the player falls between C1 and A (into F1), they will respawn at C1. If the player falls down the side of the mountain (anywhere into F2), they will respawn at B.
These checkpoints will allow the player to not have to restart from the beginning, which can become tedious, allowing them to progress. It also allow serves as a reward for the effort of getting that far with the new ability.
Note: Blocking volumes and checkpoint triggers have been placed around ANY area where the player can leave the mountain using the ability. This will either stop the player or respawn them at the previous checkpoint, to avoid any cheating/ escaping.

2D DESIGN OF THE PUZZLE





LEVEL DESIGN

TRIPLE JUMP PUZZLES (MUDDY RUINS)

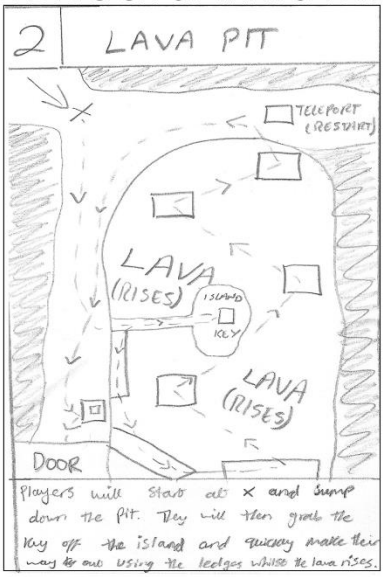
PUZZLE 2: Jump into the pit to retrieve the book, jump up out of the pit before the lava catches you.

PUZZLE STATS
Difficulty level: MEDIUM
Skills required: Visual, twitch, reflex, logic
Puzzle type: Reflex
Typical completion time: 30 secs - 2 mins
Number of checkpoints: 1

PUZZLE BREAKDOWN

1) Player will walk up to the door (K). A UI message will appear saying 'Sacred Texts are required'.
2) Player will realise that they must go into the lava pit.
3) The player must jump down to the island at A and interact (walk into) the book. This will set the lava to begin rising.
4) Player must run down the pathway towards B. They will then begin using their triple jump ability to jump to C, run up the ledge and jump to D, then move onto E.
5) At E, they will change to face inwards and jump to F, then, G, H and I, before making the final jump to J.
6) Once at J, they will walk to K, which will automatically place the book onto the stand, opening the stone door.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

If the player touches the lava, they will be reset at the checkpoint (R). This will reset the lava back down to the base, respawn the book and set the 'has key' boolean back to false, meaning the player cannot open the door without retaining the key again.
Again, blocking volumes have been placed around the area to prevent escaping.
The lava rises through a timeline which lerps between the start and end locations.
The lava speed is set to rise (from start to finish) in 23 seconds (see 2).

LEVEL DESIGN

TRIPLE JUMP PUZZLES (MUDDY RUINS)

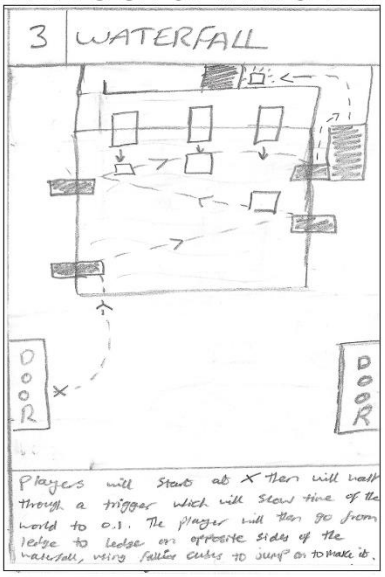
PUZZLE 3: Use the ledges and falling blocks to jump up the waterfall to get the gem.

PUZZLE STATS
Difficulty level: HARD
Skills required: Visual, twitch, reflex, logic
Puzzle type: Reflex
Typical completion time: 30 secs - 5 mins
Number of checkpoints: 0

PUZZLE BREAKDOWN

1) Player will enter the puzzle area and time will slow down to a tenth speed of normal (Time Dilation is set to 0.1).
2) Player will jump up to ledge A.
3) Player will jump across the waterfall to B.
4) Player will jump across the waterfall to C.
5) Player will wait for a block to fall from 1, 2 or 3 which is at a height just under the ledge (D).
6) Player will jump onto the falling cube, resetting jumps.
7) Player will jump off the falling cube onto the ledge at D.
8) Player can triple jump upwards from D to E.
9) Player will walk down the path, retrieve the gem and time will be set back to normal so they can leave.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

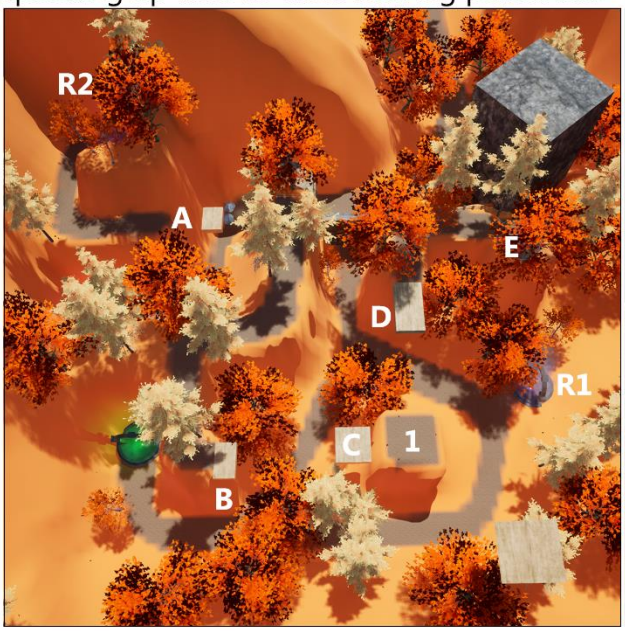
Cube blocks will fall in turn from 1, then 2, then 3 at a frequent and consistent rate.
Cube blocks can hinder or add to progress, depending on if the player times their jump correctly and manages to land on, get blocked by or is pushed down by the cube.
Players can advance their jump by mixing it with the sprint ability, allowing them to jump and travel further across the gaps.
Time is set to slow down to give the players more of a chance of landing on cubes.
Again, blocking volumes have been placed around the area to prevent escaping.

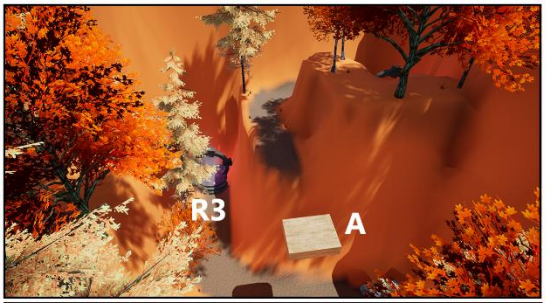
LEVEL DESIGN

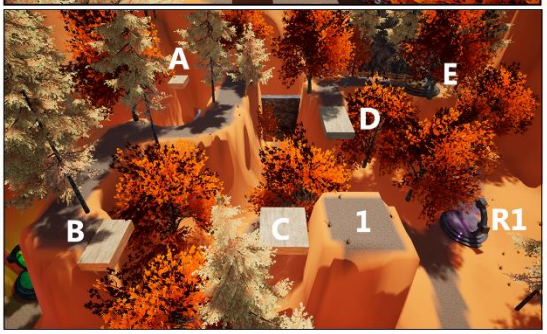
TIME MANIP. PUZZLES (ORANGE SUNSET)

PUZZLE 1: Use a mixture of slowing down and speeding up time to cross moving platforms.

PUZZLE STATS
Difficulty level: MEDIUM
Skills required: Logic, visual, reflex
Puzzle type: Logic and reflex
Typical completion time: 30 secs - 4 mins
Number of checkpoints: 0



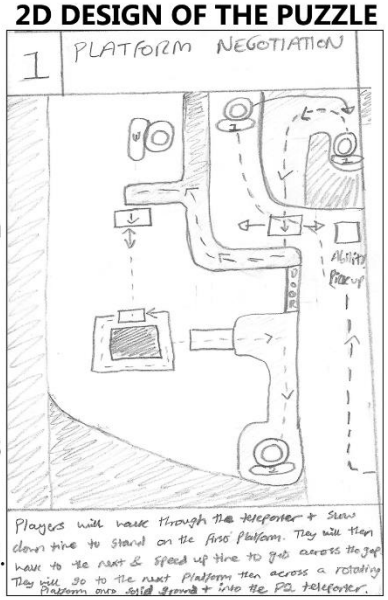




PUZZLE BREAKDOWN

1) Player will use the teleporter at R3 and spawn at R2.
2) Player will follow the path to A, where they will see a platform moving from side to side (left to right).
3) Player will use the 'Slow Down Time' ability and jump on this platform (A).
4) They will then jump across to the path and venture forth towards B. Here they will see a very slow moving platform.
5) Player will 'Speed Up Time' until the platform arrives.
6) Player wil get onto this platform and move towards C.
7) Player will leave B and jump onto C, which is rotating around the platform (1).
8) Player will either step onto 1 or stay on C until it reaches D, where they will 'Slow Down Time' and cross over to D, which is rotating in an anti-clockwise motion.
9) Once they have crossed D, they will go to the portal at E.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

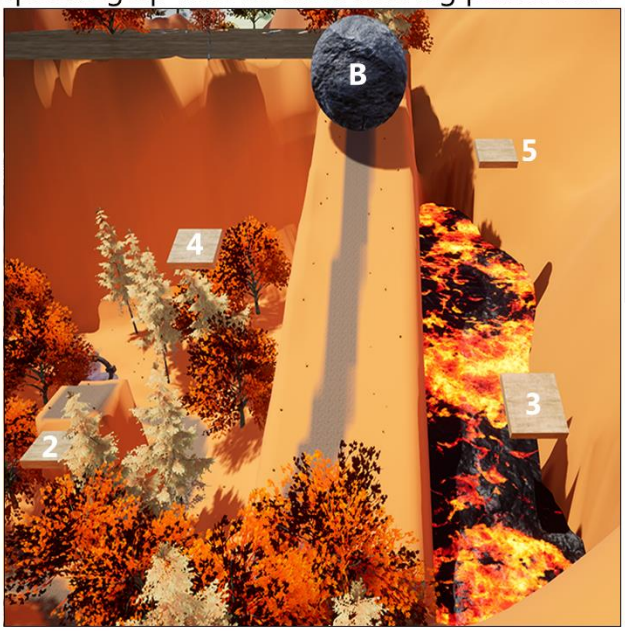
If the player falls off a ledge or misses a jump, they will fall to the ground. They can restart this section and get back to R2 by going through R1 or R3 (depending on fall). Players can only use ONE time manipulation speed at a time: Slow, normal or Speed up. This puzzle is classed at a MEDIUM rating as it relies on players to use a range of skills.

LEVEL DESIGN

TIME MANIP. PUZZLES (ORANGE SUNSET)

PUZZLE 2 Use a mixture of slowing down and speeding up time to cross moving platforms.

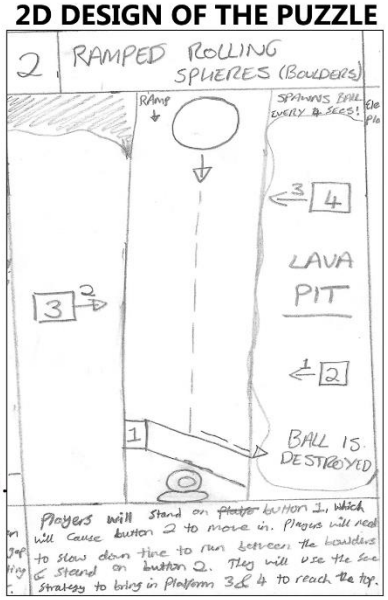
PUZZLE STATS
Difficulty level: MEDIUM
Skills required: Logic, visual, reflex
Puzzle type: Logic and reflex
Typical completion time: 30 secs - 4 mins
Number of checkpoints: 1 (R4: Spawn)



PUZZLE BREAKDOWN

1) Player will spawn in from the teleporter (E) at R4.
2) Player will see the boulders rolling down towards them.
3) Boulder will hit the wall next to 1 and fall into the lava.
4) Player will stand on 1. This button will glow green and 2 will begin moving inwards towards the ramp.
5) Player will 'Speed Up Time' for 2 to move in quicker.
6) Player will 'Slow Down Time' and run to 2 when there is a gap between boulders (B).
7) Once 2 is stood on, it will glow green and 3 will begin moving inwards. Player will follow the same steps as before, speeding up time for 3 to move in quicker, then moving to 3 using 'Slow Down Time' between boulders.
8) Player will follow the same steps to get to 4 and finally 5.
9) Once the player has stepped onto 5, the boulders will stop spawning and the player can progress to puzzle 3.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

If the player falls to either side or is hit by a boulder, they will respawn at R4 to retry.
Players can only use ONE time manipulation speed at a time: Slow, normal or Speed up.
When a platform (1-5) is stood on, it will glow green, play a SFX and set the next platform to begin moving inwards towards the ramp.
Boulders spawn consecutively every 4 seconds.

LEVEL DESIGN

TIME MANIP. PUZZLES (ORANGE SUNSET)

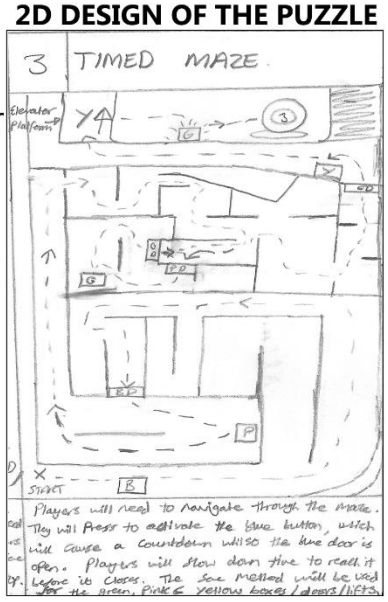
PUZZLE 3: Press the cubes to start the timer and use Slow Down Time to get through to next area.

PUZZLE STATS
Difficulty level: MEDIUM
Skills required: Logic, visual, reflex
Puzzle type: Logic and reflex
Typical completion time: 1 min - 5 mins
Number of checkpoints: 3

PUZZLE BREAKDOWN

1) Player will walk to 1, which will prompt the player to press the interaction key ('E' on PC, 'X' on Controller).
2) This will begin a 12 second countdown for the player to make their way to the blue door (A) before it closes.
3) Player can gain more time to navigate the maze by using the Slow Down Time ability.
4) Once the player has reached A (by following the trail of blue dots), they will walk to 2. If they do not reach A in time, they MUST return to the blue cube and retry.
5) Player will interact with the pink cube (2) and get 17 seconds to get to B. Same rules apply as with blue.
6) Once reached, players will interact with the green cube (3). This will remove the door at C so they can make their way through to D. They will get 10 seconds.
7) Finally, the player will interact with the yellow cube (4) and will get 5 seconds to get to E. Once here, the yellow lift (E) will take the player up to the gem stone and a portal taking them to the exit.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

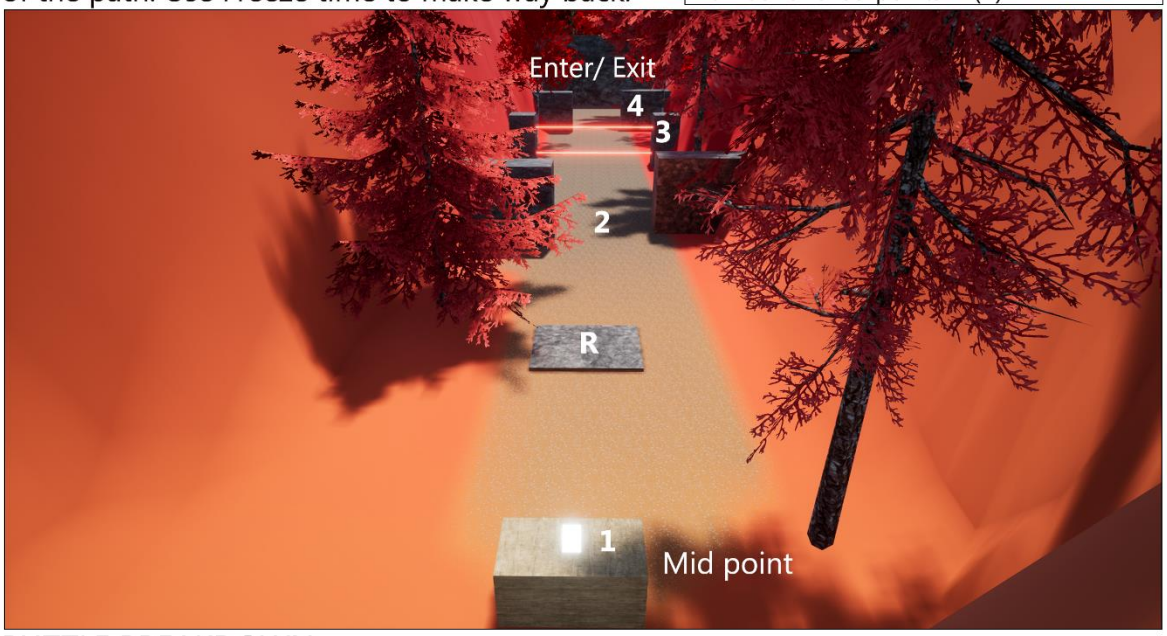
A ticking second timer will play through the duration of an active cube.
As stated, the time manipulation ability affects the duration players have.

LEVEL DESIGN

FREEZE PUZZLES (RED MOUNTAIN)

PUZZLE 1: Grab the glowing key block from end of the path. Use Freeze time to make way back.

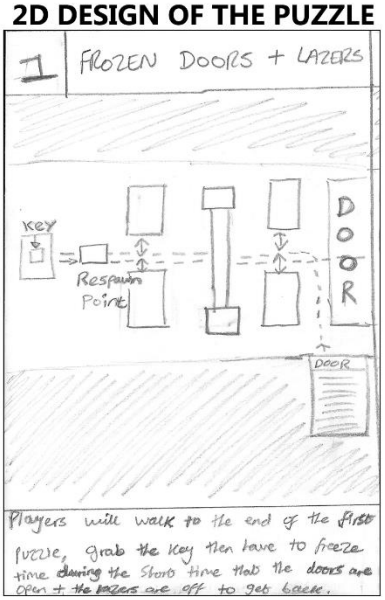
PUZZLE STATS
Difficulty level: EASY
Skills required: Reflex, logic, visual
Puzzle type: Reflex/ Logic
Typical completion time: 30 secs - 2 mins
Number of checkpoints: 1 (R)



PUZZLE BREAKDOWN

1) Player grabs the glowing key at the end of the path (1).
2) This will trigger the doors to slam closed and the lasers to turn on.
3) The player will walk up to the doors at 2 and wait for them to open. They will open for 1 second then reclose.
4) During the second the doors are open, the player must active their freeze ability. The doors will freeze in their position, allowing the player to walk through.
5) The player will then walk up to the lasers at 3 and wait for them to turn off. They will switch off for a second, in which time, the player must use their freeze ability and walk through.
6) The player will walk up to the doors at 4 and complete this stage in the same way as they did for 2.
7) The exit door will open and the player can continue.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

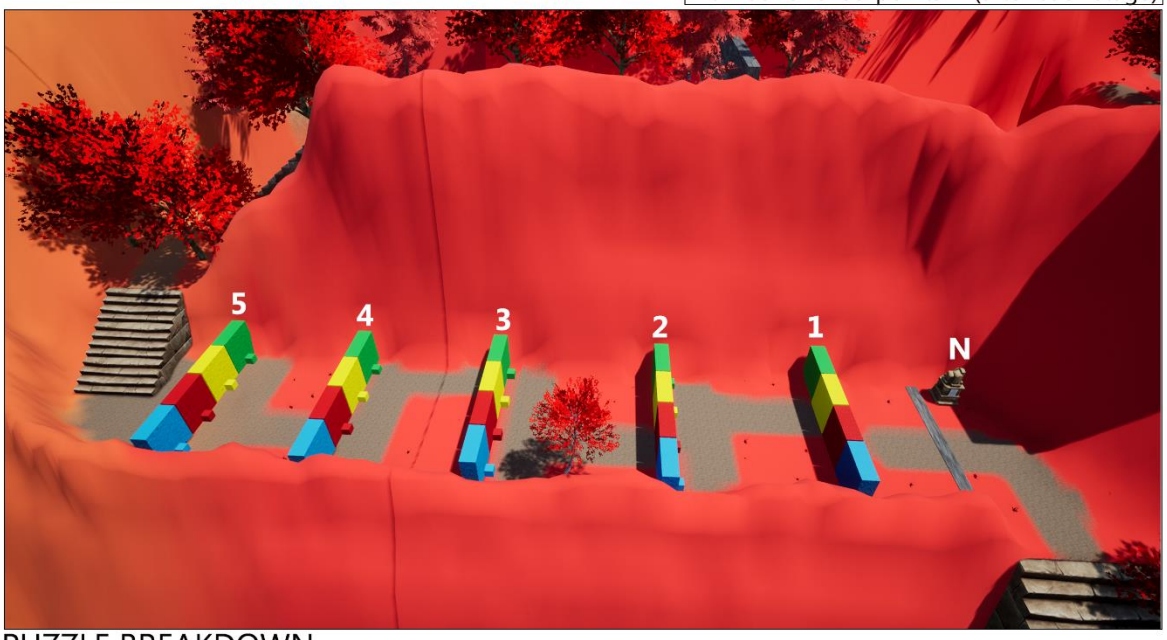
If the player touches the laser or is trapped between the doors, they will respawn at R.
Players will know they are using the freeze ability through the freeze UI and SFX.
Players will know if they are using the ability/ if they are respawning instantly.
The checkpoint has been placed at R to avoid the player from 'backtracking' too much.

LEVEL DESIGN

FREEZE PUZZLES (RED MOUNTAIN)

PUZZLE STATS
Difficulty level: EASY
Skills required: Logic/ reflex, visual, auditory
Puzzle type: Reflex/ Auditory
Typical completion time: 30 secs - 2 mins
Number of checkpoints: 4 (after each stage)

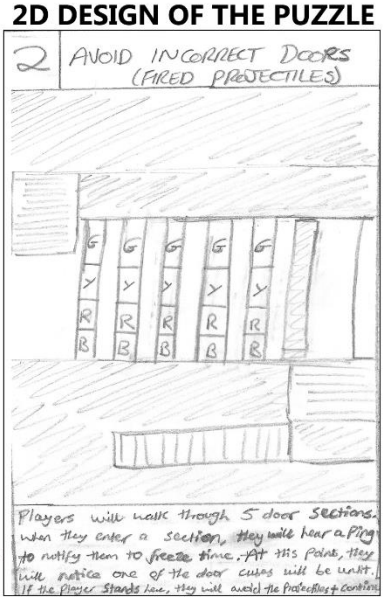
PUZZLE 2: Freeze time when you hear the SFX cue and see the cube flash. Stand in front of the unlit cube.



PUZZLE BREAKDOWN

1) Player will read the note at N, providing a puzzle hint.
2) Player will walk into the first area (1).
3) 3 of the 4 cubes (red, blue and green) will glow an emissive colour, leaving yellow as it's normal base colour.
4) As it is the first area, the player will hear a 3 second tick countdown before hearing a ping SFX.
5) Within these 3 seconds, players will need to freeze time and stand in front of the unlit colour, in this case, yellow.
6) The coloured walls which had emissive cubes in front of them will now fire projectiles at the player. If the player is hit, they will immediately respawn at the start of the current area. If the player is in the correct lane (stood in front of yellow), the yellow cube in front of the wall will glow and the door will open for the player to progress.
7) This will happen at each stage, however, after area 1, the player will only have 1 second to react at area 2, then just 0.25 seconds to react in areas 3-5, after the ping and light flash, in order to freeze and get to the correct lane, this being: Red for 2, Green for 3, Red for 4 and Yellow for 5.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

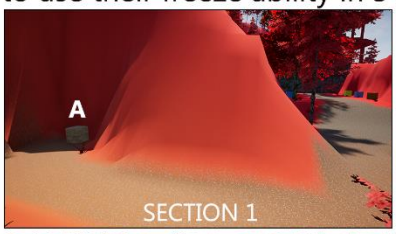
If players are hit, they will immediately respawn at the start of the current area. Puzzle will be reset. The ping SFX and emissive flash will be the 'Use Ability Now' feedback.

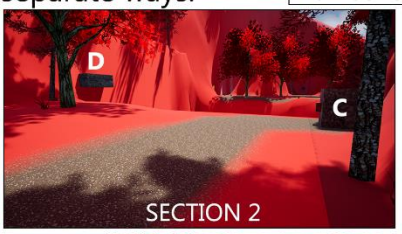
LEVEL DESIGN

FREEZE PUZZLES (RED MOUNTAIN)

PUZZLE 3: Split into 3 sections, players will have to use their freeze ability in 3 separate ways.

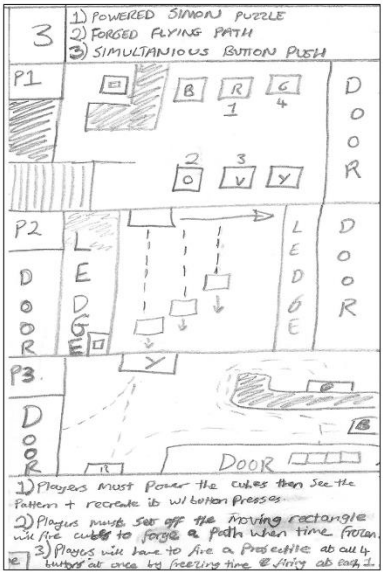
PUZZLE STATS
Difficulty level: MEDIUM
Skills required: Logic, visual, twitch
Puzzle type: Logic/ reflex
Typical completion time: 1 min - 5 mins
Number of checkpoints: 2 (Between stages)





PUZZLE BREAKDOWNS

2D DESIGN OF THE PUZZLE



Part 1: Simon Says

1) Players will interact ('E' on PC, 'X' on Controller) with the wooden cube at A.
2) Players will then freeze time and walk over to B.
3) Players will unfreeze time and watch the sequence (Red, Orange, Violet, Green).
4) Players will interact with these cubes in the order shown.

Part 2: Forged Flying Path

1) Players will interact with the button at C.
2) The stone block (D) will begin moving to the right and will fire out cubes of the same size across the pit (E) at a rate of 1 every 0.25 seconds.
3) Whilst firing, the player will freeze time and jump on the fired cubes. These will act as a staircase and the player can walk across to the firing cube (D) and stand on top of it.
(OR continuously freeze and unfreeze time, moving up the forged staircase whenever frozen).
3) After 5 seconds, the stone cube will be at the other side and the player can jump off.
4) IF the player falls into the pit, they will respawn back at C and can try again. The stone firing cube will return back to the starting position after 5 seconds.

Part 3: Simultaneous button push

1) Upon entering the puzzle area, player needs to freeze time.
2) Player then needs to interact with each coloured buttons on the walls (G, F, H and I). These buttons will glow and remain active for 1 second after interaction.
3) Player needs to unfreeze time and with all 4 buttons active, the door will open.

LEVEL DESIGN

REVERSE PUZZLES (CHERRY BLOSSOM)

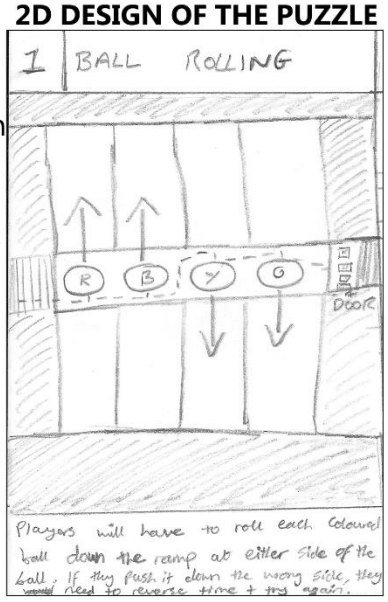
PUZZLE STATS
Difficulty level: EASY
Skills required: Logic/ Visual
Puzzle type: Logic
Typical completion time: 30 secs - 2 mins
Number of checkpoints: 0

PUZZLE 1: Push the spheres one way or the other down the ramps, if wrong, reverse and try again.

PUZZLE BREAKDOWN

1) Player will walk up to the RED sphere (A) and push it down one of the RED ramps, placed either side of the ball.
2) If the player gets it wrong (pushes down the right side in this case), no changes will occur and player must reverse.
3) If the player pushes the sphere down the correct ramp (left in this case), the sphere will disappear, they will hear a 'Correct Ping' SFX and the red end door light will glow.
4) Player will do this for all 4 spheres and can do this in any order.
5) If RED (A) is pushed down the left red ramp, VIOLET (B) pushed down the left violet ramp, YELLOW (C) pushed down the right yellow ramp and GREEN (D) down the right green ramp, then all 4 colours will be glowing on the end door and it will open for the player.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

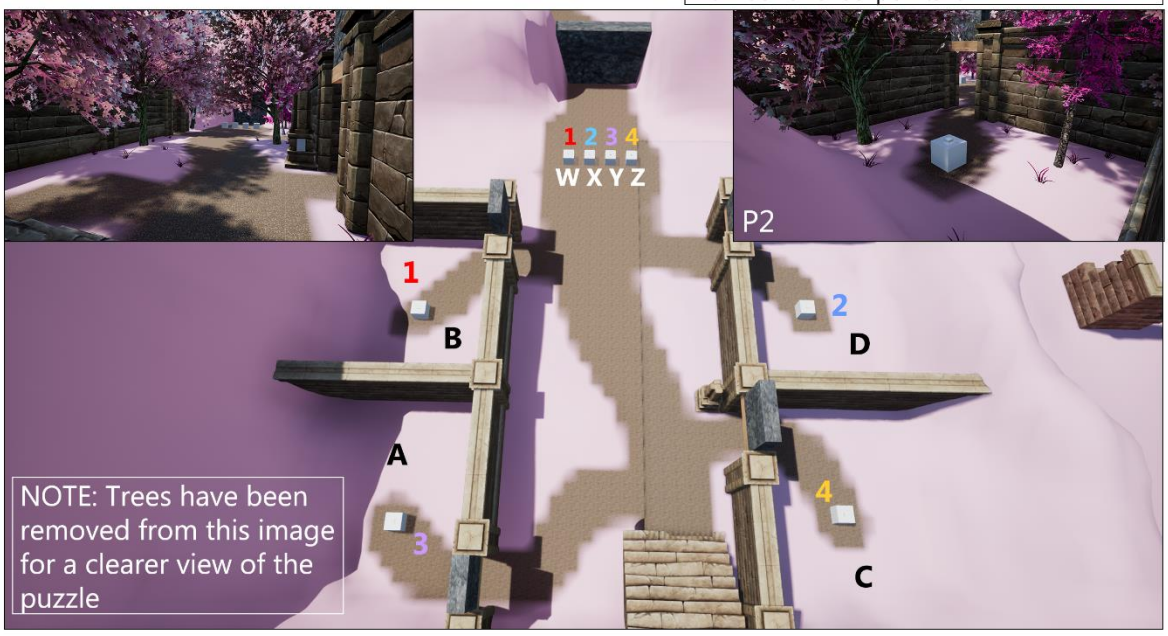
The player can push any of the spheres in any order.
If the player gets it wrong or pushes the sphere to a wrong position, they can reverse time in order to rectify their mistake.
The end door will keep track of how many the player has correct, through the lights glowing on the door. Ramps all feature a coloured line (1) to provide a hint on which sphere to push down it, plus are located DIRECTLY either side of that coloured ball.

LEVEL DESIGN

REVERSE PUZZLES (CHERRY BLOSSOM)

PUZZLE STATS
Difficulty level: EASY
Skills required: Logic/ Visual, Reflex
Puzzle type: Logic/ Reflex
Typical completion time: 1 min - 4 mins
Number of checkpoints: 0

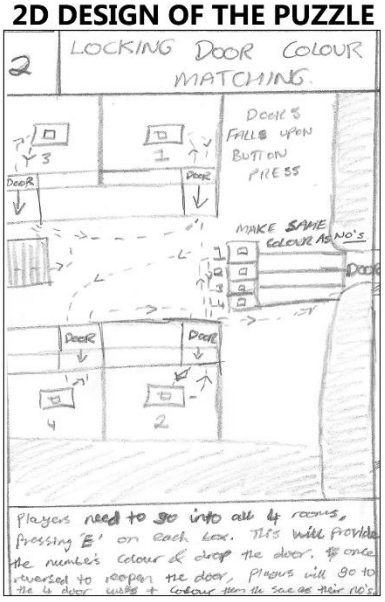
PUZZLE 2: Interact with the cubes, remember their colour and match it with the door cube numbers.



PUZZLE BREAKDOWN

1) Player will walk into one of the lettered areas (e.g. B).
2) Player will walk up to the cube (1) (seen clearer in P2).
3) Player will interact ('E' on PC, 'X' on controller) with the cube (1).
4) This cube will change colour (in this case, RED).
5) The number on the cube will also become more visible.
6) This will trigger a white beam of light to appear at the cube of the same number near the door (this case W).
7) Players must find the door cube with the same number on it (1 which is at W) and change the colour of this cube to the same colour as the one they triggered (1 = RED).
8) After 3 seconds of being the correct colour, a green light will glow on top of the cube and a 'Ping' SFX will play.
9) Players must then follow the same process for the other areas, with the cube at D (2) becoming BLUE, the cube at C (4) becoming YELLOW and the cube at A (3) becoming VIOLET. The player must then match these colours to the door cubes with the same no.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

After the player interacts with the area cube button, the door will close, locking them into the area. They must use reverse time to reopen the door so they can progress. Interaction with door cubes can only occur post interaction in same no. area.

LEVEL DESIGN

REVERSE PUZZLES (CHERRY BLOSSOM)

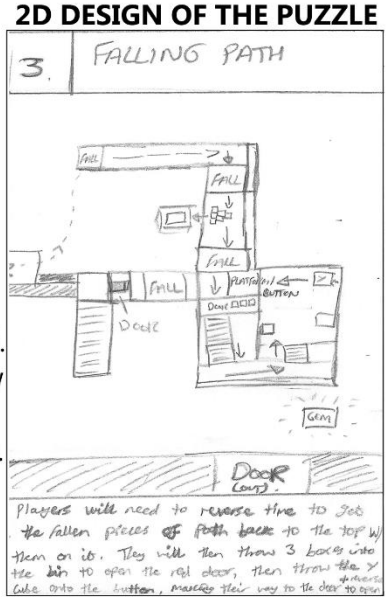
PUZZLE 3: Get onto the ledge, push 3 spheres into the red bin, push yellow cube off ledge to open door.

PUZZLE STATS
Difficulty level: MEDIUM/ HARD
Skills required: Logic/ Visual, Reflex
Puzzle type: Logic/ Reflex
Typical completion time: 1 min - 5 mins
Number of checkpoints: 0

PUZZLE BREAKDOWN

1) Upon entering the area, the wooden beam (A) will fall.
2) Player must stand on this fallen beam and reverse time, allowing them access to the rest of the puzzle.
3) Player will follow the path until they get to B.
4) Player must push 3 out of the 4 red spheres into the bin placed to the right of the path (C).
5) Once 3 have been pushed into the bin, D will open.
6) Player will make their way up the stairs and get to E.
7) Player will push E until it is on the ledge directly above F.
8) Player will push E off the ledge onto F, causing F to glow yellow and the door (G) to open for 2 seconds.
9) Player must make their way to G (door will be shut now).
10) Whilst looking at F, player must reverse time until E moves off the button (F) (as it will reverse the fall of E).
11) When E is half way between falling from the ledge and being on F, the player must stop reversing. Normal speed will commence and E will fall onto F. This will open the door (G) for the player to leave.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

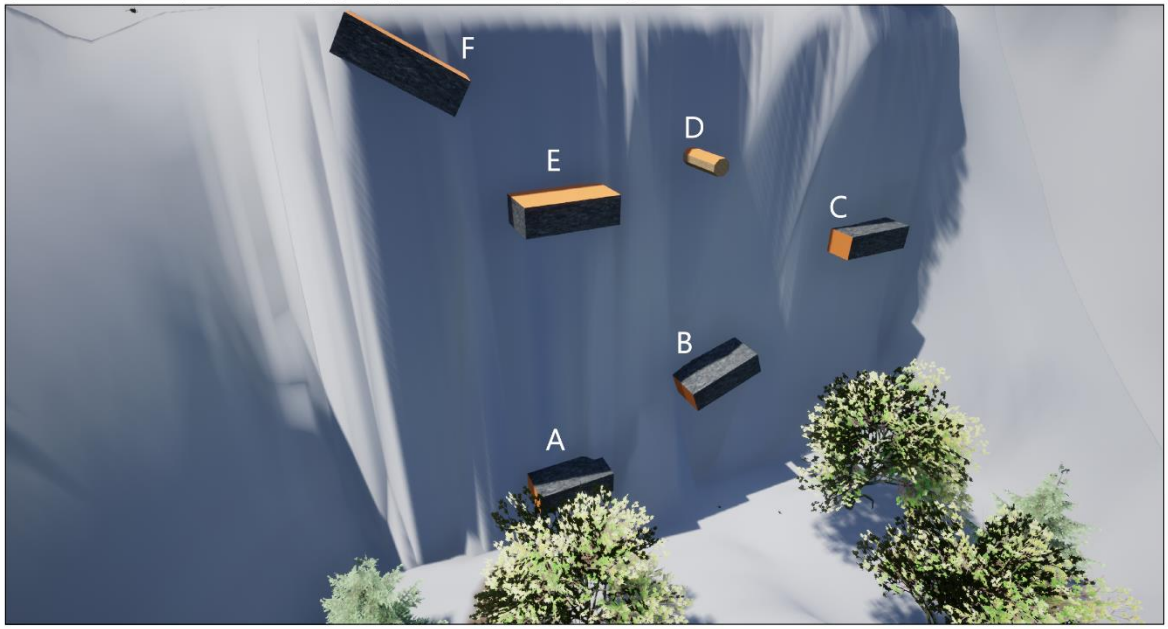
The number of red spheres (B) pushed into the bin (C) can be checked on the door (D), as when one enters, one of the red lights on the door will glow green until 3 enter.
If the player makes a mistake at any point, they can reverse time and retry.

LEVEL DESIGN

GRAPPLE PUZZLES (ROCKY GREYS)

PUZZLE 1: Use the orange faces of the stones to guide the player as they grapple to the top ledge.

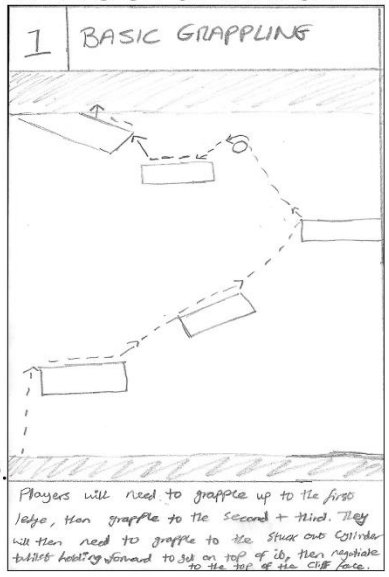
PUZZLE STATS
Difficulty level: EASY
Skills required: Logic, reflex, visual
Puzzle type: Reflex, Coordination
Typical completion time: 30 secs - 2 mins
Number of checkpoints: 0



PUZZLE BREAKDOWN

1) Player will grapple to the orange side of A, the end jump lifting them onto the platform.
2) The player will do the same with B and C.
3) The player will have to jump, then grapple across to D, where they will have to push forward in order to get onto or over the cylinder ledge.
4) Player will then grapple downwards from D to E.
5) Player will grapple up to the side of F, the end jump carrying them onto the main part of the (F) platform.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

As it is a first puzzle, it is primarily to teach the player how to use the mechanic, which is why it is a very simple puzzle. Whilst grappling, the player will see a grapple rope, which will hit the end location and pull the player towards it.

FEEDBACK

The orange faces have been placed onto the side of the stone platforms in order to provide the player with a hint as to where they should be grapping. This was well recieved in testing and allowed the player to focus more on learning how the ability of grappling works and which part of the orange surface to grapple to specifically.

LEVEL DESIGN

GRAPPLE PUZZLES (ROCKY GREYS)

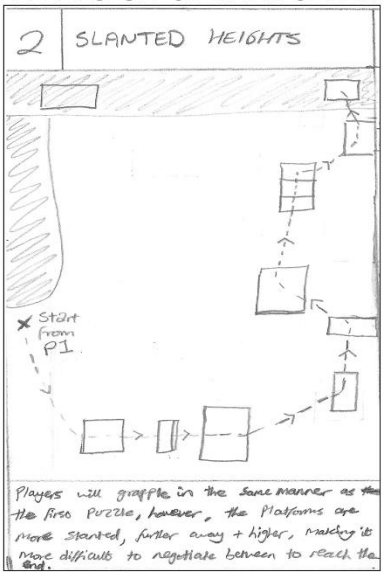
PUZZLE 2: Grapple up the ledges and across the gaps using the orange faces to guide the player.

PUZZLE STATS
Difficulty level: MEDIUM
Skills required: Logic, reflex, visual
Puzzle type: Reflex, Coordination
Typical completion time: 1 min - 5 mins
Number of checkpoints: 0

PUZZLE BREAKDOWN

1) Player will use their grapple to get to the top of A.
2) They will then grapple to the thin side of B and jump up.
3) They will then stand on the slanted edge and grapple across to C.
4) Player will then jump and grapple across to D, then do the same motion in order to get across to E, then F.
5) Player will jump and grapple across from F to G, before grappling up to H.
6) The player can now choose whether to time their jump and jump straight down, grappling to J or if they are not feeling as confident, they can grapple down to I, then make the shorter grapple across to J.
7) From here, the player will need to jump and grapple downwards to reach K.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

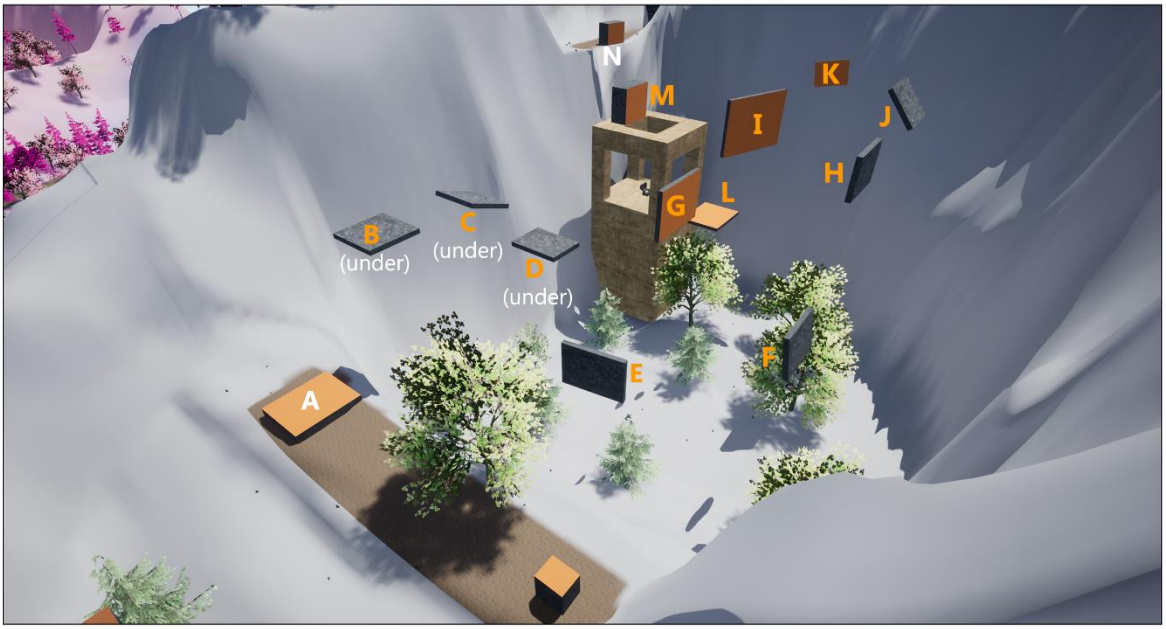
Builds on the previous puzzle by making the player traverse over longer and higher distances, giving them key skills which will be required in puzzle 3.
Still uses the orange faces to guide the player as to ensure they do not get lost.
If completed correctly, this can be a quick puzzle to complete, however, most players require a couple of attempts in order to complete it, which will serve them well for P3.

LEVEL DESIGN

GRAPPLE PUZZLES (ROCKY GREYS)

PUZZLE 3: Use the orange faces to guide the player through a continuous loop of grapples.

PUZZLE STATS
Difficulty level: HARD
Skills required: Logic, reflex, visual
Puzzle type: Reflex, Coordination
Typical completion time: 30 secs - 5 mins
Number of checkpoints: 1 (A)

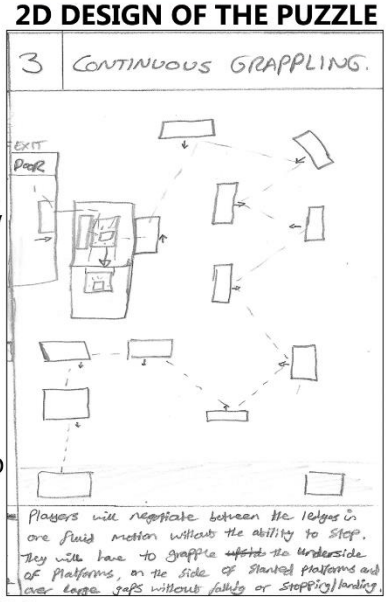


PUZZLE BREAKDOWN

This puzzle is a non stop loop from start to finish. At no point can the player stop until they hit the flat ledge at L.

1) Player will start at A.
2) Player will jump and grapple to the underside of B.
3) Player will fall for a second (as the grapple ability resets), then can grapple to the underside of C, then same for D.
4) After grappling to the underside of D, when they fall, the player will need to adjust their rotation to the right and grapple across to E.
5) Players will then need to adjust again to get to F.
6) Whilst falling for a second at F, the player will need to turn 180 degrees, then grapple over to G. They will need to repeat this process to get to H, I, J and rotate 90 degrees anti-clockwise to get to K.
7) The player will then do one final turn and grapple down in order to get to L, where they have access to the gem stone.
8) Once the gem is collected, the player can grapple up to M then N to leave the area.

2D DESIGN OF THE PUZZLE



ERROR RECOVERY/ NOTE

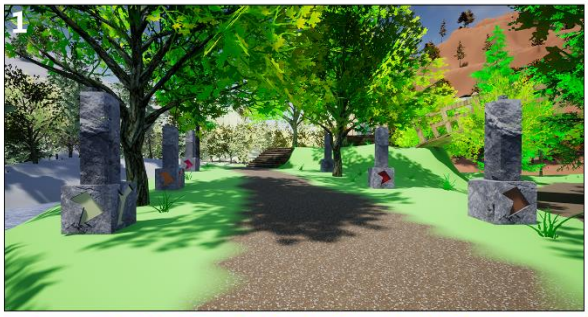
If the player falls into the pit beneath them, they will respawn at A immediately.
The orange faces have been used again to guide the player through the required path.
Blocking volumes have been put in key areas so players cannot stray or cheat.

LEVEL DESIGN

FINAL TOWER PUZZLE (MIDORI ISLES)

PUZZLE: Interact to start the timer, then find a way to get the gem stone to the top of the tower.

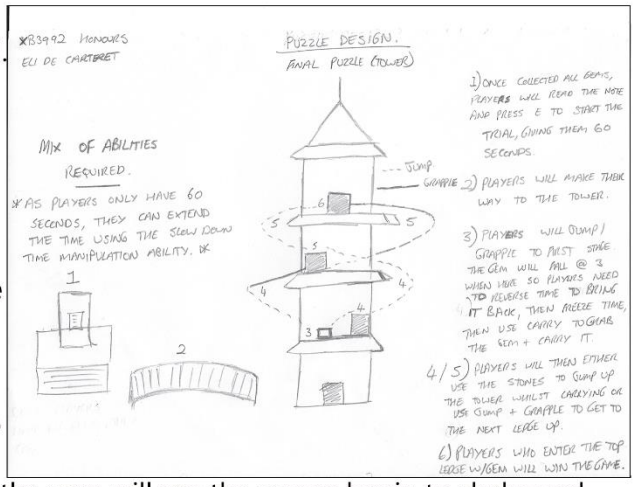
PUZZLE STATS
Difficulty level: HARD
Skills required: Logic, reflex, visual, coordin.
Puzzle type: Reflex, Coordination, Logic
Typical completion time: 40 secs - 10 mins
Number of checkpoints: 0



PUZZLE BREAKDOWN

1) Once all gems are collected, players will notice all the stones in 1 will be illuminated.
2) Player will read the note (A) and interact ('E' on PC, 'X' on controller), to start the trial, giving them 60 seconds.
2) Player will make their way to the tower.
3) Player will Jump/ Grapple to the first stage/ floor (B). The gem will fall through a hole when here, so players need to Reverse Time to bring it back, Freze Time, then use 'Carry' to grab the gem and carry it.
4) Players will then use the stones at C/ D to jump up the tower whilst carrying or use jump and grapple to get to the next ledge.
5) Players who enter the top ledge (E) with the gem will see the screen begin to shake and will see a cinematic zoom out shot of the top of the tower with a yellow beam of light shining from the top floor, out the top of the tower and into the sky. The screen will fade to white before a UI pops up reading 'You are the light of the world'. After a few seconds, the player will be taken to the credits screen, then the Main Menu.

2D DESIGN OF THE PUZZLE



FEEDBACK/ NOTE

The amount of time the player has left will be shown on the screen as a widget.
As players only have 60 seconds, they can extend the time by using the 'Slow Down Time' Manipulation ability strategically, as this does not mix with most others.

NARRATIVE

NARRATIVE OVERVIEW/ GOALS

Path to Deity will feature a narrative from people who attempted the trials previously but failed, to be abandoned in this world as an 'Eclipse'.

NARRATIVE GOALS

The narrative should be INTREGUING and UNIQUE.
The narrative should be OPTIONAL (so core puzzle players can purely focus on playing the puzzles.
Narrative should be DISCOVERABLE by players.
ALL narrative featuures should be CONSISTENT.
Narrative should be INTERTWINED throughout the world space and landscape.

NARRATIVE OVERVIEW/ PROGRESSION

Type: Non-linear, open, story with tangents.
Theme: Puzzle, adventure, exploration.
Origin: Whilst creating Earth and the other planets, God realised that a light source would be required, to which the Sun was created. However, God needed a way to maintain this light source, therefore an energy source was needed. When God created humans, God realised that their energy could be drained and used to power the Sun. However, in order for the light to be strong enough, God would have to make the chosen human into a Demigod. In order to do this, God decided that only the strongest and most successful humans would be worthy of this status and so created this world as a trial area.

Successful trialists would recieve a place in the afterlife as a Deity as a reward for giving their life, with failing trialists forced to be stuck in this purgatory for eternity as a mortal. These people who failed call themselves the Eclipses and can see each other but cannot be seen by current trialists.

The player can discover these Eclipses through the notes and letters scattered around the world. These letters will also explain the architecture and origin of life in this world:
- God selected people one by one to try out becoming a Demigod.
- One of the first candidates was a Japanese man who failed.
- In his guilt of failure and in panic of his daughter being trialed next and being forced to stay in this world too, the man got together with the other Eclipses and began hand crafting a home for themselves, along with a number of ruins, towers and bridges.
- This is the reason for the Japanese architecture, however, the next few people to be trialed stemmed from the man's English wife, meaning more English letters were written.

Main influences for this narrative include games such as Far Cry 4, Dark Souls, Elder Scrolls, Zelda and religions/ cultures such as Christianity, Greek and Roman.

ART

ART OVERVIEW/ GOALS

The environment and art should take inspiration from games such as The Witness. The main goals are listed below.

ART GOALS

The art should be BRIGHT and VISUALLY PLEASING to the player.
The art should be CONSISTENT throughout the game.
The art should FIT with the NARRATIVE of the game.
It should BLEND together nicely throughout all the art.
It should ADD to the gameplay through placement of assets and features placed.

ART STYLE AND LANDSCAPE

The visual style should make the player feel as though they are in a unique, bright, picturesque world, filled with a mixed terrain (which will be used to guide the player).
The use of (semi) pastel colours, will allow the game to look bright and to blend well.
Textures should be basic but semi realistic, e.g. how the terrain and trees are set out.
The landscape should be VARIED and VIBRANT.
The landscape should cater for the needs of the narrative, mechanics and gameplay, meaning one puzzle section per island (area), split by the river (1 colour per area).
ALL sections of the landscape needs to be accessible by the player AT ALL TIMES.
The landscape should create curiosity and force a want to explore/ create immersion.
The use of ruins, towers, trees, foliage and Points Of Interest should fill out the world.
Footpaths SHOULD have ridges/ slight inclines at either side to make the path more natural and stand out more. The landscape should also have LIMITED flat areas.

LIGHTING

The lighting should be created in a way which adds to the brightness of the world. The lighting should also feel natural to give a more real world feel. Static lighting should be baked wherever possible, however, foliage and moving objects should all be set to moveable for dynamic shadows to be rendered.

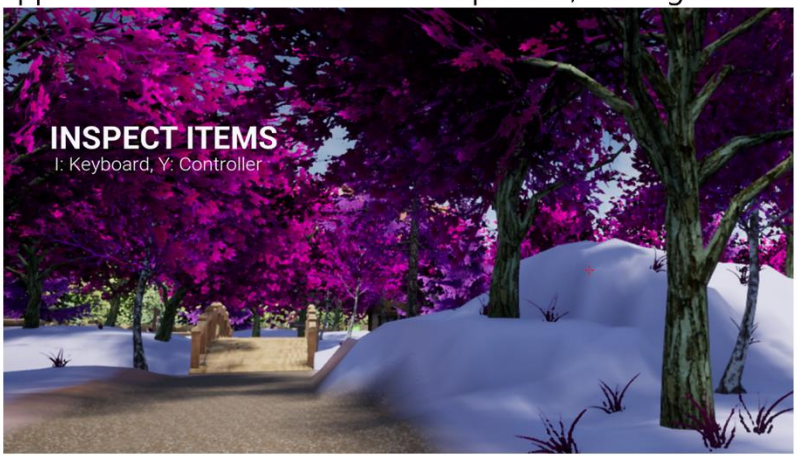
USER INTERFACE

UI OVERVIEW/ GOALS

As Path To Deity is a puzzle game, the UI is an important factor to allow players to fully understand the game and know what they should be doing at all times, giving them the best chance at working out the puzzles for themselves.

GOALS

To create a CLEAR interface design which does not take away from the gameplay experience, but adds to and enhances it.
Ensure no widgets or anything in the User Interface OVERLAPS.
UI provides CONSCISE AND CLEAR feedback in the puzzles and whilst using abilities.
The visual feedback UI is presented in a timely fashion.
The technical UI (buttons etc), all work as intended AT ALL TIMES.
To minimise the amount of UI on screen through the game, making any UI which does appear seem more valuable and important, making it more noticable.



INFLUENCES

The main influence for the UI widget on the left (for the abilities) is from Fallout 4, when the player finds a new location as this design is very clear and sleek. The ability UI will pop up with 'Ability Unlocked' then tell the player which ability it is and how to use it.

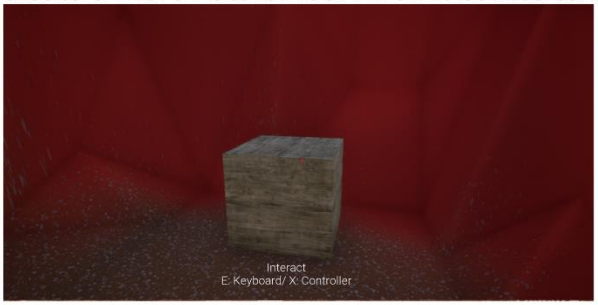
UI LIST

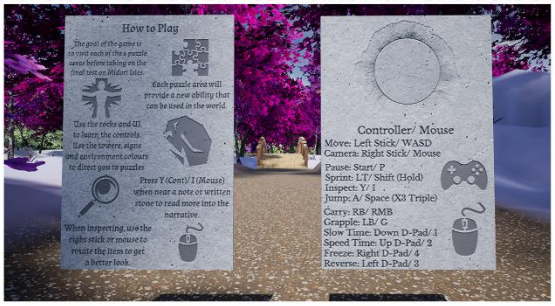
The UI which is required for the creation of this game includes:

Menus: Main Menu, Pause Menu, How To Play Menu, End Screen Menu.

In game: Crosshair on main screen, Ability widgets, Interaction pop ups (saying how to interact [see bottom left image]) and Stat UI, e.g, Gem stone counter and Timers.

UI as environment features: Some UI has been printed into elements such as rocks to create a more natural feel when it comes to the UI. This also saves clutter on the screen.





AUDIO

AUDIO OVERVIEW/ GOALS

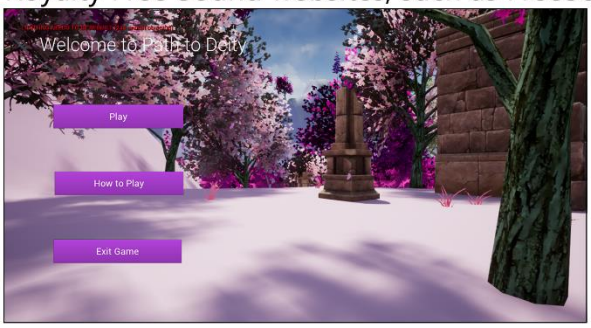
As Path to Deity is an a vibrant, peaceful and open world, the audio should reflect this, along with SFX to be used as feedback and throughout the puzzles.

GOALS

The main background music for the Main Menu and the main gameplay should be CALM and RELAXED, in order to promote the peacefulness of the environment.
The SFX for puzzles should be sounds which are TRUE TO REALITY (where possible).
The audio should evoke a sense of tranquillity and restfulness whilst exploring.
The audio should be CLEAN and used to it's FULL POTENTIAL in editor/ the game.

SOURCES

The main places to get the audio required for the game are from:
Unreal Engine 4 Marketplace Content Packs, such as the Fantasy Music Pack.
Royalty Free Sound websites, such as FreeSound.org (MAIN) and FreeSFX etc.



AUDIO LIST

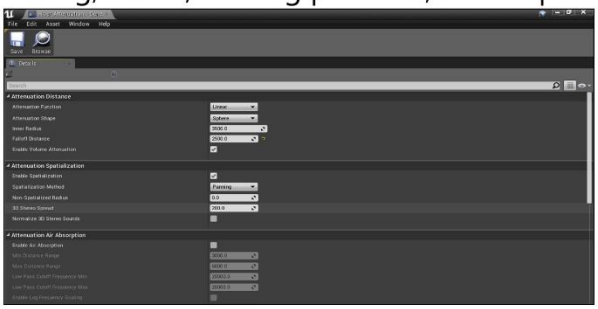
NOTE: Ensure audio is set up correctly (e.g. Using Cues, Looping, Attenuation etc).
The audio required for this project includes:

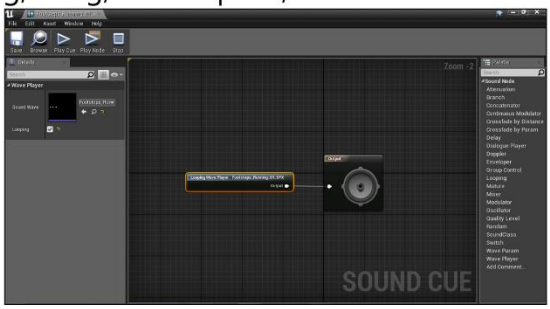
Music: Background music, Main Menu music.

UI: Menu buttons (hover, pressed), pop ups (such as Ability Unlocked UI).

World: Footsteps, Water, Wind, Tree rustling, Waterfall.

Puzzles: Item pickup, Timer, Correct Ping, Laser, Lava, Ability sounds, Rolling, Door sliding, Portal, Moving platform, Door Opening, Bang, Button push, Puzzle SFXs.

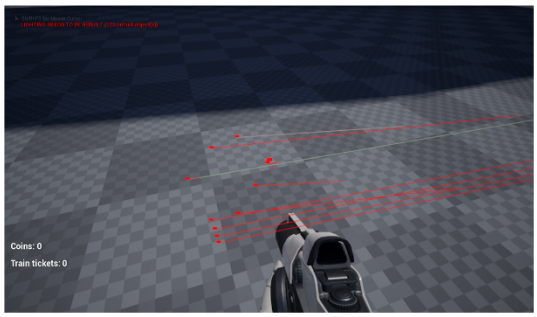




TESTING AND FILES

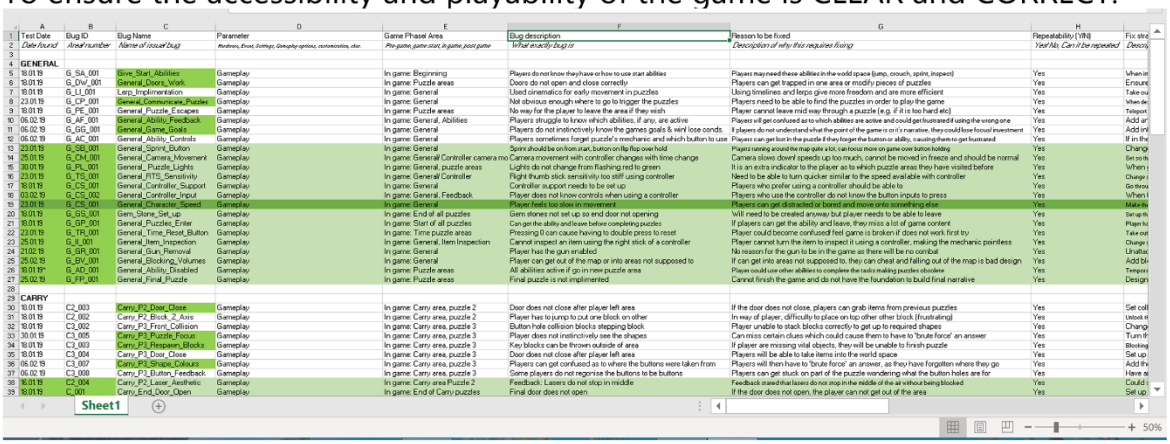
TESTING OVERVIEW/ GOALS

Testing is important in any game, however, since this is a puzzle game, testing for this game is VITAL.



TESTING GOALS

To find BUGS which could cause the game to become unplayable so they can be fixed.
To ensure the game is FUN and INTERESTING to play, but is also ACHIEVABLE.
To test the STABILITY of the game when played in different ways.
To see NEW METHODS of play in which were not previously anticipated.
To ensure the accessibility and playability of the game is CLEAR and CORRECT.



Test Date	Bug ID	Bug Name	Parameter	Game Phase/ Area	Bug description	Reason to be fixed	Repeatability (Y/N)	Fix strategy
Date found	*Area/ number*	*Name of issue/ bug*	*Windows, Bugs, Settings, Gameplay options, customization, etc.*	*Pre-game, game start, in game, post game*	*What exactly bug is*	*Description of why this requires fixing*	*Yes/ No. Can it be repeated?*	*Description*
GENERAL								
18.01.19	G_SA_001	Give_Start_Abilities	Gameplay	In game: Beginning	Players do not know they have or how to use start abilities	Players may need these abilities in the world space (jump, crouch, sprint, inspect)	Yes	When in
18.01.19	G_DW_001	General_Doors_Work	Gameplay	In game: Puzzle areas	Doors do not open and close correctly	Players can get trapped in one area or modify pieces of puzzles	Yes	Ensure
18.01.19	G_LI_001	Lerp_Implimentation	Gameplay	In game: General	Used cinematics for early movement in puzzles	Using timelines and lerps give more freedom and are more efficient	Yes	Take ou
23.01.19	G_CP_001	General_Communicate_Puzzles	Gameplay	In game: General	Not obvious enough where to go to trigger the puzzles	Players need to be able to find the puzzles in order to play the game	Yes	When de
18.01.19	G_PE_001	General_Puzzle_Escapes	Gameplay	In game: Puzzle areas	No way for the player to leave the area if they wish	Player cannot leave mid way through a puzzle (e.g. if it is too hard etc)	Yes	Teleport
06.02.19	G_AF_001	General_Ability_Feedback	Gameplay	In game: General, Abilities	Players struggle to know which abilities, if any, are active	Players will get confused as to which abilities are active and could get frustrated if using the wrong one	Yes	Add ar
06.02.19	G_GS_001	General_Game_Goals	Gameplay	In game: General	Players do not instinctively know the games goals & win/ lose conds.	If players do not understand what the point of the game is or it's narrative, they could lose focus/ investment	Yes	Add ini
06.02.19	G_AC_001	General_Ability_Controls	Gameplay	In game: General	Players sometimes forget puzzle's mechanic and which button to use	Players can get lost in the puzzle if they forget the button or ability, causing them to get frustrated	Yes	If in the
23.01.19	G_SB_001	General_Sprint_Button	Gameplay	In game: General	Sprint should be on from start, button on flip flop over hold	Players running around the map quite a lot, can focus more on game over button holding	Yes	Change
25.01.19	G_CM_001	General_Camera_Movement	Gameplay	In game: General/ Controller camera mo	Camera movement with controller changes with time change	Camera slows down/ speeds up too much, cannot be moved in freeze and should be normal	Yes	Set co ts
30.01.19	G_PL_001	General_Puzzle_Lights	Gameplay	In game: General, puzzle areas	Lights do not change from flashing red to green	It is an extra indicator to the player as to which puzzle areas they have visited before	Yes	When
23.01.19	G_TS_001	General_RTS_Sensitivity	Gameplay	In game: General/ Controller	Flight thumb stick sensitivity too stiff using controller	Need to be able to turn quicker similar to the speed available with controller	Yes	Change
18.01.19	G_CS_001	General_Controller_Support	Gameplay	In game: General	Controller support needs to be set up	Players who prefer using a controller should be able to	Yes	Go throu
03.02.19	G_CS_002	General_Controller_Input	Gameplay	In game: General, Feedback	Player does not know controls when using a controller	Players who use the controller do not know the button inputs to press	Yes	When
23.01.19	G_CS_001	General_Character_Speed	Gameplay	In game: General	Player feels too slow in movement	Players can get distracted or bored and move onto something else	Yes	Make th
18.01.19	G_GS_001	Gem_Stone_Set_up	Gameplay	In game: End of all puzzles	Gem stones not set up so end door not opening	Will need to be created anyway but player needs to be able to leave	Yes	Set up th
18.01.19	G_GP_001	General_Puzzles_Enter	Gameplay	In game: Start of all puzzles	Can get the ability and leave before completing puzzles	If players can get the ability and leave, they miss a lot of game content	Yes	Player ha
23.01.19	G_TR_001	General_Time_Reset_Button	Gameplay	In game: Time puzzle areas	Pressing G can cause having to double press to reset	Player could become confused/ feel game is broken if does not work first try	Yes	Take out
25.01.19	G_II_001	General_Item_Inspection	Gameplay	In game: General, Item Inspection	Cannot inspect an item using the right stick of a controller	Player cannot turn the item to inspect it using a controller, making the mechanic pointless	Yes	Change
21.02.19	G_GR_001	General_Gun_Removal	Gameplay	In game: General	Player has the gun enabled	No reason for the gun to be in the game as there will be no combat	Yes	Unattac
25.02.19	G_BV_001	General_Blocking_Volumes	Gameplay	In game: General	Player can get out of the map or into areas not supposed to	If can get into areas not supposed to, they can cheat and falling out of the map is bad design	Yes	Add bl
18.01.19*	G_AD_001	General_Ability_Disabled	Gameplay	In game: Puzzle areas	All abilities active if go in new puzzle area	Player could use other abilities to complete the tasks making puzzles obsolete	Yes	Temporar
25.02.19	G_FP_001	General_Final_Puzzle	Gameplay	In game: Puzzle areas	Final puzzle is not implimented	Cannot finish the game and do not have the foundation to build final narrative	Yes	Design
CARRY								
18.01.19	C2_003	Carry_P2_Door_Close	Gameplay	In game: Carry area, puzzle 2	Door does not close after player left area	If the door does not close, players can grab items from previous puzzles	Yes	Set coll
18.01.19	C2_002	Carry_P2_Block_Z_Axis	Gameplay	In game: Carry area, puzzle 2	Player has to jump to put one block on other	In way of player, difficulty to place on top other other block (frustrating)	Yes	Unlock rt
18.01.19	C3_002	Carry_P3_Front_Collision	Gameplay	In game: Carry area, puzzle 3	Button hole collision blocks stepping block	Player unable to stack blocks correctly to get up to required shapes	Yes	Change
30.01.19	C3_005	Carry_P3_Puzzle_Focus	Gameplay	In game: Carry area, puzzle 3	Player does not instinctively see the shapes	Can miss certain clues which could cause them to have to "brute force" an answer	Yes	Turn th
18.01.19	C3_003	Carry_P3_Respawn_Blocks	Gameplay	In game: Carry area, puzzle 3	Key blocks can be thrown outside of area	If player are missing vital objects, they will be unable to finish puzzle	Yes	Blocking
18.01.19	C3_004	Carry_P3_Door_Close	Gameplay	In game: Carry area, puzzle 3	Door does not close after player left area	Players will be able to take items into the world space	Yes	Set up
06.02.19	C3_007	Carry_P3_Shape_Colours	Gameplay	In game: Carry area, puzzle 3	Players can get confused as to where the buttons were taken from	Players will then have to "brute force" an answer, as they have forgotten where they go	Yes	Add th
06.02.19	C3_000	Carry_P3_Button_Feedback	Gameplay	In game: Carry area, puzzle 3	Some players do not regonise the buttons to be buttons	Players can get stuck on part of the puzzle wondering what the button holes are for	Yes	Have a
18.01.19	C2_004	Carry_P2_Laser_Aesthetic	Gameplay	In game: Carry area Puzzle 2	Feedback: Lasers do not stop in middle	Feedback in and that lasers do not stop in the middle of the air without being blocked	Yes	Could s
18.01.19	C_001	Carry_End_Door_Open	Gameplay	In game: End of Carry puzzles	Final door does not open	If the door does not open, the player can not get out of the area	Yes	Set up

Sheet1

TESTING GUIDELINES (HOW TO TEST)

Watch the player and the screen whilst they play. Make notes and be aware as to the players emotions to the game and if there are any issues which they run into.
Provide an anonymous questionnaire for honest review upon finishing the test.
Ensure these questions are a mix of general and specific questions and allow players to give a full comment with a text box, as these comments could provide to fresh ideas.
DO NOT give the player any information about how to complete a section unless absolutely necessary (i.e. they cannot progress after a few minutes and record it).
Upon competition of the questionnaire and playtest, developers may discuss the player's experience to gain more information.

ANY RELEVANT FEEDBACK AND BUGS FOUND MUST BE REPORTED ON THE TESTING SHEET (see above). This includes a Test Date, Bug ID, Bug Name, Parameter, Game Phase/ Area, Description, Reason for requiring fix, Repeatibility status and Fix Strategy (if applicable).

FILE TYPES

Project files should be in these types: Audio (.wav), Models (.FBX/.OBJ), Textures (.PNG).

Key Dates: Concept presentation (04.10), Mid Point Presentation (Whitebox- 12.12), Alpha Playtesting Session (06.02), Beta Presentation (27/03), Final Hand In (01.05).

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