SKUL: THE HERO SLAYER

Do different types of characters affect the new player's performance?

IDD223-User Research & Testing

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Abstract

In Skul: The Hero Slayer, a rogue-like platformer game, there are over 30 playable characters with different rarities that result in the quality of each character. All of these characters randomly appear during the gameplay, which means the player might not get to play the same character they liked and wanted to play over and over again.

With the way the characters randomly come for the player to play, and how each of them affect the gameplay in different ways. I wanted to see whether Skul: The Hero Slayer's characters affect the player's performance and experience or not. For example, would players start taking risks instead of playing safely when they get a strong character? Or would the player's performance drop when their character changed back to the common one that's not as strong as the one they used before.

Introduction

In many video games nowadays, they have various playable characters for players to play with different experiences. Some of the game might provide the player with different characters just for them to play in different styles. But most games with "randomness" often have different characters with different qualities. By that it means there are certain characters that are hard to get and they can make the game become easier than playing with the common ones.

But even if the game is easy, it doesn't mean every player can play it well.

Still, with the variety of playable characters for players, they should at least be able to do better than how they used to be with those characters that are not strong enough to survive in the late game.

The game I will be testing to research about the new player's performance with different types of characters is Skul: The Hero Slayer. Every character in this game is completely different. I will be gathering data of the player's performance through playtesting. But there will be a method and restrictions in the playtest. As there are also the items in the game that could change the game's difficulty, and the other contents that will make the game too easy.

Literature Review

Skul: The Hero Slayer Analysis

Skul: The Hero Slayer is a 2D roguelike platformer action game developed by Korean-based SouthPAW Games. Skul reverses the fantasy trope of the human hero against the evil monster's army. Skul must save the Demons from the human invaders from Caerleon. [1]

Being a roguelike, Skul: The Hero Slayer generates randomized elements for the player in the fixed theme from the beginning to the end of the gameplay. By that the theme means the map. There are currently 3 maps available. In each map, there will be a different layout of stages which will randomly appear for the player when they enter the stage making them can't predict what's up next, but they can learn and memorize the strategy of each stage after several encounters.

There are more randomized elements than the stage such as the playable characters and the items. These are what could impact the game's difficulty.

Obtaining high rarity characters/items provide much easier usage than the common ones in the gameplay which makes the player's experience not as intense as using the common characters/items. However, it doesn't mean that the player will have a

much easier time playing the game. No matter how good the characters/items they get, it will always involve the player's skill in combat, and that is what would get impacted the most by the characters and items.

Obviously the player would feel powerful for getting a high rarity character in this kind of game, but things won't be as they thought it would. The character might be actually good, but would it fit the player's playstyle? This is what matters. Sometimes things won't go well with the type of character that the player isn't familiar with.

The further the player goes, the harder the game gets. If the player dies in the middle of the stage or completes the whole run, they will have to start all over again as the default character with no items following the roguelike aspect. Which means what the player got from the run will not be available for them to start with on the next time. And that is the loop of the game. Start the run, gain the characters/items randomly, end the run, everything is reset, and start all over again from the beginning.

In conclusion, the random in Skul: The Hero Slayer is the main factor of the player's experience and performance. Getting high rarity characters doesn't mean the player will have an easy time playing or be better at the game. If the character

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doesn't fit the player's playstyle, it's nothing different than using the common

characters in a very hard stage.

Knowing about the characters

To see whether these characters could affect the player's performance or not,

we should know how these characters work first.

The data below is the summarized information of every character in the

game and the unique effect of their types. (The characters in this game are called

Skulls)

Skull Types and their bonus effect

Balance: Magic Attack +20%

Power: Physical Attack +20%

Speed: Critical Hit Chance +10%

Skulls Analysis

Skulls' rarities are divided into: Common, Rare, Unique, Legendary

Balance Type

-Skul (Common)

The initial skull player will be playing as at the start of the game. This skull has moderate damage and survivability with high mobility skills of throwing the skull and teleport to the skull's location. Certain areas that require specific items to access can be entered with this skull's skill instead. It can be used for a long time before getting a new skull.

-Mummy (Common)

A skull with slow movement speed and low damage. Its ranged attack was designed for restraining the enemy with small amounts of damage before delivering a big damage with a high cooldown speed skill. This skull's specialty is its immunity to any trap damage.

-Carleon Recruit (Common)

Carleon Recruit focuses on charging up its basic attack for higher critical chance. However, as its attack requires a little bit of time to charge up, it is not good for playing recklessly.

-Skeleton-Spear (Common)

This skull focuses on dashing moves. With its specialty of dash attack and the skill which enhances dash attack damage, this skull is decent for a hit and run play style.

-Gargoyle (Common)

Gargoyle focuses on fighting mid-air. Its movement and attack speed greatly increase when it's flying. Despite being more powerful mid-air, its movement is quite hard to control.

-Alchemist (Rare)

Alchemist is quite a complicated skull to play. Its basic attack and skill are for harassing the enemy while waiting for the passive skill to activate as its passive is the key for defeating a large group of enemies at once. The passive skill triggers automatically once it's completely charged up, so it requires quite a bit of timing to get into the perfect position to use the passive effectively.

-Glacial Skull (Rare)

This skull focuses on crowd control with its ability to freeze enemies with active, passive skills, and swap skills. This skull focuses on magic damage more than physical damage.

-Hunter (Rare)

A ranged skull with chargeable basic attack. If the arrow is charged, it will pierce through a line of enemies. Despite its good mobility, Hunter is not a good choice for clearing a large group of enemies. This skull also requires quite a patience to play.

-Dark Paladin (Unique)

It's considered to be one of the skulls with the best survivability for having a fine amount of damage and shield generating passive skill. Its skills are also good for clearing a huge wave of enemies too.

-Archmage (Unique)

Archmage is considered to be very hard to use. With its low damage basic attack, and its skills that will only become good after taking a long time to charge with a slower movement and inability to attack while charging, it requires a high skill and experience on this game to use it effectively.

-Grim Reaper (Legendary)

Grim Reaper is by far the best skull for playing through the whole game. With its passive skill of turning the dead enemies into a group of energy balls that follow and attack the surviving enemies and moderate cool down speed skills with great damage and AoE, it can clear each stage with ease.

-Archlich (Legendary)

The existence of Archlich made the balance skull being the first type that has 2 legendary skulls. It is not hard to use it like the other skulls, but it is hard to use its full potential. With the stackable skill of increasing magic damage on each kill, Archlich is quite a powerful skull as it is one of the skulls with the great AoE skills that deal magic damage. But what makes it hard to maintain its power is because each time Archlich takes damage, it will lose half of its damage bonus from the mentioned skill.

Power Type

-Skeleton-Shield (Common)

This skull has quite a low mobility and attack speed. Its damage is fine for a power type. But when it comes to survivability, this skull is a good one to use during the first levels of the game. It has the active and swap skill that instantly generates the shield to block all incoming damage.

-Ent Skull (Common)

This power skull is more likely to focus on using the skill as its basic attack and movement seemed to be more sluggish than the other power skulls. Also because of its skill it has quite a wide AoE and decent damage for clearing a group of enemies.

-Warrior (Rare)

Compared with the other power skulls, Warrior's movement is as slow as Ent Skull. Its skill works the best on a small group of enemies. Its damage is also very high. But this skull requires quite a good timing due to a slow execution on each action.

-Minotaur (Rare)

Minotaur's passive skill decreased its movement speed. But it didn't seem to affect Minotaur much considering the average attack speed and high attack damage. Its skill is also good in AoE, damage, and mobility making Minotaur a fine power skull for a long-time use.

-Jinn (Rare)

Despite being a power skull, Jinn's mobility is quite high, but its attack and skill damage are low for being a power type. However, it's still a decent skull for clearing a big group of enemies.

-Ghoul (Rare)

Ghoul focuses on the basic attack because of its passive of stacking up the physical damage on each kill. Its mobility is low, but its skills can help itself gets close to the enemies quickly and easily.

-Predator (Unique)

Predator is a power skull with good mobility and damage. Its skills are flexible in many situations. It can charge through the huge wave of enemies or focus on dealing the damage one by one and slowly breaking through the wave.

-Berserker (Unique)

Like Ghoul, Berserker's highest DPS comes from its basic attack. Its passive skill helps increase the physical attack depending on how low its HP is. And its active skills also support its basic attack with attack speed increasing buff.

-Living Armor (Unique)

Unlike the other power skulls, Living Armor's damage is magic damage. Its basic attack doesn't deal much damage, but it helps itself triggering the passive skill which greatly enhances its active skills in damage and effects. Its movement is quite slow and will require some concentration to play it.

-Yaksha (Legendary)

Yaksha possesses a high physical attack, skill damage and a large AoE for its skills. Its skills also have a good crowd controlling capability. It's mobility is fine for being a power skull. It also has a passive skill that helps it clear a small group of enemies quickly making it capable of fighting against a large number of enemies too.

Speed Type

-Skeleton-Sword (Common)

Skeleton-Sword has a very high attack speed. Its passive, active and swap skills focus on enhancing its basic attack to be able to inflict continuous damage on the enemy (Bleeding, poison).

-Werewolf (Common)

Werewolf is a perfect skull for hit and run style. Its attack speed is quite high, but its damage will make it take several hits to defeat the enemy. Its skill helps it evade the attack with a very long invincibility frame, but with its great mobility, it can be uncontrollable and run into traps sometimes.

-Rider (Rare)

Rider focuses on movement speed and critical hit. As its movement speed can enhance its critical hit chance. Its mobility is good for being a speed skull, but just like Werewolf, it could run into traps sometimes.

-Clown (Rare)

Clown's damage focuses on poking bit by bit and harassing the enemies with its skill. Its shaky movement on all its actions made it hard to control.

-Skeleton-Bomber (Rare)

Skeleton-Bomber is a one time use skull. Once the player switches to this skull, it takes a short amount of time for itself to commit a self-destruct which deals a great amount of damage. This skull requires good positioning to defeat the enemies easily.

-Rock Star (Rare)

Rock Star is quite a challenge to the player. Players will have to keep attacking the enemies to charge up for triggering the passive skill. Its passive skill rewards the players quite well with a large AoE and continuous damage.

-Ninja (Unique)

Ninja's movement is swift, but when it attacks, its mobility goes down a little bit, making players must be a little careful while attacking. It also has ranged skills for helping it kill the enemies from a far distance that it's not focusing on.

-Samurai (Unique)

Samurai's main damage comes from its passive skill. Each time it landed an attack on the enemy, it would leave a marker on the enemy. If Samurai attacks the marked enemy, it will deal a large amount of damage depending on how many marks have been marked on the enemy.

-Prisoner (Unique)

Prisoner is one of the skulls with the highest flexibility, it has a passive skill that enhances itself randomly between offense or survivability. Its mobility is very high. It has various skills with good capabilities such as long range, crowd control, mobility, damage and AoE.

-Fighter (Legendary)

Fighter is by far the fastest skull of the game. Its skills don't have cooldown, but it consumes the gauge obtained from landing basic attacks on the enemies. If the gauge is full, it will turn into a berserk mode which all of the surroundings will become very slow, while Fighter's movement speed, attack speed and damage greatly increases. Its passive skill also consists of making the Fighter be able to cancel its skill which takes sometimes to charge by dashing.

Player's Performance in Skul: The Hero Slayer

What is performance?

Performance is the accomplishment of a task measured against preset standards of accuracy, completeness, cost, and speed. [2]

Performance analysis (In terms of football player) [3]

Performance analysis is split into 2 main categories, notational and motion analysis. Notational analysis provides records about the position of the ball, the players involved, the action concerned, the time and outcome of the activity.

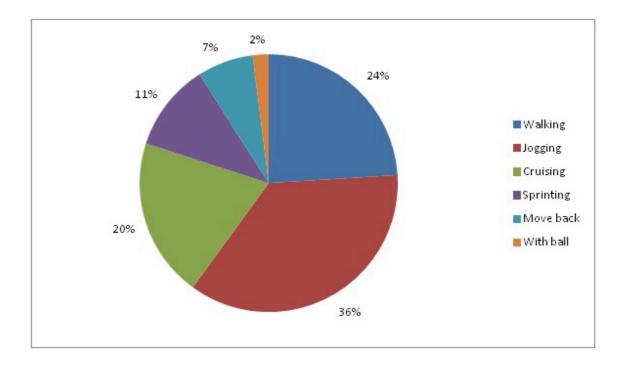
Motion analysis focuses on the features of an individual's activity and movement.

(Identifying fatigue and measuring work rate.)

From the information above, I find the motion analysis being the most applicable player analysis to my project. As it will be focusing on the specific player and their behavior which leads to their performance.

Motion analysis in Football [4]

Apart from the notational analysis, the coach can improve their coaching by knowing more about the motion analysis. Motion analysis is the process of classifying activities according to the intensity of movements. There are 3 elements that should be considered, intensity/quality, duration/distance, and frequency. The activities were coded according to the intensity of movement such as walking, jogging, cruising, and sprinting. With this information, the coach will be able to design specific drills to fit the players in different levels and positions to achieve higher efficiency of improving performance.



What's the performance I define in this game?

1) Average clear time of each room in 1 map.

In Skul: The Hero Slayer, the player will be clearing the room that has enemies inside and claim the reward once it's cleared before moving to the next one. If the player did well in the battle, they could reach the next room in no time.

2) Average HP loss of each room in 1 map.

The amount of HP that the player lost from the battle can define whether the player fought with skills or carelessly charged into the battle, or they might not even be ready to face the enemies yet.

3) The amount of times that the player took damage from the trap.

This tests the player's awareness and skills to overcome the obstacles. Some of them require timing, some require positioning. The performance depends on how they get through the traps and do they get hurt.

4) Player's behavior while playing the game.

The player's behavior/emotion can change their performance of what I listed above. If they panicked, they might have a hard time in the battle. But if they're calm, they can do better for sure.

5) Precise usage of the Skull's abilities

Not only having a Skull with powerful skills is enough. The player must be able to utilize the Skull's specialty in order to use it at its full potential and to clear the stage as fast as possible.

6) The movement

Movement in this game can lead to winning or losing. One wrong position can cause a big punishment to the player. By observing how well they can dodge the attack and travel around the area can also be an information to their performance.

Methodology

Project Topic

To observe the player's performance whether it changes or not by the time they change their character in the game. (Will there be a change to the player when they use the character/type that they're unfamiliar with?)

Pre-test questionnaire (Persona)

- -Target tester's age.
- -Gender.
- -Video game preference.
- -Experience on platformer games.
- -First impression toward Skul: The Hero Slayer. (There will be an image/video in the questionnaire)
- -Which Skull do they think looks strong? And what do they think their chosen Skull will be like. (Given some images of Skulls from different rarities)
- -Interested type of Skull. (Given a list of Skull types and some examples)

How to test?

- -Let the tester play the game on my laptop.
- -Record the video of the gameplay and the tester's expression for a further analysis.
- -Observe the tester and collect the data as much as possible for an answer of the test questions. If there are missing datas, they can be collected by watching the recorded video.

Test method

The method is based on the White Box Method.

- -The amount of testers that I planned is 12. But in case if there wasn't enough time, it would be 6 instead.
- -Each tester will be playing for 3 times with a specific type of Skull. The tester can choose which type they wanted to play in each round, but can't choose the type that they already played again.
- -As the player will always start with the balance Skull, I will allow the tester to use the starter Skull until they find another type that is the specific type of each round.
- -Player won't be able to take all of the items. All legendary rarity items and certain epic rarity items will not be able to pick up as it can change the game's difficulty.
- -No quintessence is allowed.
- -The tester can't take the extra Skull from the castle, but can take 1 item.
- -The time limit of each round is 15 minutes.
- -The tester can heal from any healing source.

Test Questions

Think of the questions that involve the main topic. List out what would lead to the conclusion of the research topic. The test questions will be based on the performance of the game as listed in the literature review.

- -Did the tester clear at least 1 map before the time ran out?
- -What's the average time taken to clear 1 room?
- -How many times has the player healed?
- -What's the average amount of HP that the player lost?
- -Was there any room that the tester could clear without taking damage?
- -Did the tester panicked when they got themselves into trouble?

(Cornered/Running low on HP)

Post-test questionnaire

- -Did the tester enjoy the game?
- -Was the game too hard in the tester's opinion?
- -Did the tester get to use the legendary Skull? If yes, how did they feel playing it?
- -From all types of Skulls, which type does the tester think they can play the game well with?
- -Was there a moment that the tester was about to run out of HP? If yes, how did they feel? And how did they handle that problem?
- -If the tester gets to play again, which Skull do they expect to play as on the next time?

Data Analysis

Observe the player's actions from the playtest and the recorded video, see how frequently did the tester do the specific action such as using skills, heal, get hit by a trap. And find the answers for the test questions

Conclude

After collecting enough data from the playtest, conclude the result of this research topic.

Conclusion (Literature Review)

From the researches about Skul: The Hero Slayer and their characters along with the meaning of the player's performance which I have defined my own, the different types of characters could "possibly" affect the new player's performance.

Looking into the new player's learning curve, if they chose one type of Skull and kept playing that specific Skull of their chosen type, when they tried the other Skulls that are still in the same type, they might have to take some time to get used to them. But if it's the different type from what the new player wasn't playing as before, that curve is reset. They have to learn how this new type works all over again which will result in making them play the game in a way they didn't used to.

Research

Update #01

Questions for a questionnaire before playtesting have been listed in the list below, and the questionnaire has been created (Link below).

https://docs.google.com/forms/d/158YpHHPAWV22qHtAZ5qUHLDj8BYScLp6K tjLreCgwkU/edit?usp=sharing

Pre-Test questions

Persona

- -Name, Age, Gender
- -What's the tester's favorite game?
- -What's the tester's average play time per day?

About the game

- -Has the tester ever heard about Skul: The Hero Slayer before?
- -If the tester has heard about it before, have they ever played it?

-Let the tester watch the game's trailer, and ask them what they think the game would be.

The tester's opinion

-Given 3 images of different types and rarities of Skulls, ask the tester what they think or feel about each of them.

-Given a list of the types of Skull and the type bonuses, ask them which one do they think is the best or interested the most, and why.

-Do the tester think the game will be hard?

What to do next?

-Let the professor check the questionnaire for an approval or suggestions on the questions.

-Start working on the post-test questionnaire and hand out the pre-test one to the target testers once it's ready to be used.

Update #02

Post-test questions have been listed in the list below, and the questionnaire has been created (Link below).

https://docs.google.com/forms/d/1rNfRr9AQ-_ztdTkdwWzmB-qfR36-8phTAhczZbkimgQ/edit

Post-Test questions

- -Name
- -Did the tester enjoy the game?
- -Was the game too hard? And why?
- -Did the tester get to try the legendary skull?
- -From the question above, if yes, how was the experience?
- -From all types of skulls, which type does the player think they can play well with?
- -Ask for a reason of why was the type of skull from the question above their answer.

- -Has the tester ever faced the situation where they're running low on HP?
- -From the question above, if yes, how did the tester feel? And how did they handle that situation?
- -If the tester gets to play this game again, which skull do they expect to play as on the next time? And why? (Answer in the skull's name or type)

Pre-Test questionnaire now got some feedback

Pre-Test questionnaire has been fixed following the professor's suggestion and has been handed out to the target testers, and the feedback has arrived.

Tester #01

Name - Yeen (Thanawat Samarnkatiwat)
Age - 18
Gender - Male
Favorite type of game.
Strategy.
Average time playing games per day.
More than 6 hours.
Has the tester ever heard about Skul: The Hero Slayer before?
Yes.
Has the tester ever played the game before?
No.
Tester's first impression of the game after watching the trailer.
Kind of cool.

The tester's opinion towards the rare skull.

It doesn't really look strong.

The tester's opinion towards the epic skull.

Badass.

The tester's opinion towards the legendary skull.

Looks really cool.

The tester's most interested type of skull.

Speed.

Does the tester think the game will be hard?

Yes.

Tester #02

Name - Paat (Warat Rujirasettakul)

Age - 19

Gender - Male

Favorite type of game.

Platformer, MOBA, RTS

Average time playing games per day.

3-5 hours.

Has the tester ever heard about Skul: The Hero Slayer before?

Yes.

Has the tester ever played the game before?

Yes.

Tester's first impression of the game after watching the trailer.

Pretty cool theme and challenging game.

The tester's opinion towards the rare skull.

Doesn't look strong, just a sword.

The tester's opinion towards the epic skull.

Looks stronger. The weapon is bigger and the face is scarier.

The tester's opinion towards the legendary skull.

It's good. I know.

The tester's most interested type of skull.

Balance, because the skill damage can be destructive.

Does the tester think the game will be hard?

Maybe.

Tester #03

Name - Beam (Supakorn Suwannarit) Age - 20 Gender - Male Favorite type of game. FPS, RTS Average time playing games per day. 1-2 hours. Has the tester ever heard about Skul: The Hero Slayer before? Yes. Has the tester ever played the game before? No.

Tester's first impression of the game after watching the trailer.

Good art style and interesting gameplay mechanics.

The tester's opinion towards the rare skull.

Doesn't look strong.

The tester's opinion towards the epic skull.

Absolutely strong.

The tester's opinion towards the legendary skull.

Probably fast and focus on agility or teleportation.

The tester's most interested type of skull.

Speed, because it seems to be fast.

Does the tester think the game will be hard?

Maybe.

What to do next?

-Let the professor check the Post-Test questionnaire and comment for a suggestion if anything needs fixing.

-Find some time to start the playtesting. (Let the target testers who answered the questionnaire play the game and record the playtesting video)

Update #03

Playtests on every tester have been done and recorded. And the post-test questionnaire has been responded to by the testers.

Responses

Tester #01 (Yeen)

Did you enjoy the game?

Yes.

Was the game too hard for you? And why?

It's not too hard, It seems like there are a lot of things that will be easier to dodge if you know a pattern.

Did you get to use the legendary skull? (Grim Reaper, Yaksha, etc.)

No.

From the question above, if yes, how was your experience playing it?

Got yaksha in the balanced run. Well done.

From all types of skulls, which type do you think you can play the game well with?

Speed.

From your answer above, can you explain why was that your answer?

Easier to dodge.

Have you ever faced the situation where you're running low on HP through the playtest?

Yes.

From the question above, if yes, please describe how you feel. And how did you handle that situation?

I felt kinda fucked. especially since I don't know what I am doing.

Lastly, if you get to play this game again, which skull do you expect to play as on the next time? And why?

I want to play any speed skull. fuck the power type.

Tester #02 (Paat)

Did you enjoy the game?

Yes.

Was the game too hard for you? And why?

No, the game has challenges but you can overcome them.

Did you get to use the legendary skull? (Grim Reaper, Yaksha, etc.)

No.

From the question above, if yes, how was your experience playing it?

-

From all types of skulls, which type do you think you can play the game well with?

Speed.

From your answer above, can you explain why was that your answer?

I got futhest with the least effort with speed skulls.

Have you ever faced the situation where you're running low on HP through the playtest?

No.

From the question above, if yes, please describe how you feel. And how did you handle that situation?

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Lastly, if you get to play this game again, which skull do you expect to play as on the next time? And why?

Speed or balance type.

Tester #03 (Beam)

Did you enjoy the game?

Yes.

Was the game too hard for you? And why?

Not too hard because I can manage to win the first level.

Did you get to use the legendary skull? (Grim Reaper, Yaksha, etc.)

No.

From the question above, if yes, how was your experience playing it?

You forbid using Legendary items.

I only forbid the legendary items, but he got the legendary skull of the wrong type that he chose to play. But this is his answer, so I will take it.

From all types of skulls, which type do you think you can play the game well with?

Speed.

From your answer above, can you explain why was that your answer?

Fast and easy to dodge.

Have you ever faced the situation where you're running low on HP through the playtest?

Yes.

From the question above, if yes, please describe how you feel. And how did you handle that situation?

Shit, I'm probably gonna lose.

Lastly, if you get to play this game again, which skull do you expect to play as on the next time? And why?

Speed because it's fast and I like the agility of it.

Data Analysis

From the recorded videos of playtesting and the questionnaires' responses, these are the important data and analysis that will lead to the conclusion of this research project's topic.

Tester #01 (Yeen)

Important Data from Playtesting

Round 1 (Speed Type)

- -Yeen couldn't utilize the dashing mechanic well in the first round.
- -He took a lot of damage while using the Skeleton Sword skull as it focuses on defeating enemies one by one, and he couldn't dodge well.
- -Even though he often got hit by traps, he still couldn't figure out which part of the environment is the trap.
- -He started to take less damage when he picked up the Rock Star Skull.
- -He beated Yggdrasil in this round. (First stage's boss)

-He took damage almost as often as when he used the Skeleton Sword when he changed from Rock Star to Clown skull.

Round 2 (Power Type)

- -Yeen has been taking a lot of damage through this whole round.
- -He didn't even get to fight Yggdrasil this time.
- -He could barely dodge ranged attacks.

Round 3 (Balance Type)

- -Yeen couldn't dodge well when using the Hunter skull. But he played better with the other skulls.
- -He still couldn't dodge the ranged attacks well.
- -He started dashing a lot when using the Skeleton Spear skull.
- -His mobility increases when using the Alchemist skull.
- -He could almost beat Yggdrasil with the Alchemist skull, but he couldn't dodge the punch move of Yggdrasil.

Performance Analysis

Average Clear Time

Yeen took around 1-2 minutes to clear each room of the first stage. Then it increases to 3 minutes in the second stage.

Trap Avoiding

_____Most of the time he will get hit by traps when he's fighting against the enemies as he was focusing on the enemies and unaware of the environments. But outside of the fight, he avoided most of the traps very well.

Behavior

He learned new things calmly, and he didn't get scared by his first or a few mistakes. However, he often panics when he's facing many enemies at once or running low on HP. He often tried to remain calm as much as possible when fighting against the boss.

Summary

Yeen is the type of the player who likes the speed. His performance increased significantly when he used the speed skulls compared to when he used the power skulls. He got damaged by the enemies, but managed to survive often. However, he was panicked when he ran into unexpected or deadly situations. He was careless enough to take most of the damage from the traps and ranged attacks that he wasn't aware of.

Tester #02 (Paat)

Important Data from Playtesting

Round 1 (Power Type)

- -Paat changed the control into the similar style of the other platformer game he used to play.
- -He almost took no damage when fighting. Especially when facing a large army of enemies.
- -He always made a perfect timing on dashing to avoid attacks.
- -He utilizes the skull switching mechanic and made a combo well.

Round 2 (Balance Type)

-He played in a safer way than rushing into the enemies like when he used the power type. Making him took less damage than before.

Round 3 (Speed Type)

- -He still played well as always.
- -He defeated the Leiana Sisters (second stage's boss).

<u>Extra</u>

-His round always ended because the time ran out. He never died.

Performance Analysis

Average Clear Time

He took around 1-3 minutes to clear each room through the whole playtest.

Trap Avoiding

_____He avoided most of the traps precisely, but sometimes got hit from an accident.

Behavior

_____He always remained calm in every situation no matter how bad the situation was.

Summary

Paat was an experienced platformer game player, and he used to play Skul too. Even though he was an experienced player, I still wanted to do the playtest with him because comparing his performance with the new player would be easy to analyze. His playstyle differs when he uses different types of skull, but his performance didn't change when he used different skulls of the same type. He knew the pattern of the enemies and the bosses well so that he could avoid most of the attacks.

Tester #03 (Beam)

Important Data from Playtesting

Round 1 (Balance Type)

- -He fell into the trap and died. He didn't reach the Yggdrasil boss.
- -He utilized the skull's abilities well, but was mostly unaware of traps.

Round 2 (Power Type)

- -He didn't rush into the enemies like the other testers when they played the power type.
- -He mostly avoids attacks by staying out of the enemy's range instead of dashing through for iframe.
- -He used jump attacks a lot to clear the wave of enemies.
- -He tried so hard to kill the enemies when they're almost dead and he wasn't aware of dodging the incoming attacks.
- -He defeated Yggdrasil.

Round 3 (Speed Type)

- -He barely took damage from any sources through the whole round.
- -He made an accident from dashing and fell into the trap sometimes.
- -He dodged the attacks swiftly and knew when to engage or avoid.

Performance Analysis

Average Clear Time

He took around 2 minutes to clear each room through the whole playtest.

Trap Avoiding

Beam was extra careful when he knew there would be traps in the game. He checked the area around him carefully before engaging, but sometimes got baited into the trap.

Behavior

_____He sometimes panicked when he was surrounded by enemies, but he always found a way to get out alive. Most of the time he remained calm and always aware of the surroundings.

Summary

Beam is the type of player who is very careful of surroundings. His best performance shines when he uses the speed skull. With its mobility, he avoided enemy's attacks swiftly and disengaged at the right time precisely. However, he sometimes fell into a trap from a hardly controllable speed.

Project Conclusion

From the whole research and playtesting, it turns out that the player's performance differs when they use the different types of characters. Not only the new player, even an experienced one's performance also changes as there will always be that one character that the player can use better than the others. The performance doesn't have to be bad to analyze the change, sometimes it was good, then it turned even better when the tester used a specific character.

After testing and analyzing the tester's performance, it turned out that the different rarity of the characters affects the performance a bit. But what's effective on the player's performance the most is the character's type. As mentioned in the literature review, there were 3 types of characters including Balance, Speed, and Power. From all of the playtests, the Speed type was the easiest type to play and the one with the best player performance according to the playtests data and the testers' feedback.

After all, the different types of characters really affect the player's performance depending on the player's playstyle and the characters. Not only in Skul: The Hero Slayer, but in many other games too.

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