



Dreamgear Games Presents

# Sword of the Dead City

Made with Unreal Engine 4

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# Overview

## Concept

- Sword of the Dead City (SotDC) is a side-scrolling action game set in late-edo Japan. The game focuses on fast-paced action and platforming and features a unique look with low-poly PS1-era graphics inspired by traditional Japanese watercolor.

## Core Gameplay Mechanics Overview

- Teleporting to enemies
- Camera encroaches player on repeated attacks
- Player gains new abilities over time
- Metroidvania inspired level design
- Enemies must be stunned, then executed

## Targeted platforms

- Steam (PC)

- Steam is not only the largest digital game distribution platform in the world, allowing us to reach the greatest possible audience, but it is also the platform that is easiest to get a game onto. Unlike consoles, Steam does not monitor games, send them to a marketing team, and try to produce the product, they allow it to be what it is. For our project, where we are aiming for a relatively niche group, console groups would certainly make huge changes to our game that would change what it is.

## Project Scope

### - Time Scale

- Ten weeks
  - 2 Weeks pre-production
  - 6 Weeks production
  - 1 Week post-production

### - 4-person team with outside help

- Kyle Hanselman
  - Lead game/level designer
  - Particle artist
  - Sound designer
  - Prop artist
- Chris Schickler
  - Lead systems designer

- Animator
- Ky Shinkle
  - Lead narrative designer
  - Environment artist
  - Prop artist
  - Particle artist
  - Character artist
- Julie McNamara
  - Texture artist
  - Environment artist
  - Prop artist
  - Character artist
- Outside Help**
  - Aiveen Dunn
    - Voice actor
    - Editor
  - Aaron Minich
    - Composer
  - Austin Rethwisch
    - Animator

## Influences

- Castlevania: Symphony of the Night**
  - Video Game
  - SotN is a well-renowned classic with fun, smooth gameplay, a huge environment to explore, simple puzzles, and a large variety of enemies. If this project were to go on for longer than the allotted ten weeks, we would aim for this game in terms of scale.
- Dishwasher: Vampire Smile**
  - Video Game
  - Dishwasher is an extremely fast and brutal side-scrolling action game. The gameplay here is very similar to what we are looking for with Crimson Bamboo.
- Samurai Champloo**
  - Anime
  - This is an anime that takes place in edo-period Japan with many historical locations and events. However, it is not entirely accurate and takes on a personality of its own, just like this game; it is fun and exciting.
- DOOM 2016**
  - Video Game

- An extremely violent game with very modern mechanics. It also features demons, fast and aggressive combat, and winding level design.

#### **- Mega Man X6**

- Video Game

- Mega Man X6 is an action platformer that has a strong focus on moving quickly through an environment with numerous platforming abilities like double jumps, wall climbing, and a variety of dashes.

#### **- Onimusha**

- Video Game

- Onimusha is a PS2 game featuring a samurai attempting to save the princess from an unknown demon threat. It has similar themes and art style. However, Onimusha is a slow, calculated game with a fix third-person camera, making it play very differently.

#### **- Okami**

- Video Game

- Okami is a very well-known game for its graphical beauty, and we intend to capture that same feeling with Sword of the Dead City. Other than that, the games are very different.

## **Project Description**

### **Quick Description**

Sword of the Dead City is a faced-paced action platformer taking place in a post-apocalyptic Edo Japan; Jin Keishi, a Ronin returned home, must use abilities only he has learned to defeat the Oni and bring peace to his city.

### **Full Description**

Sword of the Dead city is an action platformer that focuses on hack-and-slash combat with a puzzle element. The player will have to use wits, skill, and reflexes to move through the environment and defeat their enemies, the Oni. The players take control of Jin Keishi, a ronin samurai who has been away from home for many years. As he returns, he finds that the whole city has been attacked by mysterious Oni, and must fight his way through to uncover what happened to the city he once abandoned, feeling partly responsible for the tragedy.

The game takes place in an 1850's edo Japan that has become a post-apocalyptic hellscape of fire and monsters. This world is represented through dated Playstation or N64-era graphics with art inspired by traditional Japanese watercolor paintings.

We begin with Jin Keishi leaving the temple where he once trained to look down on a flaming city. He descends through the caves and jungles into the city, learning about what happened between him and his master, but from the point of view of his master. Here he comes across the first of the oni, one who wields a katana, and a powerful floating mask, and he unlocks

his abilities the slide and the dash. This zone takes place largely inside a cave, but also features jungle-like terrain, there are many waterfalls here, but few enemies. This space is used to show the player how the combat and platforming feel without becoming overly complex.

He leaves the base of the cliff of the temple and enters the city gates. He learns about the life of the people here, and what happened to them. He learns the horrible acts of the Oni, and why they have appeared. The city is burning and maze-like, with many monsters, including a new one, an oni who carries a rifle. He also learns the ability to wall jump and teleport here. This is where the game starts to come alive with more complex mapping which requires the player to better blend their platforming and attacks to survive. There will be more enemies on-screen, more complex sequences of platforming to progress, and numerous new obstacles.

Jin Keishi now enters the castle, which has been completely overrun by the Oni. He fights his way up to the top floor by maximizing the use of his many, new talents. It is here that he understands how deeply the corruption ran which caused the appearance of this Oni army. The castle acts somewhat like a level finale, with many enemies and nothing new for the player to learn. They have hopefully mastered their movement by this point and are capable of surviving intense combat whilst platforming.

Finally, he enters the shrine, where he finds peace with himself after defeating what he believes is the last of the Oni forces and finds the last surviving citizens hidden within. This is a very simple area focussed on being beautiful and serene, not combat or platforming. The player will traverse at the end of the level where he will find the last survivors of the city.

## What sets this project apart

- Unique art style
- Puzzle-like combat
- Creative implementation of mechanics
- Willingness to ensure authenticity to PS1 era

## Core Gameplay Mechanics

### - Teleportation Attack

- The player can teleport to attack

The player has the ability to teleport, but only if there is an enemy in the screen space. They will teleport to the nearest enemy and land an attack. They can travel any amount of distance with this move, but can only use it if there is an enemy on screen, and are unable to use it otherwise. This ability will allow players to teleport to areas they could not get to before.

### - Combo Attack

- Successive attacks deal less damage

The more the player lands attacks, the less damage these attacks do, this is a way to discourage players from button mashing their way through the game. Each attack also plays a successive set of animations, much like the combo sets in other games.

#### - Narrowing Vision

- As the player attacks, vision decreases

As the player attacks, the screen gets closer and closer, encouraging more than just button mashing. Excessive attacking will leave the player incapable of seeing around themselves and put them in danger. This will work well with the combo attack system.

#### - Platforming

- The player has many abilities in this regard

From the teleportation, to wall jumping, sliding, dashing, air dashing, double jumping, and ledge grabbing. These abilities will allow the player to quickly and aggressively explore the environment.

The gravity is high, making mistakes quick and sometimes punishing, but this also makes the player feel powerful and aggressive. The wall jump can be done an infinite number of times, allowing the player to scale walls quickly, but can also be used to clear larger gaps. When the player is against a wall and not jumping they latch on and slowly slide down.

The slide covers a large distance and can only be performed when staring in a static position.

The dashes also cover a large distance and can be performed either on the ground or in the air. If quick, the player can also use the dash just before a jump to get significantly increased distance.

#### - Pickups

- Ability and power pickups

Throughout the environment, the player will be able to find many pickups. There are minor pickups such as health, but there are also power pickups which will grant the player permanent upgrades to their abilities like dashing, teleportation, and the wall jump.

# Systems

## Player Systems

### Movement Systems

- Walking / Running

Movement in SOTDC works the same as any traditional Metroidvania title. The player uses the left and right controls to move in that respective direction. By default, the player is always running. The player may hold

down the walk button to move slower, preventing him from falling off of ledges. The player runs about 800uu, and walks at about 150uu. The goal of movement is to feel unnaturally quick. During movement, the player will assume a traditional samurai posture of running with his hand on the hilt of his sword.

- Jumping

Jumping is made to be very fast and fluid in the game. Gravity is set to 8 while holding jump, 18 when releasing jump and falling, with a character mass of 6000, and a jump velocity of 3000. This creates lightning-fast Z movement as the intense gravity fights against intense velocity. Ronin in pop culture are portrayed to be agile, and that's something we want to exaggerate. During the jump, the player will continuously be in a front-flip somersault position until landing. The player can jump roughly 5 meters in the air.

- Wall Jumping

Wall jumping is an important part of the characters abilities. As mentioned prior, Ronin are portrayed as being extremely agile, thus it is fitting that the player can bounce off of walls and climb them. The player will use this ability to scale rooms and thwart foes. Jumping off a wall upwards launches the player at a velocity of  $0/(-)300/2800$ , and jumping off the wall outwards launches the player at velocity of  $0/(-)2000/2800$ . When jumping off a wall, the player will assume a standard jump stance, with one leg extended outward and one leg bent in. Additionally, the player can slide down walls. As long as the player is moving against an adjacent wall, they will reduce their falling velocity to -250. During this slide the player will grind their sandals against the wall with the rest of their body facing the opposite direction.

- Crawling / Sliding

Crawling is currently a placeholder and will be changed to slide and crouch.

- Dashing / Air Dashing

In order to keep the game moving at a fast pace, and continue exaggerating the tropes of Ronin, the player has a dash. When activated on the ground, the player gains a 0.1 second speed boost at a velocity of 3000 that can be used to gain momentum for jumps and strikes. When used in the air, gravity locks at 0 for 0.3 seconds and pushes the player forward at a velocity of 1500. The player can use this to dodge obstacles and land on platforms otherwise impossible to reach. The player will assume a position similar to the wall jump.

- Room Navigation.

Room navigation is done by approaching doors and indicated exits and interacting with them. When this happens, the screen will turn black and move the player to a different area.

## Combat Systems

- Attacking / Comboing

Attacking with your sword deals one damage per swing. The attack button can be pressed as often as desired. The first swing unsheathes the players sword, and every swing thereafter is random. After a short delay without attacking, the player will sheath the sword. Animations will consist of traditional Japanese sword swings as well as sheathing and unsheathing. When attacking during standard jump, the swing will move in one full clockwise revolution. Attacking during other air movement will have a similar effect to standing.

- Teleportation

[Under Development]

- Closing Camera

One of the key features of combat in SOTDC is the camera focus. For each time the player attacks, the camera zooms in slightly closer. This penalizes players for spamming attack, and promotes more careful play. If the player attacks too much too quickly, they will have limited vision of their surroundings. The camera sits at 1500 arm length away, and it loses 100 per attack. The camera will go no closer than 900, and will reset to original state if the player has not attacked for 2 seconds.

- Projectiles

[Under Development]

## Miscellaneous Systems

- Health

The player has 7500 health points. This was inspired by older games and their numerical health systems over the more modern health bars. The number was specifically designed to feel over the top, which goes along with the theme of the game. When the player health reaches 0, the game ends. When the player is hit, the screen will shake indicating damage has been taken. The player will also recoil back in pain. When the player is dead, they will collapse onto the floor. A death screen with a red tinted filter will cover the screen and direct players back to the title.

- Powerups & Pickups

Throughout the game the player will be able to collect different items they can store in their pouch. These include health items and projectile ammo. The player will be able to activate health items any time they choose and ammo will be used as their respective weapons are.

## **Enemy Systems**

### **AI Systems**

- **Combat**

- **Standard Spirit**

The spirit enemy is an enemy whose job is to chase the player and make navigation a challenge. It moves at 20uu/s. The player will take damage when colliding with the enemy, who will deal 375 damage. The spirit can be defeated after taking 2 hits.

- **Advanced Spirit**

The advanced spirit enemy will move at 50uu/s and take 4 hits to defeat.

- **Standard Ronin**

These warriors will chase and attack the player at any cost. In order to defeat them, the player must attack at the same time as the ronin repeatedly until a gap opens up in their defense. At this point, the player should dash forward during their opening and strike. After this is done 3 times, the ronin will fall. The ronin has the same movement properties as the player. The player takes 750 damage from this foe.

- **Advanced Ronin**

[Under Development]

- **Standard Gunman**

The gunman are the ranged enemies of the game. They will aim at the player when in range and constantly fire until their target is dead. They will take 2 hits, but will shrug off the player every time they are damaged. They have a vision range of 1500uu, and will fire 1 shot per second. Bullets travel 2000uu/s. The player takes 500 damage from this foe.

- **Advanced Gunman**

The advanced gunman will fire 3 shots ever second, and take 4 hits to defeat.

- **Titan Enemy**

The titans are the tanks of the game. When they see the player, they will chase the player down and attempt to smash them. They will get close, stop moving, and charge an attack, which is the best time for the player to get out of the way. After the golem attacks he will return to chasing the player. During the chasing phase, the player should repeatedly attack as often as possible, and eventually this enemy will fall. The titan takes 10 hits before being defeated,

and moves at 2000uu. He will pause every 2 seconds to charge his attack. The player takes 1500 damage from this foe.

## Combat Systems

### - Enemy / Player Interaction

Combat in SOTDC has an emphasis on cinematic effect. Every time an enemy is hit, the screen will freeze for 0.2 seconds. When an enemy is killed, the screen will go monochrome with high contrast, and display “Dead” for 0.5 seconds. Every enemy has a “stun” state. When an enemies health reaches 0, they will turn to stone and be briefly frozen. During this time, the player must strike the enemy to destroy it, otherwise they reactivate and must be struck down again.

## Other Systems

### Environment Systems

#### - Environmental Hazards

##### - Fire

[Under Development]

##### - Spirit Fire

[Under Development]

##### - Bamboo

Bamboo is a deadly trap that damages the player upon contact. Bamboo is only a hazard at its ends. When the player comes in contact with its ends, they take 1000 damage. If the player manages to get on the side of the bamboo, they player can slash and destroy the bundle entirely.

##### - Poison Bamboo

Poison Bamboo is instant death when contact is made.

### UI Systems

[Under Development]

## Story

### Game World Backstory

#### History

Edo-period Japan, Oni have taken over a small city north of -Edo (Tokyo) named Kiyokoshi. Rather than being fully post-apocalyptic, the feel is more akin to the beginning of an apocalypse. Player is a Ronin samurai who's returning to his town after an absence of many years. Despite the diminishing role of samurai as warriors in the period, they were still trained as such and dedicated their lives to training under their daimyo, residing within their castle and only receiving pay from them. They were not allowed to own land or have any other source of

income. Many unemployed ronin were left as the government cut down the size of armies due to the general peace within this era- there were more ronin during this period than any other period. During the Edo period, samurai were restricted, and were — above all — forbidden to become employed by another master without their previous master's permission. Long swords were a symbol of the samurai class- no other class could wield them, nor could a ronin after they were dismissed from service.

Within the setting of the game, Hirata Goro's (daimyo of Kiyokoshi) is forced by the government to cut down the size of his army. Jin Keishi, a faceless samurai who dedicated his life to training to protect the city as repentance to the misdeeds of a previous lifetime, was consequently left unemployed and unable to be employed by another master. He left the city entirely in search of a new purpose and to escape the humiliation and ridicule that came along with being a ronin. Despite leaving and no longer being a proper part of the samurai class, he keeps his sword and is unable to return due to the possibility of being apprehended for that.

Unable to find any purpose for his life outside of combat, after years of searching he decides to return unsatisfied to his hometown to live out the rest of his days in acceptance of his new position in life or otherwise face punishment for his actions. If Hirata Goro still lives in Kiyokoshi, he must find him in order to properly resolve things.

## **Game Story**

He returns first to the temple outside of the city for the purpose of entering the zen and praying rooms- preparation for his proper return to the city. However, he finds blood and signs of destruction (slashes on walls, knocked over furniture, broken things, etc). Investigating the temple reveals Oni inside it that the Jin Keishi must fight. The temple serves as a sort of ‘tutorial’ area. There’s power-ups and healing items, explained due to the fact that it was temporarily a sanctuary from the Oni, and movement will be covered in the various rooms of the temple because they offer a wide variety of layouts. Though there’s largely fodder enemies here for the purpose of learning combat, in a few rooms there can be different types of enemies just for the purpose of introducing them, as there will be far more variety later on in the city.

### **- Temple Notes**

One written by Hirata Goro that explains Jin Keishi’s dedication to the army as well as elaborating on his dissatisfaction with life outside of being a samurai. It hints at the actions of his past.

An order from the region to cut down the size of the army and dismiss the samurai- it says that they must return their swords and depart from service.

After leaving the temple he can enter the city proper, which is largely abandoned at this point. Any houses are occupied with nothing but Oni and they’re creating general chaos in the streets. There are no survivors, but there’s evidence that people have evacuated the town-

missing animals and carts, belongings missing from houses like food and clothing. Generally, it seems to be occupied and run by the Oni instead.

### - **City Notes**

A note to the above detailing that the Oni are coming from the demongate in the North-East and that they're attacking due to the folly of the town. It was built geographically wrong, and without the wards against bad luck that would normally exist to protect them. This means the town would have had to rely on the samurai alone for defense against the Oni, but due to not wanting to prepare for an unseen threat, the samurai were all dismissed. The Oni attacked because the town was vulnerable.

An order to gather in the shrine, where there is a sanctuary for survivors. The only way to leave the town will be to move out as a group, because the Oni overwhelm the number of survivors and none of them are combat trained.

Jin Keishi goes to purge the castle of Oni, given most of their defenses are likely there and it will have more healing supplies just as the temple did given it was also a sanctuary before it was overrun. There's only one note at the castle, notes on the entrance that all say to stay away- the survivors have fled the castle because the Oni have taken control of it.

The Oni have a wider variety of ranks in the castle because it's the central location of their 'troops', so to speak. Jin Keishi clears it out before deciding to go to the north-east to close the demon gate, as that must be where they are coming from, even if they are not sure of the reason they're coming through. A note left on a desk in the final room of the castle has more in-depth speculation about this. It seems to have been a coordinated attack from the Oni rather than a matter of punishment or bad luck. The country being so isolated during the time period as well as being at peace lead them to realize it was the optimal time to attack, and this town is the first battle in a larger plan.

The kimon (demon gate) corresponds directionally to the location of the shrine outside the city- north-east. This has the highest concentration of enemies- think a wave system or a boss battle of some kind. He has to destroy the shrine entirely in order to keep more Oni from coming through.

After destroying the shrine (and therefore closing the open kimon) he has to set off to find the survivors of the town based on the notes left back within the city, and beyond that (despite being a ronin and therefore having no real social standing that will enable people to listen to him), he has to warn other cities of impending attacks and the Oni's supposed plans. This is beyond the scope of the level presented here, but at least establishes that it's part of a larger game. One last note at the shrine says that the Jin Keishi's master likely isn't dead because he was leading the evacuation, which means that if the Jin Keishi finds him he can potentially be re-employed due to these circumstances or otherwise restore his honor. The master is the only other named character aside from the main character, at least in this level.

## Oni Story

A type of yokai, which are largely animal based. They typically have animal traits, but Oni in particular are associated with the north-east direction, which corresponds to the “ox-tiger” direction. The Oni’s horns and tiger-pelt clothing are likely derived from this.

Similarly, the north-eastern direction is believed to be bad luck as a result. It’s termed the “kimon” (demon gate) and is the direction through which evil spirits passed. Temples are built facing this direction. Also, Japanese buildings may sometimes have L-shaped indentations at the northeast to ward Oni away. There is also a ‘back gate’ in the south-western direction. Konjin, a kami that is associated with the compass directions, as at its height of power when it is residing at both demon gates (Kimon Konjin). Konjin is said to be violent and is known for delivering curses, leading to its association with the Oni. Within the story of the game the arrival and strength of the Oni could possibly be related to Konjin’s position. In particular, if there are any doors in the northeast corner of a building then that doorway will serve as an entrance for the Oni. These beliefs are deeply rooted in the Shinto religion.

The traditional bean-throwing custom to drive out Oni involves people casting roasted soybeans indoors or out of their homes and shouting: "Oni go out! Blessings come in!"

They inhabit abandoned fortresses (such as the temple and castle in this game) and originally reside in hell. They eat humans, livestock, and alcohol.

Oni are born when truly wicked humans die and end up in one of the many Buddhist Hells, transformed into Oni. They become the ogreish and brutal servants of Great Lord Enma, ruler of Hell, wielding iron clubs with which they crush and destroy humans solely for enjoyment. An Oni’s job is to mete out horrible punishments such as peeling off skin, crushing bones, and other torments too horrible to describe to those who were wicked.

Oni are able to disappear or hide in plain sight.

During the Edo period, the Oni began to retreat from their overall impact on society, at least in comparison to their role during previous periods. While previously they were viewed as a suspicion and a threat even in high-level courts (as high-ranking as the Imperial court), during the Edo period they were only apparent in the literature and superstitions of the common people. Within the game, this would mean that the government of the region did not view the Oni as a threat to the same degree the common people would, and therefore they would not view the city as under any sort of threat (thus leading to the samurai being dismissed).

However, belief of the supernatural was one of the uniting cultural aspects of the Edo period. Evidence suggests that *local* government officials and bureaucrats still

viewed the Oni with wary suspicion. Control was a very large cultural aspect of the Edo period, as it is due to such strict control that peace came to the era. Demons and other supernatural entities, however, couldn't fall under any sort of control (though there are documents that try to claim that Oni would still bow to the shogun), and therefore were viewed with wariness and hatred. Additionally, intellectuals and scholars of the era studied the Oni and therefore devised methods of protection and warding against them.

Some aspects of the general population took to mocking the Oni (something that could incur their wrath, at least within the storyline of the game). They were parodied extensively within the arts.

Another reason the Oni may not have been viewed as a serious threat- and why the samurai may have been dismissed- is because the Oni were not as frightening to the common people as the samurai might have been. With their various regulations, rituals, and privileges, the rigid class system limited people's opportunities. Increasingly distanced from the samurai that supposedly protected them against the demons that weren't truly even considered a genuine threat as much as they were a superstition, the dissonance would have created feelings of unease that would have lead to the distance and eventual dismissal of an army from the town they were protecting.

"Outcasts and performers were confined in certain areas and people's movements and behavior were constantly supervised. Under these circumstances, belief in the existence of Oni became increasingly difficult. For urban residents, Oni were the creatures of literature and art, not an immediate threat to their day-to-day existence, whereas samurai with two swords and various social and political benefits (including the existence to strike down common folk should the need arise) could actually endanger their lives and livelihood." (Noriko T. Reider)

While Oni were once viewed as an indestructible and omnipresent force, as time progressed they were viewed as tangible, and therefore something that could be defeated in combat, as well as something that could be defended against through other means.

## In game Story Elements

### Opening narration

Long ago, at the foot of some mountain, there was a village. The village, Kiyokoshi, was peaceful and prosperous.

A great number of highly skilled samurai protected the land and its people, and their daimyo, Hirata Goro, trained them well.

But the village had been without conflict for so long that the samurai were viewed as unnecessary. Many believed that there was no threat to be protected from. Under strict pressure to reduce the size of his army, the daimyo dismissed nearly all of his samurai.

Faced with great humiliation and ridicule, many of the ronin left the village in exile, forced to forge new paths. All but one returned their sword to the daimyo as they left.

A great number of years later, Jin Keishi returned to Kiyokoshi.

Though he had continued to carry his sword with him, his training was all but forgotten, and life as a ronin was unsatisfying and lonely.

His journey home lasted many weeks, through jungles and caves. He traveled first to the temple he had once trained in, heavy with the guilt of abandoning the city and in search of Hirata Goro...

### **Note 1: (dash ability; temple- on a desk in a study of some kind)**

A great number of samurai have resided in this castle throughout my lifetime of teaching, and yet none have surprised me as greatly as Jin Keishi. Although I was warned against it, his propensity for single-mindedness has only shown itself in his level of resolve. He is entirely dedicated to Kiyokoshi and the people who reside there.

Whatever misdeeds may have followed him into this lifetime, they are not apparent in his demeanor. His dedication to the defense of this city overshadows all else, and though I fear he may one day burden himself with guilt should the city fall to a threat, he has poured a great deal of time into his training. There is no finer warrior in this army, and his agility is entirely unmatched. I will teach him all I can.

One thing is apparent- a man such as this cannot be dismissed from service. Steadfast as he is in finding redemption through his studies, I worry that he will find no other purpose in this lifetime, nor will he be able to fully give it up when he is forced to do so.

### **Note 2: (slide ability; temple- pasted on a wall)**

Hirata Goro, daimyō of Kiyokoshi:

Due to extensive policy changes within recent years, it has become imperative to re-evaluate the state of our region. Following extensive study, it has been determined that Kiyokoshi is under no threat from any source.

As such, maintaining an army is no longer a necessity. We thank them for their service, but it is no longer required.

Any remaining members of your army are to be dismissed immediately. They will receive one final stipend before they leave. Their belongings are to be removed from the castle, and their swords returned.

### **Note 3: (wall jump ability; city- inside a house)**

I have become concerned as of late with the unrest of the kimon that lies in the Northeast region of Kiyokoshi. While I cannot guarantee a present danger at the present time, it alarms me that our city lacks the means through which to protect its people from the Oni.

Whether deliberately or through folly, the town was laid out to circumvent the precautions that would normally defend us from such a threat. Our temple faces the wrong direction. Our homes possess no wards against bad luck. Kiyokoshi is vulnerable.

If all of these protections continue to remain absent, it will fall upon the samurai to defend us from what may emerge from the demon gate.

I am aware that protection against an unseen force is viewed as an unnecessary strain by the people here. The villagers fear the samurai more than they fear something that cannot be proven to be a genuine threat. But should the town become vulnerable, an attack will be eminent. Of this I am certain. Our disbelief and our mockery has sent a clear message to the Oni.

If we lose the protection of the samurai within the years that follow, I fear Kiyokoshi must be abandoned before it is destroyed. Our hubris and distrust will be our downfall.

#### **Note 4: (teleport; city- pasted on a wall)**

Kiyokoshi has fallen! The castle has been overrun! Any remaining survivors should flee to the shrine instead. Approach as close to the gate as you can, and you will be directed to the sanctuary. Please, do not attempt to flee the city- our only chance of survival lies in moving as an organized assembly.

## **Build Notes (What changes were made for this build)**

### **Build 1.08**

- Added castle, city, generic, shrine, and temple props
- Added Shrine and Temple environment models
- Imported various other assets
- Finished temple and city greybox
- “Dead” replaced with a less intrusive kill count at the bottom of the screen.
- Wall sliding now reverses player direction
- Dashing while wall sliding air dashes outward.
- Rifleman shot frequency reduced.
- Inventory system implemented for health items.
- Save game system implemented.
- Fall save removed from slide
- Spirit movement slowed
- Room transitions now automatic
- Teleporter fixed
- Created Enemy spawner/Destroyer
- Player no longer gets stuck on short walls

### **Build 1.10**

- Everything is on fire and we are in hell.

- Numerous bug fixes
- Detailed temple environment
- Completed basic lighting and post processing
- Implemented intro video
- Implemented full UI
- Lowered texture quality significantly to improve PS1 authenticity
- Began city level/environment

## **Build 1.11**

- Fixed room transition, now moves faster and disables gravity
- Fixed room spawner. Enemies no longer respawn while in a room.
- Implemented character models, animations, particle effects (1.09)
- Fixed spirit enemy collisions
- Fixed Gunman collisions
- Added low resolution post processing effect
- Fixed enemy hitboxes
- Added a safeguard to prevent spirit class enemies from floating through walls.
- Rebuilt the teleport function.
- Tweaked enemy behavior
- Improved bamboo trap
- Added UI elements
- Turned on Save function
- Adjusted player controls
- General bug fixes
- Continued to expand the game world, mostly the city level

## **Build 1.12**

- Finalized levels
- Placed enemies, pickups, power ups, obstacles
- Finalized lighting and post processing

# **Playtesting Notes**

## **Build 1.01**

- The character movement feels too floaty
- Crouch must be made into a slide
- Dash is still affected by gravity
- Needs a 4:3 aspect ratio
- Camera goes out of bounds
- Camera lag is too strong
- Camera is too close to character

- Camera close in during attacks is too great
- Jump is half what it needs to be
- Transition between rooms is too long

## **Build 1.05**

- ‘Dead’ is far too distracting on killing enemies
- Dashing while against a wall should automatically move player the opposite direction
- Enemies must stop attacking after player is killed
- Crouch can’t move, slide needs to be implemented
- Look around feels useless, as well as crouch - maybe combine them?
- Time between shots on riflemen is too fast

## **Build 1.07**

- ‘Dead’ is far too distracting on killing enemies
- Dashing while against a wall should automatically move player the opposite direction
- Enemies must stop attacking after player is killed
- Look around feels useless, as well as crouch - maybe combine them?
- Time between shots on riflemen is too fast
- Roll detection is too large
- Work on the finishing move, shorten hold time, work on hit detection
- Cannot pickup health at max
  - Make inventory system for health kits
- Mask, specifically the strong one, moves too fast
- Can’t get player to work in levels outside of player zoo
- Level transitions should happen automatically, not on player use
- Remove fall save on the slide - let the player slide off edges
- Riflemen should stop attacking once the player is beyond off screen
- Enemies are going through walls
- Won’t jump if against short walls
- Teleport is broken, the player will only go to the next room 30% of the time, 30% of the time they don’t go anywhere, 30% of the time they are teleported to a random room.
  - Sometime, the player can hit space anywhere in a room and gets teleported to a random location, usually the last room transition teleport they went through.
- Enemies need to spawn when the player enters the room and despawn when they leave the room.
- Player needs a smaller collision box for platforming

## **Build 1.08**

- Fade between rooms should be instant
- Enemies repeatedly spawn during combat
- Needs menu music implemented

- Consider moving to a 2D side scroller or mimicing that effect.

## Build 1.11

- Using slide makes the player start moving without controls or get stuck and stop moving entirely
- Using room teleports repeatedly in succession sometimes makes them stop working
- Checkpoint system doesn't seem to work- player respawns at start and kill count resets
- Texture gaps in the cave areas

## Build 1.12

- Gunman is invisible and not solid
- Ronin is invisible and not solid
- Spirit repeatedly spawns after the first one is killed
- Bamboo cannot be cut
- Bamboo rooms will damage player on entering
- Checkpoint/save system is broken
- Titan does not spawn
- Music isn't playing (oops)

# Assets Needed

- ~~—~~ Strikethrough means assets is finished and in-engine
- \* means work in progress
  - - means work awaiting another person

## Models

- **Character**
  - o Enemies
    - ~~Fodder (Floating oni mask)~~
    - Ranged Warrior (rifle)
    - Golem (big & bulky)
    - Ronin Warrior (kanabō)
  - o NPC's
    - Generic female
    - Generic male
  - o Protagonist
    - ~~Player Character~~
- **Environment (all pieces MUST be multiples of 5 in scale)**
  - o Castle
    - Paper wall
    - Sliding door
    - Stairs

- Stone wall
  - Tatami floor
  - Wall art x 3
  - Wood beam
  - Wood wall
- City
  - Cobblestone street
  - Cobblestone stairs
  - Floor stilts
  - Home roof
    - Straight
    - Corner
  - Home wall
    - Exterior
      - Bare wood
      - Wood slats
      - Broken
      - Paper window
    - Interior
      - Ceiling Straight
      - Ceiling Angled
  - Wood floor
  - Wood Stairs
- Shrine
  - Concave Shrine Roof
    - Strait
    - Outward Corner
  - Ground
    - 30 degree angle
    - 45 degree angle
    - Flat
  - Large ornate gate
  - Red shrine walls exterior
    - Painted red wood
    - Painted red wood with paper windows
    - Pillar
  - Walls interior
    - Plain wall
    - Wall with window
- Temple
  - Arched bridge
  - Cliff Wall
  - Red wood white painted walls

- Standard
- Window
- Damaged x 2
- Stone Wall
- Temple spire
- Door

## - Props

- Castle
  - Armor rack
  - Cannon
  - Military statue
  - Ornate chair
  - Ornate table
  - Ornate lamp
  - Sitting mat
  - Support beam
  - Weapon rack
- City
  - Cart
  - Barrel
  - Farming plow
  - Sale Stall
  - Signs
    - Hotel
    - Food
  - Small shrine
  - Stove
  - Urn
- Generic
  - Basket
  - Candle
  - Chair
  - Fenee
  - Hay blocks
  - Lamp
  - Shelf
  - Table
  - Bamboo Sticks
  - Various small items
    - Bowl
    - Plate
    - Knife
    - Tea cup

- Tea kettle
- Shrine
  - Fountain
  - Hanging clothes
    - Male gown
    - Female kimono
  - Shrine bell
  - Shrine box
  - Shrine paper
- Temple
  - Torii gate
  - Torii gate small
  - Small Gate
  - Gate Doors
  - Shrine Wall
  - Painting
- Foliage
  - Cherry blossom
  - Maple (red)
  - Pine
  - Shrub
- Item
  - Health kit
  - Power pickup

## Textures

- Character
  - Enemies
    - Fodder (Floating oni mask)
    - Ranged Warrior (rifle)
    - Shield Warrior (big & bulky)
    - Standard Warrior (kanabō)
  - NPC's
    - Generic female
    - Generic male
  - Protagonist
    - Player Character
- Environment
  - Castle
    - Paper wall
    - Sliding door
    - Stairs
    - Stone wall

- Tatami floor
  - Wall art x 3
  - Wood beam
  - Wood wall
- City
  - Cobblestone street
  - Floor stilts
  - Home roof
    - 45 degree angle (slightly curved inward)
    - Flat
  - Home wall
    - Exterior
      - Bare wood
      - Broken
      - Painted white
      - Paper window
    - Interior
      - Bare wood
      - Paper window
      - Ceiling
  - Wood floor
  - Wood stairs
- Shrine
  - Bell tower (background, large)
  - Concave Shrine Roof
    - Strait
    - Outward Corner
  - Ground - Grass, dirt, and stone of each
    - 30 degree angle
    - 45 degree angle
    - Flat
  - Large ornate gate
  - Large wood doors
  - Red shrine walls exterior
    - Painted red wood
    - Painted red wood with paper windows
  - Small Gate
  - Small Gate Doors
  - Shrine Wall
- Temple
  - Arched bridge
  - Cliff Wall
  - Red wood white painted walls

- Broken
  - Damaged
  - Stone Wall
  - Stone ground
  - Temple spire
- Prop
  - Castle
    - Armor rack
    - Cannon
    - Military statue
    - Ornate chair
    - Ornate table
    - Ornate lamp
    - Sitting mat
    - Support beam
    - Weapon rack
  - City
    - Cart
    - Barrel
    - Bunting line
    - Farming plow
    - Sale Stall
    - Signs
      - Hotel
      - Food
      - Small shrine
      - Stove
      - Urn
      - Water well
  - Generic
    - Basket
    - Candle
    - Chair
    - Fence
    - Hay blocks
    - Lamp
    - Shelf
    - Table
    - Bamboo Sticks
    - Various small items
      - Bowl
      - Plate
      - Knife

- Tea cup
  - Tea kettle
- Shrine
  - Fountain
  - Shrine bell
  - Shrine box
  - Shrine paper
  - Hanging clothes
    - Male gown
    - Female kimono
- Temple
  - Torii gate
  - Trees
    - Cherry blossom
    - Maple (red)
    - Pine
  - Shrub
    - Plain
    - White flowers
- Item
  - Health kit (bandages)
  - Power pickup
- 2D Art
  - Backgrounds
    - Forest
    - Lake
    - Mountain
    - Waterfall
    - BG cards (2D images on a flat plane to give the ground something to end on that don't parallax)
      - Trees
      - Buildings
  - Decals
    - Burn mark
    - Blood splatters
      - Dragged
      - Large
      - Medium
      - Pool
      - Small

## Sounds

### - Character

- o Enemy

- Death

- Fodder

- Damaged
    - Impact
    - Movement

- Ranged

- Damaged
    - Impact
    - Rifle shot

- Golem

- Movement
    - Charge
    - Damaged
    - Explode

- Standard

- Attack grunt
    - Damaged
    - Impact

- o Protagonist

- Attack grunts x3

- Bullet impact on sword

- Damage x2

- Dash woosh

- Death

- Draw sword

- Footsteps x2\* each

- Dirt
    - Grass
    - Stone
    - Tatami mats
    - Wood

- Impact

- Jump x2

- Land

- Sheath sword

- Slide

- Swing x3

- Teleport

- End

● Start

- **Environment**

- [Birds chirping](#)
- [Cannon Fire](#)
- [Cicadas](#)
- Music
  - Castle calm
  - Castle combat
  - [City calm](#)
  - City combat
  - [Temple calm](#)
  - Temple combat
  - [Shrine calm](#)
  - Shrine combat
  - Menu
- Temple
  - [Waterfalls](#)
  - [Water running](#)

- **Prop**

- Sliding doors
  - Close
  - Open
- Fire Burning
- Bamboo chopping

- **Item**

- Health kit
  - Ambient ‘glow’
  - Pickup
- Power-up
  - Ambient ‘glow’
  - Pickup

- **Voice**

- [Introduction](#)
- Notes
  - Note 1
  - Note 2
  - Note 3
  - Note 4
- Other

## Particle Effects

- **Character**

- [Blood spray](#)

- Finishing move Chris implementation
  - Standard Chris implementation
- o Slide Dirt
- o Enemy
  - Death smoke
  - Ranged
    - Muzzle flash
    - Muzzle smoke
  - Golem
    - Energy charge
    - Energy burst
  - Standard
    - Attack line
- o Footstep dust
- o Protagonist
  - Dash dust Chris implementation
  - Draw Swing Chris implementation
  - Swing L to R Chris implementation
  - Swing R to L Chris implementation
  - Teleport
    - End
    - Start
- o Sparks Chris implementation
- Environment
  - o Dust in the wind
  - o Falling cherry blossoms
  - o Fire
  - o Fire cinders
  - o Smoke
  - o Splintered wood
- Item
  - o Healing glow
  - o Powerup glow

## Systems

- Character
  - o Enemy
    - Fodder
      - Death
      - Movement
    - Ranged
      - Death

- Movement
  - Attacks
    - Takes Aim
    - Fires
  - Counter
    - Death
    - Movement
    - Attacks
      - Collide
      - Attack
  - Tank
    - Death
    - Movement
    - Attack
    - Charge
- Protagonist
  - Health system
  - Movement
    - Death
    - Jump
    - Run
    - Slide
    - Walk
    - Wall jump
  - Attacks
    - Camera closes on repeated attacks
    - Draw attack
    - Less damage after draw attack
    - Repeating attacks
    - RNG damage
  - Abilities
    - Bullet block
    - Teleport to enemy
      - Cooldown
      - Teleport
- Environment
  - Camera
    - Black outside of current room
    - Camera shifts between rooms
  - Bamboo
    - Harms player
    - Can be cut down
  - Moving Platforms

- Item
  - o Health kit
    - Increases player health
  - o Powerups
    - Give wall jump
    - Give teleport
    - Give Slide

## Animations

- Character
  - o Enemy
    - Fodder
      - Damage
      - Death
      - Move
    - Ranged
      - Aim
      - Damage
      - Death
      - Idle\*
      - Fire
      - Run
    - Shield
      - Attack
      - Block
      - Damage
      - Death
      - Idle\*
      - Walk
    - Standard
      - Attack
      - Damage
      - Death
      - Idle\*
      - Run
  - o Protagonist
    - Attacks
      - Bullet Block
      - Draw and swing
      - Finishing move
      - Sheath sword\*
      - Swing L to R

- ~~Swing R to L~~
- Movement
  - ~~Damage~~
  - ~~Death~~
  - ~~Idle\*~~
  - ~~Jump~~
  - ~~Run~~
  - ~~Slide~~
  - ~~Teleport~~
    - ~~End~~
    - ~~Start~~
  - Throw oil
  - ~~Walk\*~~
  - ~~Wall cling~~
  - ~~Wall jump~~

## User Interface

- Title Menu
  - Start Game
  - Load Game
  - Exit Game
- Pause Menu
  - Unpause
  - Return to Menu
  - Options
  - Exit Game

## Schedule

### Week 1:

Kyle: Research Edo architecture

Ky: Research Oni origin and powers

Chris: Research similar games and mechanics

### Week 2:

Kyle: Complete Level plan and layout, asset list, GDD

Ky: Complete game storyline/lore/various scripts

Chris: Complete base character functionality (speed, jump height, slide, wall jump)

### Week 3:

Kyle: Complete Level grey box and generic assets

Ky: Model main character, finish up all game writing (dialogue, notes, etc.)

Chris: Complete Enemy AI for 2 enemies

Week 4:

Kyle: Work on sounds for character & abilities

Ky: Model and texture 2 enemies (basic & ranged)

Chris: Complete enemy AI for 2 enemies prototype UI/complete

Julie: Model and texture 2 enemies (Fodder & shield)

Week 5:

Kyle: Work on sounds for all enemy types

Ky: Model and texture Temple and Castle buildings

Chris: Character combat abilities (Attacks, teleport attack, finishing move/stun when hit twice from behind)

Julie: Model and texture City and Shrine buildings

Aiveen: Voice over for intro

Week 6:

Kyle: Work on environmental sounds

Ky: Model various Temple assets (charms, benches, stalls, etc.)

Chris: Additional scripting: environments, additional enemies, other attacks

Julie: Model various City assets (carts, stalls, barrels, etc.)

Aiveen: Any additional voicework

Week 7:

Kyle: Place enemies and assets for street and temple locations

Ky: Model various Castle assets (weapons, cannons, etc.)

Chris: Collect additional animations

Julie: Model various Shrine assets (trees, statues, pillars, etc.)

Week 8:

Kyle: Place enemies and assets for castle and temple locations

Ky: Particle effect artwork, polish models that require rework

Austin: Complete all animations

Aaron: Complete all music

Week 9:

Kyle: Complete and implement all particle effects and sounds

Ky: Revisit all writing and polish

Chris: Polish character and enemy movement and abilities

#### Week 10:

Kyle: Bug testing, game polish and ready for presentation

Ky: Bug testing

Chris: Bug testing

## Schedule Updated At Week 5 (Only Work From This)

#### Week 5:

Kyle: Work on sounds for last 2 enemy types, complete environment sounds

Ky: Model 2 other environment sets, complete polished note scripts

Chris: Slide, Finisher, Teleport Abilities

Julie: Texture all available models

Aiveen: Voice over for intro

Aaron: Complete 2 songs

#### Week 6:

Kyle: Complete greybox of temple and city, complete final sounds

Ky: Finish any remaining models or scripts, complete decals

Chris: Environment Objects

Julie: Keep texturing

Aiveen: Voice over for notes

Aaron: Complete 2 songs

#### Week 7:

Kyle: Implement all sounds, greybox city and castle

Ky: Draw up remaining particle effects

Chris: Animations (Import from Mixamo)

Julie: Finish all texturing

Aaron: Complete 2 songs

#### Week 8:

Kyle: Asset placement for temple and city

Ky: Playtest

Chris: Particle Effect & Sound Implementation

Aaron: Finalize all music

#### Week 9:

Kyle: Asset placement for castle and shrine

Ky: Playtest

Chris: Optimizations of All Systems

Week 10:

Kyle: Pack and prepare for final presentation

Ky: Playtest

Chris: Testing

## Work Credits (Who Did What Exactly)

### Aaron Minich

#### Sound Design

- Menu Music
- Temple Music
- City Music
- Shrine Music

### Aiveen Dunn

#### Sound Design

- Voice actor in intro

### Chris Schickler

#### Systems Design (Using Blueprints)

- Jin Keishi movement/abilities/combat
- Spirit enemy movement/combat
- Gunman enemy tracking/combat
- Ronin enemy AI/combat
- Titan enemy AI/combat
- Environment hazards
- Level editor tools
- Jin Keishi animation states/blends (with Mixamo)
- Particle effects
- User Interface and Menus
- Save game system
- Intro FMV

### Ky Shinkle

#### Narrative Design

- Outlined story
- Wrote complete story per level
- Wrote opening script
- Wrote note script

#### Artwork

- Particle effects

## Kyle Hanselman

### Sound Design

- Footsteps
- Enemy attacks, movement, voices, etc.
- Protagonist attacks, movements, abilities, voice, etc.
- Environment ambient sounds

### Artwork

- Player attack particle art
- UI artwork - title, buttons, health bar, etc.
- Model city props
- Model shrine props
- Model temple props
- Model castle props
- Model generic props
- Model scroll pickup
- Model temple environment
- Model shrine environment
- Model city environment
- Fixed player model prepped for rigging and animation

### Level Design

- Greybox temple
- Greybox city

### Game Design

- Created GDD
- Updated GDD weekly
- Organized team and pipeline
- Brainstormed mechanics
- Playtest build 1.01
- Playtest build 1.05
- Playtest build 1.07
- Playtest build 1.10
- Playtest build 1.11

## Julie McNamara

### Artwork

- All in-game texture work

# **Post Mortem**

## **What Worked**

When taking on this project I was well aware that it was ambitious to try and complete something so large in just ten weeks, but I'm not one to shy away from risks, and that certainly worked out. In the end I would say the biggest success of the game is the visuals. The mix of Unreal's great lighting and post process mixed with low-fidelity textures and blocky models makes for a look that's rather refreshing being neither one thing or the other; staying clean and feeling unified. The 3D graphics were also great here, giving a sense of scale that helped tell the story better than a flat, 2D orthographic look would; it allowed me to create more detailed and interesting environments than I could in 2D.

Another successful part of the project was outsourcing some of the work. This allowed the team to focus on their own skills without needing to stretch into other areas where they would be weak and cause the game to fall apart. This combined with the heavy documentation allowed everyone to be focused on their duty as well and know everything that was happening in the game, so they weren't in the dark.

I will also say that a handful of the mechanics were quite successful, though not all of them. The dash was great and gave the character a great sense of agility, the slide felt excellent as well. The screen enclosing on the player also worked, encouraging them to strike carefully instead of mashing the attack button, though I think this could have been stepped up a bit more.

## **What Didn't**

The scale of this project with only a three-person team certainly made it a challenge to make sure everything was tested and worked well; in the end we had to leave a number of mechanics in that didn't work either technically or conceptually, but without them the game felt as though it were missing content density.

One such mechanic was the player's ability to gather their power as they progressed. This mechanic works in a full-scale metroidvania game, but it was horrible in this one. The game was much too short to hide character abilities from the player.

Another mechanic that was technically broken was the teleport, which we never had the opportunity to be bug tested, and when it was added in, it was completely broken and the map had to be changed to accompany the fact that it didn't work.

Overall the largest issue came from within the team, unfortunately. Though at first it seemed like work was being done, halfway through the project I received the assets to find they were unusable for any number of reasons from scale to style, to poor geometry. I was told that modelling wouldn't be a problem for that member, but in the end I, Kyle Hanselman, had to recreate all of the assets. This meant that I had to cut the game in half, didn't have time to play test, couldn't spread the abilities out the way I wanted, couldn't make the game a decent length, couldn't focus on polish and truly detail the environment nicely. This was a big issue that severely hurt the team and our product.

## **What Improvements Should Be Made**

First and foremost, we plan to update the game in the weeks following the turn-in date. These updates/fixes include enemy models and textures, correcting the camera, patching out all of the bugs, and doing another pass on the set dressing potentially with more models than before.

Another improvement that will be made is the abilities will be available to the player from the very beginning, so they have enough time to experience each one before the levels end. I will not be adding the two additional missing levels as I have many other projects lined up to look forward to.

In the future I plan to only choose team mates that I know personally and are both talented and hard workers. As they say, a team is only as strong as the weakest link, and in this case, our weakest link did work at an unacceptably low quality and then, afterwards, didn't do any more work that was assigned to her.

## **What Did We Learn**

I think one of the more important things I learned is how to document, specifically a good way to set up a GDD. Before this, I've never used the table of context system nor have I really had any specific order of content. This time I used some professional reference to make sure that my GDD was easy to access, read, and get around.

I also am really beginning to understand the importance of a large, highly dedicated bug testing team that is devoted to playing the game for hours on end while trying to exploit it or otherwise break the game. Not having that sort of support lead to the Systems designer and I being very surprised in the end to find so many bugs that the game was virtually unplayable. Having one-person playtest, even for three weeks, was simply not enough especially if that person is not dedicated to playing often and constantly reporting bugs.

## **What Will We Do Next Time**

Next time I will make a number of adjustments to how we roll out a game, some of these I have already briefly touched on, here is a list.

- 1) Be less ambitious, make a game that is small but tight and feels great, so it can expand later and still play well, not the other way around.
- 2) Pick specific people who are not only talented and easy to work with but are excited about the project and hard working.
- 3) I will further improve my ability to document a game development process.
- 4) I will spend more time playtesting to make sure the game is perfect before I focus on art and building a large world.