DESIGN DOC FOR
SYMPHONIES OF THE NIGHT
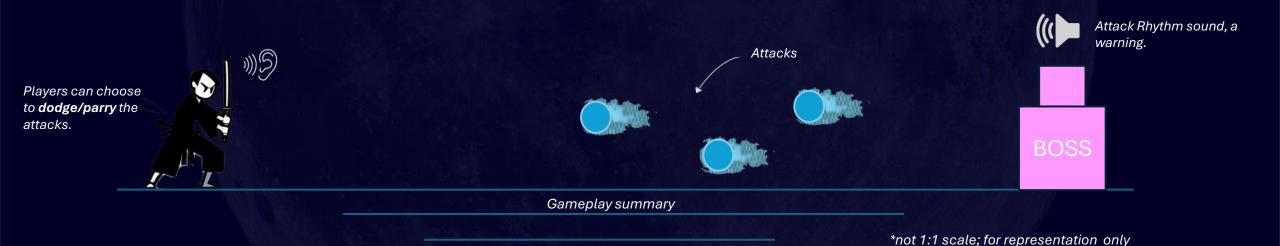
TECHNICAL DESIGN BY **KUSHAGRA BANSAL**

SOUND PRODUCTION BY **YUCHEN LIN**

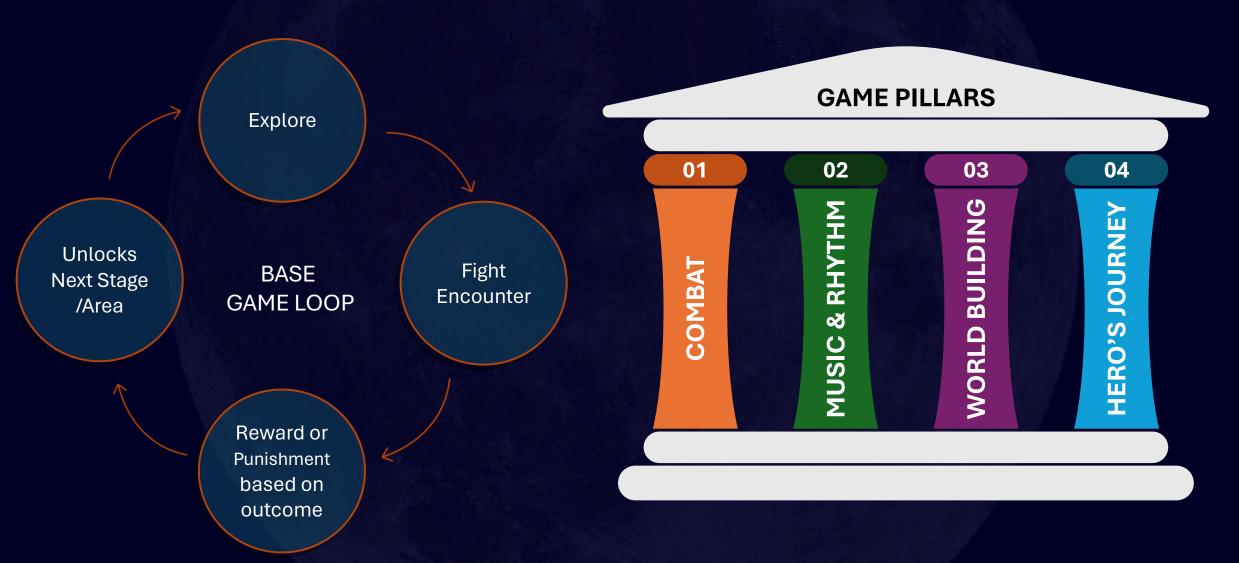# TABLE OF CONTENTS

01. THE ELEVATOR PITCH

HIGH CONCEPT | GAME LOOPS | MOOD BOARDS | TECHNICAL GOALS

Symphonies of the Night is an action-adventure game set in a cross-cultural fantasy world.
The game offers unique melee-combat with an emphasis on parry and deflect. Listen carefully as the sounds might reveal secrets necessary for winning.

Attack Rhythm sound, a warning.

Attacks

*Players can choose to **dodge/parry** the attacks.*

BOSS

Gameplay summary

not 1:1 scale; for representation only

HIGH CONCEPT | GAME LOOPS | MOOD BOARDS | TECHNICAL GOALS

HIGH CONCEPT | GAME LOOPS | MOOD BOARDS | TECHNICAL GOALS
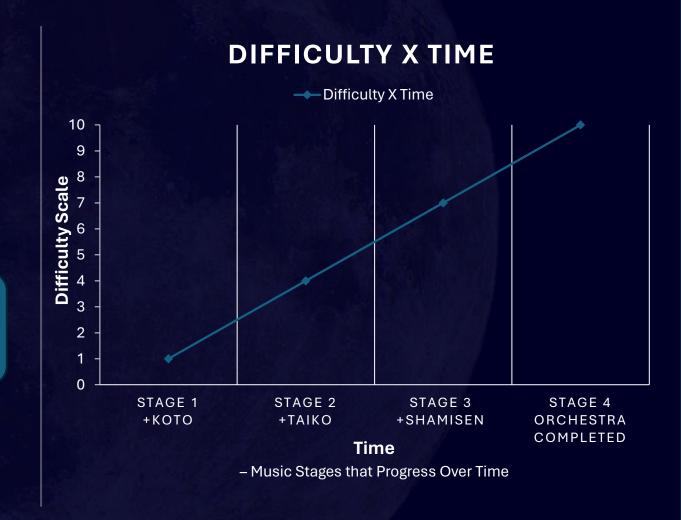
COMBAT DESIGN

ANTICIPATION

Incoming Attack Anticipation

Based on Outcome affects rewards positively/negatively

Player times attacks/block to get perfect parries

REWARD

CHALLENGE

DIFFICULTY X TIME

Difficulty X Time

Difficulty Scale

10
9
8
7
6
5
4
3
2
1
0

| STAGE 1 +KOTO | STAGE 2 +TAIKO | STAGE 3 +SHAMISEN | STAGE 4 ORCHESTRA COMPLETED |

Time

– Music Stages that Progress Over Time

HIGH CONCEPT | GAME LOOPS | **MOOD BOARDS** | TECHNICAL GOALS

The below GIF's showcase media I drew inspiration from to conceptualize the idea.

*Elden Ring – FromSoftware
Fantasy Open Worldbuilding*

*Kung Fu Hustle – Stephen Chow
Musical Action Fights*

*Demon Slayer - Unfotable
Unique Sets and World Building*

*Sekiro: Shadows Die Twice - FromSoftware
Combat and Linear Narrative*

*Sword Art Online Anime – A-1 Pictures
Fantasy RPG Narrative*

HIGH CONCEPT | GAME LOOPS | MOOD BOARDS | **TECHNICAL GOALS**

The Technical Goals of the project include making a semi-realistic open-world, action-adventure game that makes use of Unreal Engine 5 and its provided toolsets such as sequencers, world partition and most notably MetaSounds (that at the time of development was still new December 2023)

ONE BOSS
Making one end to end boss fight with various move sets for the players to fend off against.

GAMEPLAY DRIVEN MUSIC
Gameplay drives Boss Attacks that drives music which provides auditory feedback to player using MetaSounds for its gameplay-blueprint tools.

PARRY-POSTURE SYSTEM
Gameplay drives Boss Attacks that drives music which provides auditory feedback to players.

These are just overall goals that divide into several sub-goals to make the game complete. The list is updated on the go.

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CONCEPT | **IMPLEMENTATION** | SETBACKS | FINAL RESULT

SOUNDTRACK

The style is for the First Boss Mio is Japanese. Music plays an integral role and is a core pillar of the game; every attack that the boss carries out drives corresponding music feedback in the soundtrack.

START				FINISH
0:00s	00:40s	01:15s	01:50s	2:30s

STAGE 1	STAGE 2	STAGE 3	STAGE 4
KOTO ONLY	Taiko + Koto	Shamisen + Taiko + Koto	All Instruments Together

The music is divided into 4 stages each having unique attributes that scale difficulty in-game and bring about additional challenges for the player like Boss Attacks.

The unique attributes are instruments, each stage has an instrument of its own that all come together to complete the orchestra set in the final stage (Stage 4)
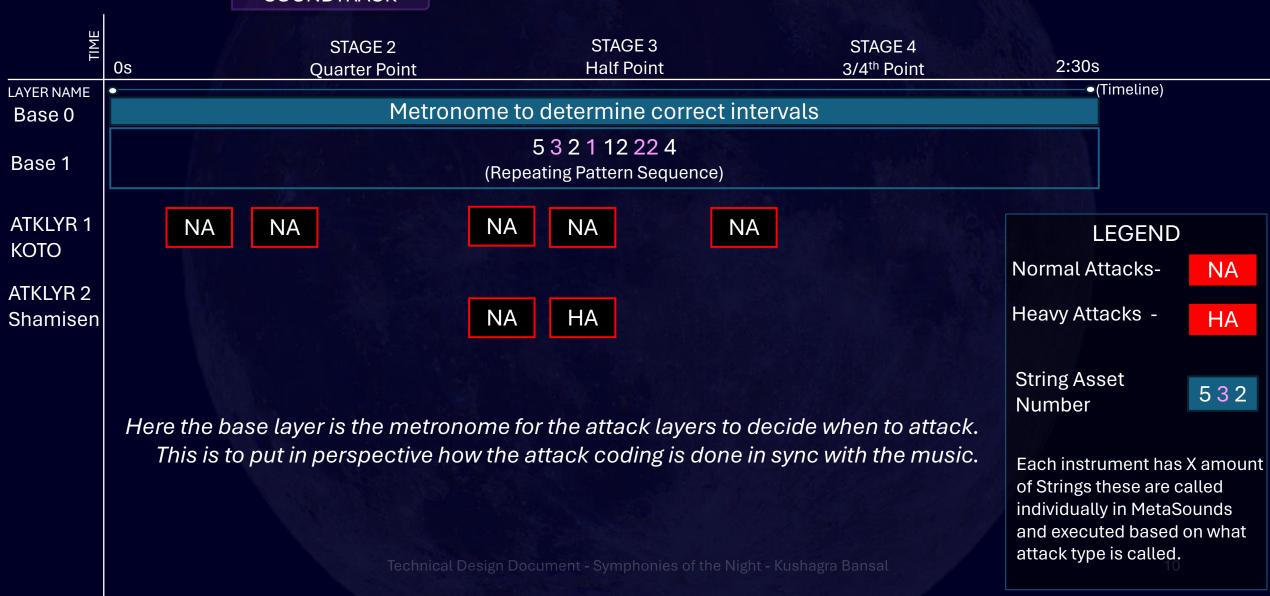
KOTO   TAIKO   SHAMISEN

Instruments that make the music

SOUNDTRACK

TIME		STAGE 2 Quarter Point	STAGE 3 Half Point	STAGE 4 3/4th Point	
	0s				2:30s

●──●(Timeline)

LAYER NAME	
Base 0	Metronome to determine correct intervals
Base 1	5 3 2 1 12 22 4 (Repeating Pattern Sequence)
ATKLYR 1 KOTO	NA NA NA NA NA
ATKLYR 2 Shamisen	NA HA

Here the base layer is the metronome for the attack layers to decide when to attack.
This is to put in perspective how the attack coding is done in sync with the music.

LEGEND

Normal Attacks- NA

Heavy Attacks - HA

String Asset Number   5 3 2

Each instrument has X amount of Strings these are called individually in MetaSounds and executed based on what attack type is called.

CONCEPT | IMPLEMENTATION | SETBACKS | FINAL RESULT

SOUNDTRACK   COMBAT

Fires off instantly when triggered with assigned sound

BOSS

HA

ATTACKS THAT HAVE TAKEN PLACE
Normal Attacks (NA)

Current Time

Current Time (On Overlap Execute Assigned Attack)

ABSOLUTE END

00: 15   2:30

TRACK		
BLYR 1	Metronome to find the correct beats	
BLYR 2	Base Music to support the attack sounds.	
ATK LYR 1	NA NA HA NA	Attacks Executed by AI based on Player Behavior
ATK LYR 2	NA NA	

CHARACTER | CAMERA | CONTROL

- Moves like real-world characters, just with unlimited stamina.
- Primarily only parries
- Can Jump (Upgradable Height)
- Can Run

- Third-Person View
- Looking Directly at the players back
- Has some Elevation
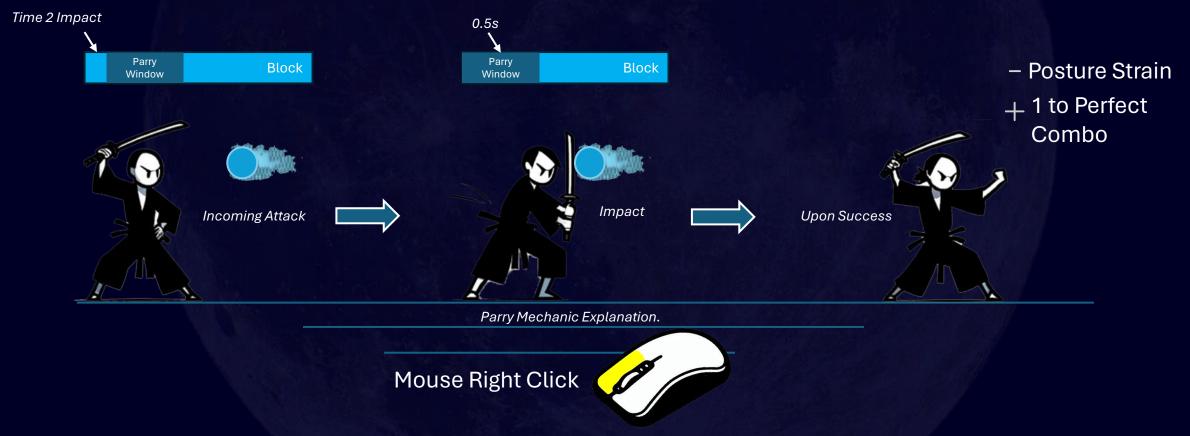
- Omni- Directional Input
- Keyboard And Mouse are Defaults
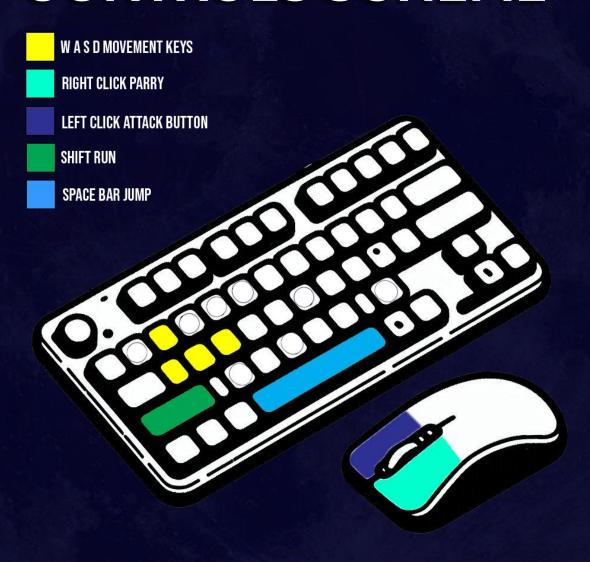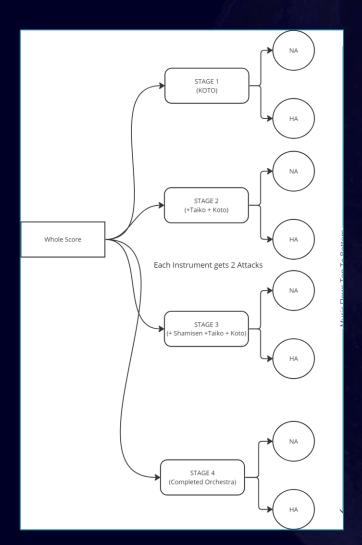- Controller Support is added too.

C. MECHANICS

Mechanics on the World, and character side are quite simple. Starting off with the parry probably THE most important mechanic that the project hinged on.
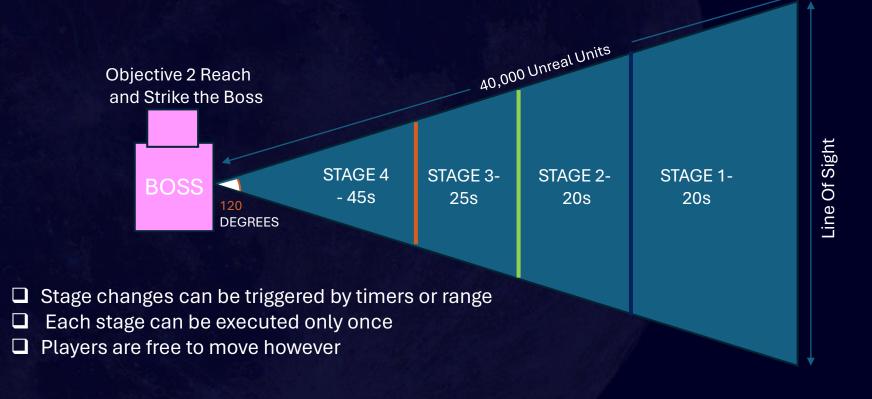

Time 2 Impact

| Parry Window | Block |

0.5s

| Parry Window | Block |

− Posture Strain

+ 1 to Perfect Combo

Incoming Attack

Impact

Upon Success

Parry Mechanic Explanation.

Mouse Right Click

CONTROLS SCHEME

- **W A S D MOVEMENT KEYS**
- **RIGHT CLICK PARRY**
- **LEFT CLICK ATTACK BUTTON**
- **SHIFT RUN**
- **SPACE BAR JUMP**

D. BOSS MECHANICS

ATTACKS & RANGE | KOTO ATKS | TAIKO ATKS | SHAMISEN ATKS

Total 6 Unique Boss Attacks most are projectile based but vary in patterns.

Objective 2 Reach and Strike the Boss

BOSS

120 DEGREES

40,000 Unreal Units

STAGE 4 - 45s

STAGE 3- 25s

STAGE 2- 20s

STAGE 1- 20s

Line Of Sight

Whole Score

STAGE 1 (KOTO)

NA

HA

STAGE 2 (+Taiko + Koto)

NA

HA

Each Instrument gets 2 Attacks

STAGE 3 (+ Shamisen +Taiko + Koto)

NA

HA

STAGE 4 (Completed Orchestra)

NA

HA

☐ Stage changes can be triggered by timers or range
☐ Each stage can be executed only once
☐ Players are free to move however

Aim: To make multiple projectile based attacks and patterns based on harmonies.

Elden Ring: Elden Beast Fight: makes use of projectile attacks.

Elden Ring: Radahn Fight makes use of projectile attacks often from a distance like Mio.
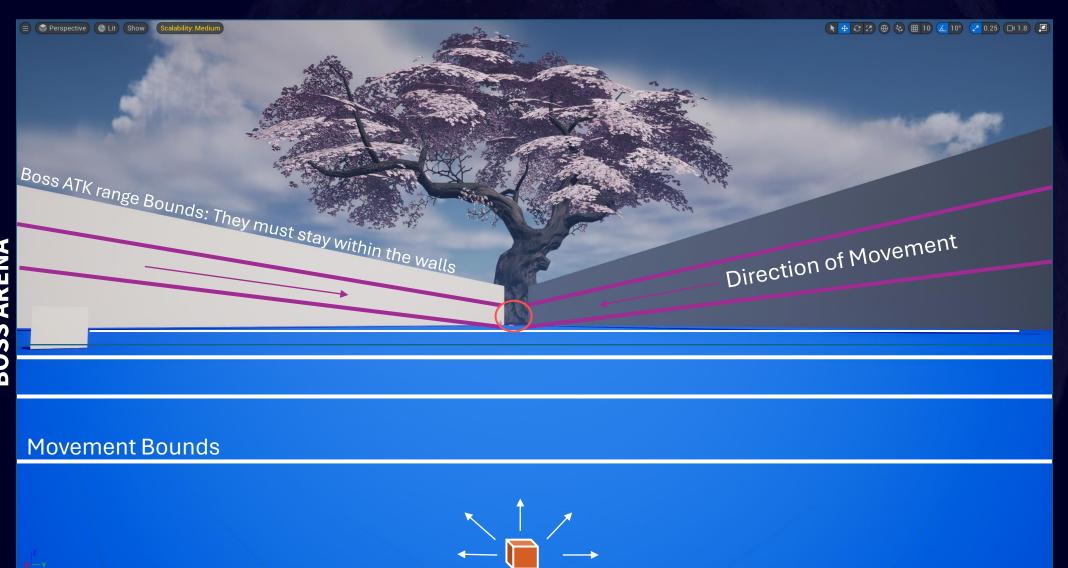
Mio is at a distance from the player and requires the player to move towards the boss; Thus, no melee combat with the boss possible during this time all attacks would have to be ranged and projectile based.

Considerations: Elden Ring has a much slower movement and general speed to doing things compared to games like Sekiro and the ours; This could be another reason why Sekiro has less projectile based attacks.
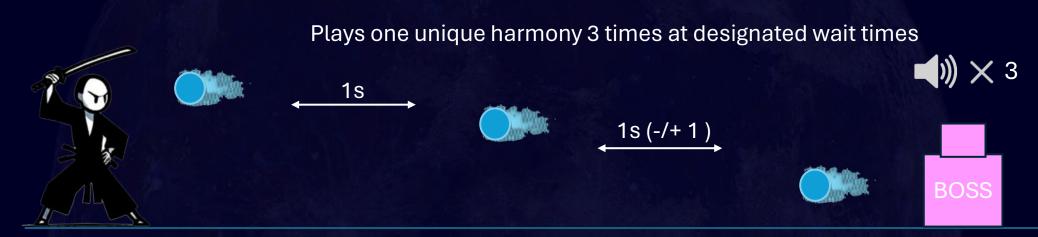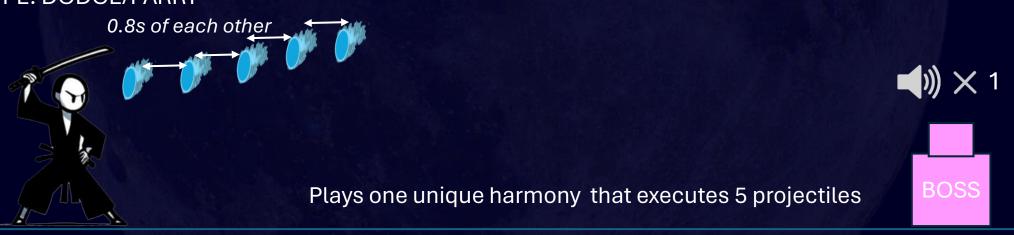
- Player Start

Possible Projectile ATKs:
1. Simple Bullet Style Firings
2. Burst Fire Bullets
3. Getsuga Tensho Vertically and horizontal
4. Barrage Missile style attacks

BOSS ARENA

Boss ATK range Bounds: They must stay within the walls

Direction of Movement

Movement Bounds

NORMAL KOTO ATTACK (NA KOTO)

TYPE: DODGE/PARRY

Plays one unique harmony 3 times at designated wait times

1s

1s (-/+ 1)

🔊 ✕ 3

BOSS

HEAVY KOTO ATTACK (HA KOTO)

TYPE: DODGE/PARRY

0.8s of each other

🔊 ✕ 1

Plays one unique harmony that executes 5 projectiles

BOSS

Taiko is a Japanese Drum. The sounds it makes give the song its bass. Bass often shakes things up with its strong vibrations, thus the attacks. Take the following inspirations:

AOE attacks (Area of Effect) are widely used in games to hit and trap characters in a larger area. These are what we will use for the attack's basis. AOE Impact Style.
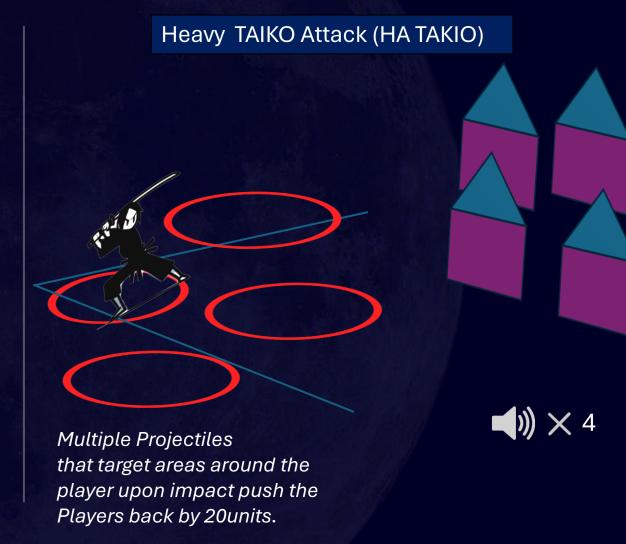
The top image on the right shows a woman (in the anime world a demon) is playing an instrument that on striking the strings teleports targets to desired locations. The sounds will be based off this style.

Bottom Right Image is the use of shamisen for a Zenitsu a character whose domain is lightning. The attacks will make use of shamisen's quick electric like sounds as attacks. Lighting will be the attack on strike.

Bottom Left image is Getsuga Tensho a wave attack with narrow but long range this attack sort of happens in an instant and will b used for the normal attack's players can Parry and dodge this attack and will used to make the players stick to certain areas or Punish them for sticking to corners for too long.
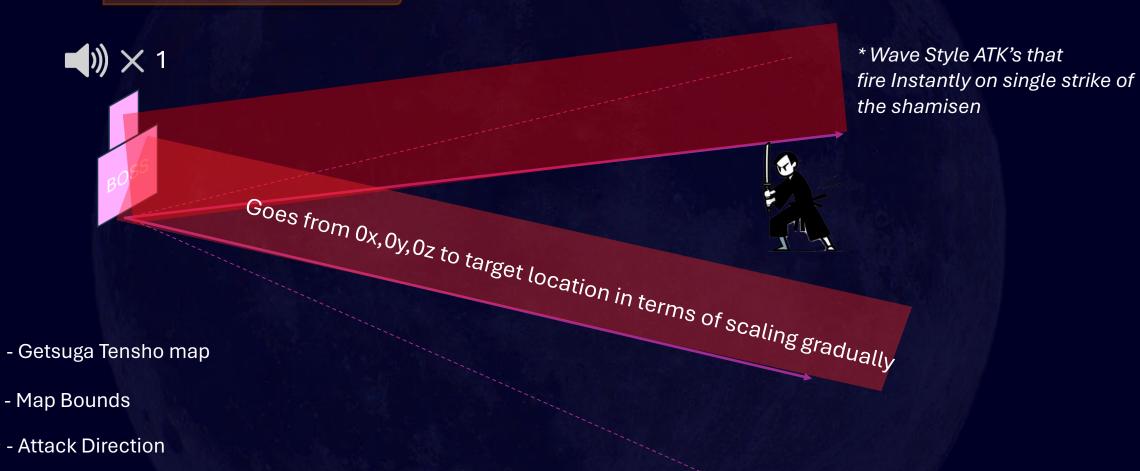

HA

*Biwa instrument/ Demon Slayer Japanese Anime

NA

HA

*Shamisen/ Demon Slayer Japanese Anime

ATTACKS & RANGE | KOTO ATKS | TAIKO ATKS | SHAMISEN ATKS

NORMAL SHAMISEN ATTACK   TYPE: DODGE

🔊 ✕ 1

Wave Style ATK's that fire Instantly on single strike of the shamisen

Goes from 0x,0y,0z to target location in terms of scaling gradually

BOSS

- Getsuga Tensho map

- Map Bounds

- Attack Direction

HEAVY SHAMISEN ATTACK   TYPE: DODGE

WARNING
- ATTACK SOUND PLAYS HERE 🔊 ✕ 1

STRIKE
- ONLY SOUND EFFECTS

1s Delay

20s

✦ Warning Visual   Lightning Strike
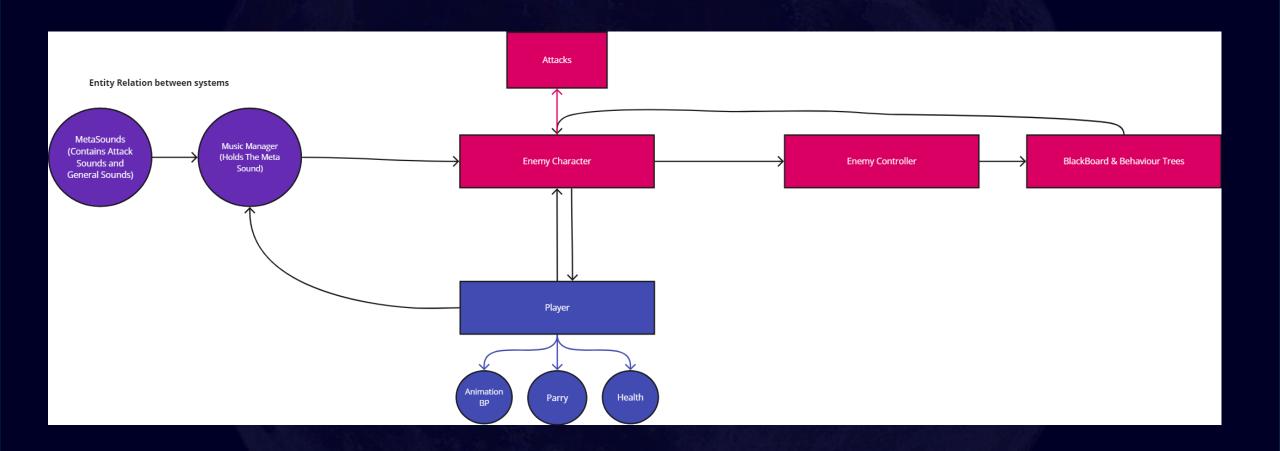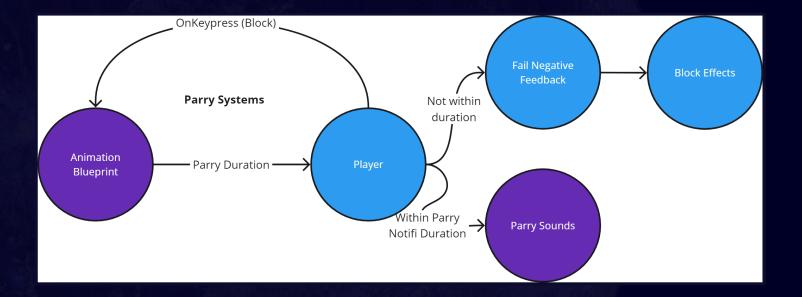
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A. SYSTEMS OVERVIEW

A. CHARACTER SYSTEMS | BOSS SYSTEMS | PROGRESSION SYSTEMS

0.5s this is the animation notify window the player must block the attack within.
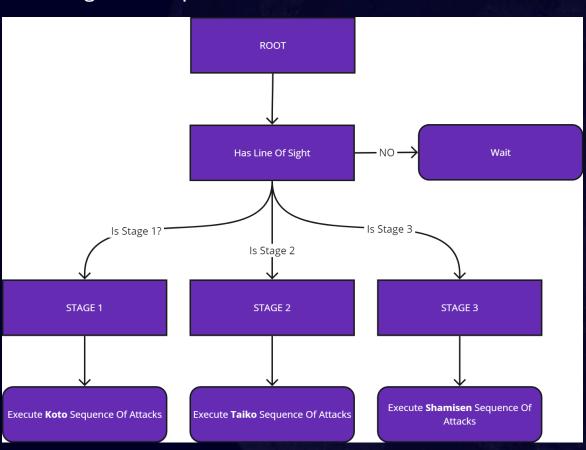
CHARACTER SYSTEMS | BOSS SYSTEMS | PROGRESSION SYSTEMS

AI

AI Design Concept:

Cooldowns and Safety Nets:

STAGE 1 — 2s	STAGE 2 — 17s	STAGE 3 — 30s

Each Stage Sequence can only be activated if the music has reached that stage in its internal manger.
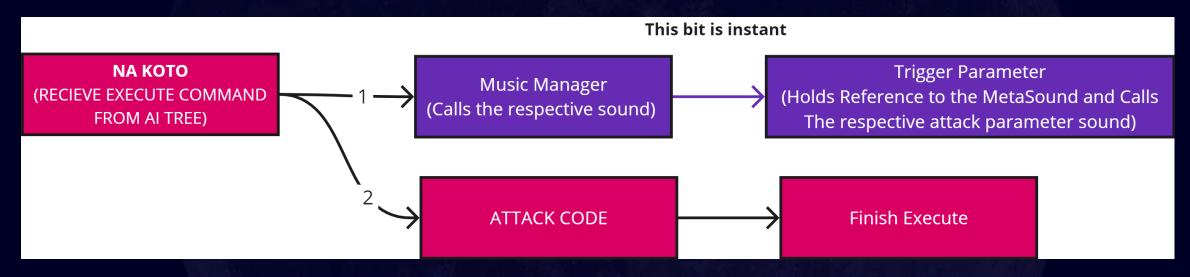
These cooldowns ensure no stage plays too many times especially the heavy ones like Stage 3 where attacks are harder hitting.

AI   SOUNDTRACK

How Attacks and Sounds Work:

This bit is instant

NA KOTO
(RECIEVE EXECUTE COMMAND FROM AI TREE)

1 → Music Manager
(Calls the respective sound)

→ Trigger Parameter
(Holds Reference to the MetaSound and Calls The respective attack parameter sound)
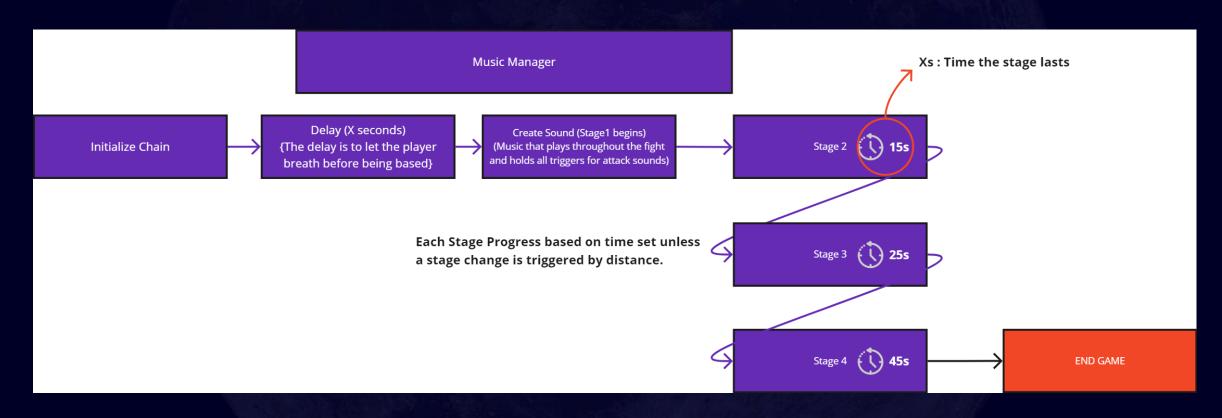
2 → ATTACK CODE → Finish Execute

This is done for all attacks where the sound spawns before the actual attack.

CHARACTER SYSTEMS | BOSS SYSTEMS | PROGRESSION SYSTEMS

AI   SOUNDTRACK

The Music Manager:

Music Manager

Xs : Time the stage lasts

Initialize Chain

Delay (X seconds)
{The delay is to let the player breath before being based}

Create Sound (Stage1 begins)
(Music that plays throughout the fight and holds all triggers for attack sounds)

Stage 2   15s

Each Stage Progress based on time set unless a stage change is triggered by distance.

Stage 3   25s

Stage 4   45s

END GAME

CHARACTER SYSTEMS | BOSS SYSTEMS | PROGRESSION SYSTEMS

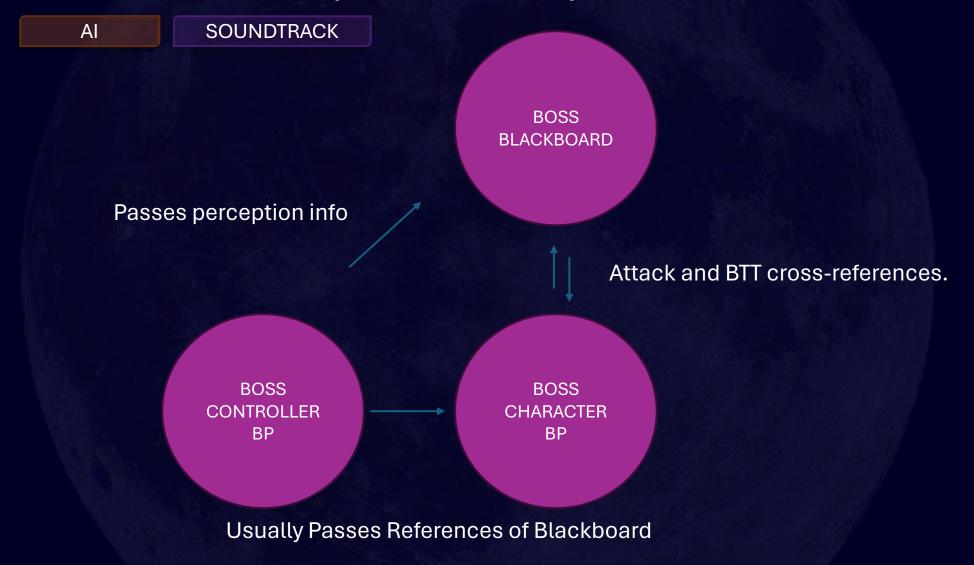AI   SOUNDTRACK

SOUND MANAGER/ STAGE MANAGER

BOSS   METASOUNDS

We make use of event dispatchers to call events within the boss blueprints to trigger Blackboard AI changes
This reduces dependencies on the Boss Blueprint to work its magic.
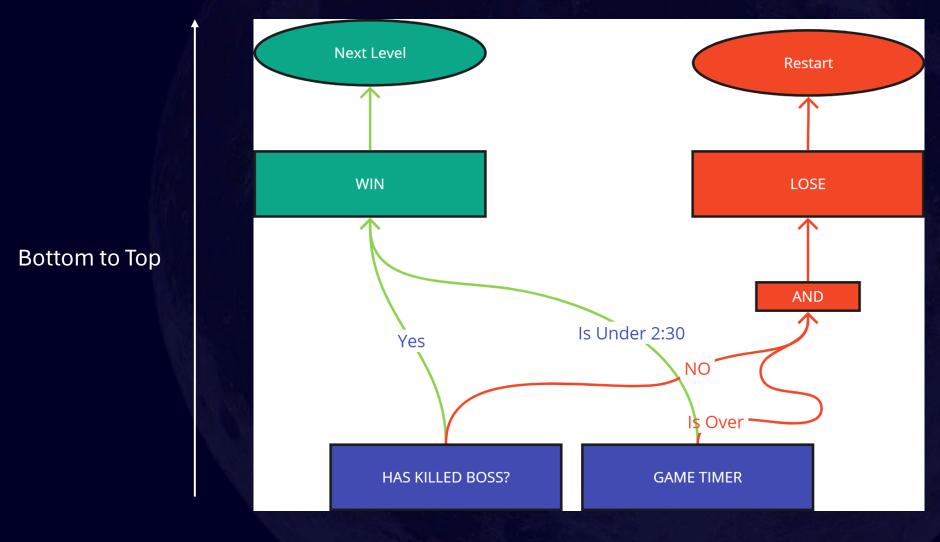
We reference these using techniques used in Quest System Tutorial by Ryan Langley (Veteran YouTube Creator) where a single quest base actor is used as a reference across blueprints.

AI

SOUNDTRACK

BOSS
BLACKBOARD

BOSS
CONTROLLER
BP

BOSS
CHARACTER
BP

Passes perception info

Attack and BTT cross-references.

Usually Passes References of Blackboard

CHARACTER SYSTEMS | BOSS SYSTEMS | PROGRESSION SYSTEMS

AI

SOUNDTRACK

Bottom to Top

05. ART STYLE

324774

071a30

6195cd

d45e24

Semi-realistic, darker tones, blues cooler template.

GAME DESIGN GOALS

Character Customization

NPC
- Humanoid
- Animal
- Unique Classes (Boss, Mob)

Stylized Art
- Elden Ring (Makes use of semi-realistic style)

Instrument Assets

Parry/Posture- Attack System

Transmedia- cultural references

THANKS FOR WATCHING

ANY QUESTIONS ?

Alternatively, you can email me: bansalkushagra13@gmail.com