# **Crystal Sin**

Designed by The Beautiful Machine Project manager Tobias Pritchard

## Changelog

Date of change	Change description	Developer Name
11/01/2022 Updated Gameplay Segment with mechanics Updated world design section with image of level design Updated Visuals section with comments on cel-shaded visuals. Added game feeling section Added some wording to the initial game design Updated instant summary Brief section on UI- needs to be fleshed out by artists! Brief notes on art requirements and considerations		Ben Hudson
11/01/2022	1/01/2022 A few words for the UI and the controls	
13.01.2022	Added scrapped mechanics from the old game doc	
14/01/22	Edits, formatting, flow	Tobias Pritchard
15/01/2022	Expanded mechanics, trying to be more specific/ Discuss both the 'why' and the 'how'. Not perfect needs some in engine proto to finalise. See Key components segments. Removed scrapped components segment. <i>Sorry Hristo</i>	
15/01/2022	5/01/2022 Updated world design notes on water & wind area. Narrative notes added with full story outline and lore overview.	
16/01/22	Final edit and changes for submission	Tobias Pritchard

## Contents

Changelog1
Summary
Overview
"Feeling" of the Game4
Setting
Pantheon4
Races4
Cultures4
Magic5
Characters
Yilia - Sephyr Protagonist - Playable character:5
Atarran - Sephyr Guard - NPC:5
Yudira - Sephyr Elder - NPC5
Barus - Sephyr vendor - NPC:5
Raelan - Elysian Praetor - NPC:5
Story
Prologue6
Beginning6
Middle6
Ending7
Epilogue
Gameplay
Core Mechanics8
Combat:
Key components of Combat:9
Exploration:
Key components of Exploration11
World Design
Art / Style
Assets
3D models14
Characters
Weapons – sword16
Enemies16

Props	16
Animations	17
Character animations	17
Monster animations	17
References:	17
Controls	17
UI, UX, Systems & Options	
Audio	
Analysis	
Target Demographic	
Development Plan	

## Summary

## **Instant Summary**

Crystal Sin is a Third person-RPG type game. The player kills monsters around the game area to cleanse her village of corruption and ensure survival.

## Extended summary

Yillia defends her village through the power of a Nullblade, a technologically advanced sword that protects her from the corruption that permeates the landscape. Fighting to protect her tribe, she will uncover secrets that were not meant to be told and discover a world full of surprises.

## Overview

Crystal Sin is an homage to the freedom and exploration of open world shooters, and the vibrant stories and characters of old school RPGs. Genshin Impact and Zelda: Breath of the Wild being direct inspirations, We aim to provide the player with an immersive and highly stylised world, they will want to return to, many times over.

## • Game Design

Focus on Third person combat with platforming elements, with combat to punctuate the exploration/ platforming.

## Open world level design

The player will have the option to tackle the first two element areas in any order, but the third area requires both the first and second areas to be beaten first. The world should have an appropriate sense of scale to the lore we've created, although it would be impractical to be realistic, we should find a strong balance. The level design be critical as this will be one of the primary 'gameplay' elements to our game, the design needs to both encourage the player to explore but equally ensure that the player never feels lost or directionless as they play through the level.

#### • Visuals

We are using Unreal Engine 4.27, this helps us as it is full-featured from the outset, so can show off our art and gameplay to best advantage.

We are going for a stylised look incorporating cell shaded visuals, we hope that this will allow us to comfortably make the game more stylised than a photo-realistic approach and embrace a slightly more saturated and vibrant aesthetic. We're aiming for a fallen grandeur/ slightly melancholic approach, a beautiful world filled with the rubble and ruins of people long gone.

#### • Combat

The combat should be straight forward, easy to learn hard to master would be the ideal. There will be a lock on system akin to dark souls/Breath of the Wild however this will be handled automatically based on whichever enemy is closer to the player. The player should be able to engage the enemy and dodge attacks. It be fast paced but encounters should be tense and feel rewarding once completed. The player cannot progress without engaging combat encounters.

## "Feeling" of the Game

The game should feel like an open world, but the player should be drawn to, and apprehensive about, the areas of higher creature density. The player should always feel that they are in a dangerous world, but they have got the skills and intelligence to resolve any conflict. Gameplay should have an emphasis on resolving story elements by using player movement, puzzle solving and combat – the player should always feel apprehensive but empowered. The combat should be tense encounters that punctuate the action and allow the quieter moments for reflection and exploration.

## Setting

#### Pantheon

#### Races

There are multiple creature races in Crystal sin, but the two most prevalent are Humans and Crystallized.

Humans are much the same as regular real-world humans in this setting and come in two flavours, the Nomadic humans and the Elysian humans.

The Nomads have heightened senses that have been lost on the Elysian humans due to years of peace and their extravagant way of life.

The 'Crystallized' are myriad races that have been corrupted by crystal sin. They can include humans, wildlife and machines.

#### Cultures

There are two primary cultures within Crystal sin, Elysians and Sephyr Nomads.

The Elysians are an authoritarian society who operate under a caste system. They are often benevolent to their own; and for those who are willing to serve. They often hold high egos, believing themselves better than others. Other cultures and ideologies are stripped away from those who join the Elysian empire and are replaced with promises of being elevated to a higher state of living. Dark secrets course through the veins of their empire, as they conquered more and more land, the dilution of their society increased, resulting in fewer like-minded peoples.

Elysian technology was far reaching and advanced, thanks to the design and implementation of cardinal energy. This allowed them to easily overpower other races on their world. (Atosa)

The tribe of nomads call themselves the 'Sephyr.' They worship the cardinal elements, primarily wind as they are frequent travellers. The Sephyr believe that natural equilibrium must be maintained for the world to thrive, you can take from the world and its resources, but you must give back in some manner. They lead simple lives but are not opposed to improving them with technology or quality of life devices.

#### Magic

There is no traditional magic in Crystal sin. Technology serves in this capacity, enabling feats of unnatural power and speed. Cardinal Energy powers a lot of this technology. The crystallized can enhance their natural traits with the power gained from crystal sin - they rarely gain new abilities, but rather enhance current ones.

## Characters

Yilia - Sephyr Protagonist - Playable character: Yilia is the protagonist of our story, part of a duo of fighters alongside Atarran, Yilia strives for the protection of her tribe, whilst also trying to discover the source of the Rend. Yilia is headstrong, loyal and inquisitive. She knows her duty, and what it takes to protect her tribe. Crystal sin will test her desire for truth against her desire to protect those she cares about.

Atarran - Sephyr Guard - NPC: The other half of the Sephyr guards, Atarran defends the tribe with a fierce passion. The tribe comes first for him, even over his own survival. Atarran is smart and knows that trying to be a hero is a fools endeavour.

Yudira - Sephyr Elder - NPC: The Sephyr tribe elder, Yudira carries the knowledge of her people. For many generations has Yudira held this charge, and she won't go without passing on her knowledge to the next in line. Yudira has a stern but calm demeanour, willing to listen to problems that the people have and find a solution that satisfies all parties. Whilst she is often calm, she will entertain foolishness, and once a decision is made, Yudira will stand by it.

## Barus - Sephyr vendor - NPC:

Barus is the Sephyr smith and resident collector. He tinkers with Elysian technology and provides the player with upgrades and tools throughout their journey. Barus is friendly and supportive, and by no means a pushover. He can hold his own in a fight.

## Raelan - Elysian Praetor - NPC:

Raelan is an Elysian praetor, a warrior of the Elysian empire. Whilst not all Elysians were killed in the Rend, it is rare to find a praetor so far from the ruins of Anchorage. Raelan is quiet and tempered but is quick to anger when Yilia interferes with his plans. Raelan is the antagonist of our story.

## Story

## Prologue

Crystal Sin prologue will involve a brief history of the Rend with a unique art style separate from the game. The prologue will introduce Yilia and later Atarran as Yilia returns to the camp. Prologue will include a visual set piece with narration from either a 3<sup>rd</sup> party narrator or Yilia herself.

## Beginning

Yilia enters the village. Windswept forest, trees bent from years of strong winds. 2-3 taupe tarpaulin tents, ground is a mix of short, trampled grass and desire paths of dried mud. Tarpaulin is pulled across the ruins of old Elysian buildings, supported by wooden logs. A small pit fire crackles near one of the tents. Wind and light rain howls in the distance.

Amongst the supplies are various bits of armour, scavenged technology and old-world crates.

Villagers gathered, looking northward toward the gates. Atarran directs the player toward the gates. Talking to the villagers results in some quotes.

> "They are supposed to be gone!" "Get rid of that thing before it curses anyone else!" "Why are they still here?! Has the world not suffered enough?"

Crystallized corpse slumped against the gates. Wooden spikes and metal bars are lashed together to form a gate structure. Finish the enemy. Brief intro to absorbing the cardinal energy & basic combat. Another enemy or two stumbles toward the gates to reinforce controls and mechanics.

Yilia returns to the village.

Return to the gathering of villagers. They are discussing the course of action.

"Someone needs to deal with this issue..." "One of us should investigate, perhaps..." "First the river shallows and now this..."

Yilia suggests she should go and investigate, having an insulator and weapon.

## Middle

Yilia is told to follow the crystallized out of the village to the north. 3-5 minutes of travel and battling enemies. Potential jumping puzzle included. Toward the end of the path are signs of a cave. More rocks and rubble are present. The path that leads upward is dotted with Elysian iconography, ancient ruins become more common, alongside corpses of crystallized enemies.

#### "The villagers never venture this far.."

Upon reaching the cave entrance, a faint glow emits from deeper within.

"...So who's handiwork is this?"

An Elysian technology door bars the way, clad in metal at the entrance of the cave. Yilia inserts her sword to open.

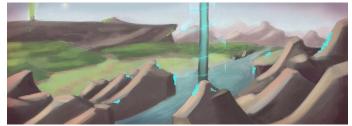
## Door must be opened via fully charging the weapon with various elements. To open the 2 elemental locks.

Yilia must travel to two areas with known elemental disturbances - known to be hostile and

dangerous areas in order to gather the requisite cardinal energy required to open the door.

#### 8-12 minutes of travel and battle.

Yilia must defeat all the enemies in the Water zone and Wind zone to spawn an elite who will provide the rest of the requisite energy.



Concept sketch of the world

## Ending

After collecting the energy, Yilia opens the cave door and ventures inside.

3-5 minutes of travel and battle.

Enemies are beginning to become more machine-like, with crystals protruding from their limbs and head. In the center of the room a strange machine hums, large power lines extrude from behind and travel through the back of the cave wall.

Curiously, this machine looks new, far more recent than any other technology seen in the last decade. Save the weapon XY wields. It stands out like a sore thumb amongst the ruins of the past.

"What? I.. I thought all of this technology was gone...destroyed..."

Raelan is present at the end of the cave. He challenges Yilia's knowledge of the Rend but doesn't deem to answer any of her questions.

Raelan teleports away whilst activating a robot enemy with a countdown

Yilia destroys the central unit, to deactivate the machine.

She succeeds, but the energy being pulled through the machine is unleashed into the cave, Crystallizing the robot enemy and causing it to attack Yilia.

#### Defeat the Custodian

After destroying the Custodian, the energy seems to stabilize. "This machine...created the crystal sin? back to the village. They will want to know about this."

After escaping the cave, the game fades to black.

Epilogue Kickstarter Link with Beautiful machine and Crystal sin logo.

## Gameplay

## **Core Mechanics**

Combat:

Goals and aims:

Combat will be from a third person perspective with a focus on movement and dodging with melee weaponry. The combat should 'flow' it shouldn't feel like 'turtling' but instead have a faster and more fluid pace, more akin to the Batman Arkham Asylum games

The player character Yilia, as part of the nomad tribe is not equipped with heavy Armor and weaponry and must survive with the weapon she has. We are trying to avoid having a specific block button as we feel this would lead to slower gameplay/gameplay that is too like our influences.

The player will be weak to attacks so they cannot withstand more than several hits before they must try again. This ensures that the focus is on the dodging aspect of combat and moving around the enemy.

## Key components of Combat:

Mechanic	Explanation	Implementation	Design notes/ misc.
Combat	To simplify gone alou for the alount	Once the playor enters V distance of the	notes
Combat Mode	To simplify gameplay for the player we will have a combat mode that is activated once the player locks onto an enemy and enables the player to attack the enemy, dodge. This would also disable much of the platforming and movement systems to allow the player to focus on the combat and ensure controller compatibility.	Once the player enters X distance of the enemy the player mesh should play 'draw sword' animation and switch to the combat animation set 'Blend by bool- animation BP' The jump input should now be replaced with a dodging input likewise attacking should now also be enabled.	Separation of modes saves on controller input space and just streamlines the players options at any given moment in gameplay
Lock on	A soft lock on system where if the player gets within X distance of an enemy the camera will pivot to lock onto the enemy and the player character mesh will also always face the direction of the closest enemy. This means that the player is focused and aware of the combat situation, to really highlight this the player character should also draw their sword.	player will have overlap sphere/capsule and once an enemy is within that we will pivot the mesh and potentially the camera rotation in the direction of enemy actor. The mesh should play animation to draw the weapon. Mesh rotation will ideally need to be updated in line with tick to ensure a smooth tracking motion. The player should be able to circle the enemy but always maintain tracking And mesh focus on the enemy. This should break and disable combat mode once combat has been completed or the player moves outside of X distance.	Lock on should always focus on the enemy nearest to the player, for this reason I suggest 1v1 encounters are the ideal format, we should focus on getting the 1v1 right, let the combat almost be the 'reward/ challenge' for platforming.
Combo attacks	If the player can pull off successive attacks, they are able to enter the attack input again within a given time window to initiate a quick follow up attack with increased damage, this is faster than another separate single attack. This should be simple to avoid overcomplication.	Several options: can look at cutting up montage of a full combo to be attack segment 1, 2, 3 etc and call those with a select node and then a delay window after each attack, if the attack input is pressed within this window, then we progress to the next stage of the combo. We could equally play X separate attack montages, one for each stage of the combo. Use a select node and Enum to control each attack and if the delay is expired then return to attack one of the combos. Attacks will use anim notifiers to enable damage in each attack	There are lots of different ways to implement this, we want to keep it basic to begin with them iterate where possible to deepen the combat system. i.e. dodging then attacking will create a new move. Notifiers will need to be created carefully so that attacking 'feels' right vs. the enemies.
Dodging	Once locked onto the enemy the player may choose to dodge the enemy attack. This can be done on the jump button while in combat mode and should factor in the players direction of travel and include frames of invincibility. This should also be seen as a good player opportunity to reposition themselves to take advantage of enemy weak spots.	Animation blendspace like movement but considering player direction as the primary factor (Don't really need speed but we could build on this with a idle dodge and moving dodge for each direction). Invincibility should be handled via anim notify like attacks. To get direction of player movement perhaps look at XY rotation. This is relying on enemies having multiple attacks. Do not disable collision on player to avoid attacks.	This is going to be very reliant if we're able to get to grips with enemies having multiple attacks. Have mocked up a version previously but was having issues with animation transitions in the animation BP.

Energy	Enemies are associated with an	On enemy death cast to the elemental	Energy drain would be
Drain.	elemental type (water, wind) when	component that stores the information. The	fantastic at ensuring the
	attacking an enemy of the	cause additional damage, can call a 'get' on	players fully engage with
	corresponding element the player	attack and increase the damage 0.X based on	all the content considering
	should gain a charge of that element to	the amount of energy of the element they	our semi-open world
	be used to enhance attacks and to enter	have.	design we want to make
	the final level. We should a surplus of	To use the level gate implementation, can call	sure that the player can't
	enemies to fill the bar by 1 or 2. If the	a similar check when interacting with a gate	just run to the end and
	damage boot is used it increases the	door and then play an animation.	avoid all the content/
	damage of the player proportionally to		challenge.
	the amount the bar is filled.		

## **Exploration:**

Third person platformer inside an open world style experience, with thematic changes based on which 'area element' the player is tackling.

Exploration will be gated based on what 'area elements 'that the player has beaten so far- this ensures that the player will not be able to rush ahead to finish the game without experiencing the core content.

Exploration will be altered based on what element the player is currently dealing with and provide additional gameplay variety.

The uncorrupted areas will provide a baseline experience.

Every area will also have combat encounters to help break up the other gameplay elements and enemies will be altered by the corruption.

#### The wind element area

focus on verticality so there will be more of a focus on platforming and timing jumps and using 'jump pads' that will allow the players to get higher than they normally would be able to. They may also encounter ancient wind machines that push the player around, adding a slight puzzle element to the area.

Enemies are more likely to be airborne and swooping in to attack the player. The player should feel challenged to reach the top of the platforming area.

#### The Water element area

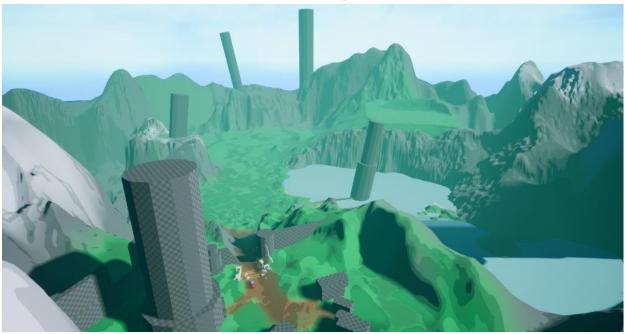
Focus on illusions and more of a puzzle experience, so false walls and more of a maze-like design. The focus is more on logic versus strict platforming.

Enemies are more likely to have a focus on evasion and 'slipping' away from the player drawing out the combat encounters and leading the player further into the area. This area will want to feature ruins and debris. It should serve as a reminder that there was once a past civilisation.

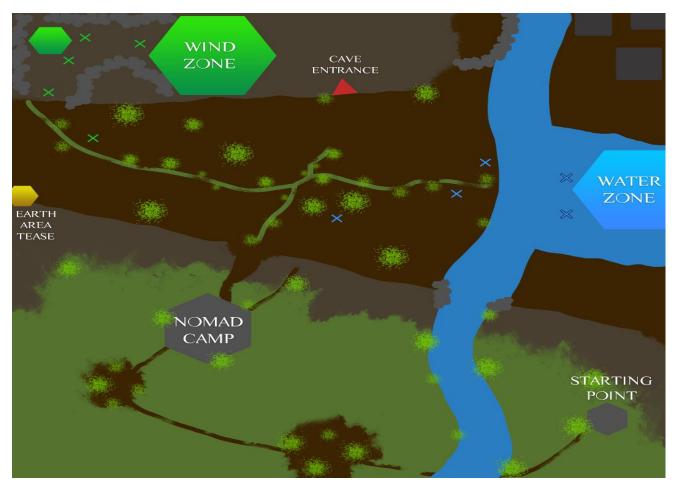
Mechanic	Explanation	Implementation	Design notes/ misc. notes
Exploration mode	Exploration mode is the default player mode for exploring and interacting with the world, in this mode the players can pick up potions and talk with NPC characters to progress the story. They should be able to jump and mantle onto abojects.	This is the default game mode, implementation of this won't really work without implementation of the combat mode. Uses a separate animation set to combat mode i.e moving without sword drawn.	Default mode shouldn't be too complex if combat mode is done.
Jumping	Jumping for the player to reach platforms, this should hook in with the mantling system. Jumping should be an exaggerated reality. It should feel responsive smooth.	It would be ideal to build off the built-in 3 <sup>rd</sup> person jump. It's equally worth looking at the animation blueprint set up to see if there's any extended functionality, we can build in or even just little visual flourishes	Fairly standard, but it would be good to get custom animations working I have conducted some prototypes and as described it has been difficult to get the transitions looking as nice as possible. Might want to look at a blendspace.

Mantling	When the player is jumping or falling the player can grab onto a ledge and climb up or running towards a waist high object, they should be able to vault up.	On tick function for the player. Check character movement if 'IsInAir?' and if true do a line trace to see if there's an object near by then if true another 2 traces to determine thickness and height to see if the player should climb up or valut the object. climable objects should be tagged as climable to avoid the players climbing on any objects.	We have a working prototype of this already, using root motion and disabling collision. This should be sufficient if the custom tags for climables are carefully placed to avoid the player being able to 'climb' into the environment.
Potions	The player can pick up and use potions within the world, these will increase speed, stamina, jump height and attack damage. To do this the player will walk over potions and they will appear on the mesh to indicate they have been pickped up. Potions can only be picked up once. The effects of potions are temporary	Pick up world objects that rotate slightly (need to see if that fits the art style/ world tone) Have some potion slots on the player mesh in sockets that are invisible and when the player picks up the potion toggle the visibility on the existing meshes. Potion effects should be added as components but handled in the game instance. Ideally the framework should be modular so that we can easily control and change the potion values and effects.	Balancing the potions will need to be carefully done, will need to review at the end off the project. I'm not sold on jump potion, but we should implement and then decide. Keeping potions on the player body is a nice touch for the UI-less design and a very nice compromise.
Talking to NPCs/Lore slates	The player should be able to interact with NPCs to engage in conversation. The conversation will be done within textboxes that appear on the bottom half of the screen with character portraits. The player will then 'click through' the dialogue. The lore slates will be similar only a change in UI style. The lore slates will cover more of the screen and fit all the text in one box. Lore slates should also make a sound when approached as they are a collectable in the world.	Several options for the UI side widget. For the text, set up Enum based on which character is talking and tie them to the NPC talking. The portrait information should be stored in the specific NPC. Might be worth looking into a JSON after conversations with the programmer. Could store the conversation 'done' in game instance.	This is going to be tricky to pull off as NPC's can have multiple conversations with the player. For monologue moments where the player is 'thinking' out loud that should be easier to anticipate with hidden collision meshes but this would be a ridged solution. Would need to discuss with the programmer.

## World Design



An early iteration of the level in engine- the overall scale of the level will be reduced so that we can focus on a tighter gameplay experience.



The world is based on an open world design structure with the player free to tackle either the wind or water zone in any order before progressing- with secrets and Easter eggs for the player to find and ensure that exploration remains rewarding. One example is the lore slates that we have, these are in slightly hard to reach areas and are a reward for exploration and they contain additional world building elements and should be easy to find in general.

We want to design the level in such a way that the player can see each important area from the very start of the game in one combined vista and there isn't too much travel time but equally that the distance between objectives feels appropriate within the context of the game world. As mentioned, we have already scaled the world size down by approximately half but we intent to make up for this but increasing the planned level of detail that we wish to include in the world.

Art consistency is key too, we have decided to utilize a cel-shaded approach so we must ensure that the assets are in keeping with the visual tone.

## Art / Style

The art style of Crystal Sin is a cell shaded 3D. This style will perfectly fit the fantasy - like world, we



Concept art of the starting village

forwards.

aim to create. Productions that came out not only in recent years, but also over a decade ago prove, that this is a good stylistic choice, looking fresh and colourful, even years after the release.

We made a short list of inspirations, when it comes to art style, those being mainly "The Legend of Zelda Breath of the Wild" (Nintendo 2017), "Genshin Impact" (miHoYo 2020), "Sable" (Shedworks, 2021) and "Prince of Persia" (Ubisoft, 2008). We also investigated Studio Ghibli movies, which also always create beautiful worlds. We believe that using this stylistic choice, we will be able to create a visually attractive final product, that will not only will be nice to play, but also visually pleasing. From a technical point of view this means that we don't have to aim for a very realistic look and can keep things stylised/ lower poly to help with the performance and the overall artist workloads going

## Assets

## 3D models

Since we chose our game to be 3D, we had to work on the 3D models. First, we considered which 3D models we need. The obvious one was the player character, beside that we also needed NPC models, weapons, as well as enemies, and props to fill the world.

All the 3D models needed for the game will be created using Autodesk Maya 2022 and Blender and checked with the game/technical designer to ensure they all work correctly within the engine and aren't overly performance heavy.

## Characters

The characters being a nomadic tribe, had to be created having this aesthetic in mind, also making sure that the design points out the fact that all the characters belong to one tribe. We needed a variety of sketches for both player character and NPS.

Player character was agreed to be a woman, but still while designing what was needed to be kept in mind was that she still fights using sword – so the decision was made for her to have tied hair, and mostly simple clothing in which it is easy to move around.







Sketches of NPC characters

The base models for the character would be made using Autodesk Maya 2022, on which the details would be added by sculpting in Blender. While modelling, main detail to remember about is right topology, so all the models would deform well while moving. This means adding extra edge loops in each area when the character bends, such as knees and elbows. Also adding the right level of detail on the face.



Base model of the character

## Weapons – sword

The player weapon will be a Nullblade, a sword with energy inside it, that has graphical elements to

The sculpted model will be later brought back

The diffuse maps will be painted using photoshop, it should be enough since the maps will mostly have only minor details. To keep the detail from the sculpted model, the normal texture maps will be baked. By doing so, even though the models will be kept quite low poly, still will be able to maintain high level of details.

into Maya for retopology.

show both the energy type and the charge level - this keeps with our intention to avoid showing player data on a heads-up display.

## Enemies

Railen is the antagonist, a humanoid in armour. There are several generic creature enemies. There is also the intention to have some robotic enemies, this is to show that the corruption is not limited to organic hosts. The final enemy is the Custodian, a large mechanical enemy that serves as the final boss. This boss will be powered with cardinal energy, uses a cone blast attack, and a spinning movement. The custodian in the narrative will be shielded by the cardinal harness – the player must disable the cardinal harness before damaging the Custodian.

## Props

Props are important part of the world – this is what fills it, so it would not be dead and empty.

While creating the props we must remember about one of the main elements of the world building – the world is corrupted. Which results in various crystalline formations being scattered around the world, and crystals covering the objects, such as rocks and old ruins.

Most of the props will not require as high level of details as the characters, so most of them will be created only using Maya 2022, skipping the sculpting part. The ones that will need extra details to be added, will follow the workflow set on characters.



Concept sketch of some props

Simple model of the tree trunk

## Animations

## Character animations

When the characters models will be all finished – modelled, UV unwrapped and textured – they also will be rigged. We plan to use an auto – rigging tool Advanced Skeleton. It is a good rigging tool, compatible with Unreal Engine which is used to make the game. Thanks to this we will save a lot of time and will be able to quickly jump into animation process.

The animations of the NPC's won't be very complicated, mostly involving slight movement while standing, talking animation, eventually a simple walking cycle if needed.

For the player character, more animations will be required. They involve:

- Walking forward and backward
- Running
- Jumping
- Dodging
- Drawing and putting back the sword
- Sword swings
- Taking a hit
- Death/game over

To make sure the animations are successful we need to remember the 12 principles of animation. We also will need references for each movement, which we will record ourselves. This way we will be able to make sure, that all the movements look natural, which we believe will improve the player's impression of the game.

## Monster animations

For the monster creatures, we will have to mostly rig them ourselves, since they will have some unusual shape, which won't allow us to use auto rigging tools. Also, since each monster looks different, we will not be able to copy the rig on another model.

For the monsters, we will need to have their either walking or flying cycle animated, also we will need to make an attack, taking a hit and death animation.

## References:

Diablo, Bloodborne, Breath of the Wild and Dark Spore.

## Controls

As our game has a third person camera angle towards the player's model, the intuitive controls come as to be W – Moving forward, S – Moving backward, A – Moving left, D – Moving right. When it comes to combat, the initial combat would be Attacking – Left mouse button. We are working on mechanics to add variety of moves which later would be mapped to convenient keys for the player.

While controller support is planned it is not the key focus of development, though the game

designer is pushing for support and all inputs will be created in such a way that controller support can be implemented as the project progresses.

## UI, UX, Systems & Options

The UI design we have agreed upon is Diegetic in-world UI, so the player is focused on the game, the character- for example the health is on the sword with minimal on-screen UI elements in game.

Most of the UI elements will be integrated within the models. For instance, the player's sword has bar meters that represents the corruption progress of the sword. The player has a health indicator on their back, keeping the screen as clean as possible – this allows the player to immerse themselves into the environment, and be less distracted by data on the HUD.

It's key to ensure that readability remains a focus throughout development, if at any point the player is lost without a HUD then we should adapt the design to better match.

This also impacts the world design, we don't want the players to feel directionless without a map so strong visual design and level guidance baked into the overworld level will be key.

## Audio

Several music tracks have been written for the game, however, there has not been a consensus to use any of them as yet. The music should be exciting, but not overpowering, and should sit alongside the combat and gameplay audio without overpowering it.

## Analysis

The Crystal Sin is a full featured and complex game, working off some core principles. They are – exploration, puzzle solving, narrative progression, and combat.

## Target Demographic

The game is aimed at 12–24 Year-olds. This is a story rich environment, with the potential for many narratives to come from this base, and this age range will be ideal as a group that has a lot of free time, and typically a group that likes deep gameplay and story driven games. This will be a complex and multi-layered production, that will ensure players are going back for one more mission. The age range ensures that these players will always have brand loyalty, thus allowing for an episodic release schedule and a solid game legacy. We have made accounts in the game name on Reddit, Twitter, YouTube and Facebook with the intention of spreading the word and generating interest. These were chosen as being accessible to this target group.

## Development Plan

We have a team who are all specialists in their area. We have Will on story and narrative, Kamila and Silviya on artwork, modelling and animating, Tobias on project management and sound, Ben on mechanics and level design, and Hristo on mechanics and coding.