Game Feel Design Document

By Jack Slaski

1. Contents

2. Game Feel Analysis

2.1 Vampire Survivors

Vampire Survivors serves as one of the main inspirations for this project as it is a very strong example of how game feel can be achieved through different mechanisms and systems on top of extremely simple game concept. At its heart, *Vampire Survivors* is a relatively simple game with

players having direct, but largely minimal, control over its core mechanic of combat against waves of enemies. Yet even though the formula is so simple, the game consistently invokes a sense of power due to its different audio and visual responses to the players actions and keeping them engaged. This is mainly because of its reliable real time controls. Swink (2008) states that when player movement is highly responsive, consistent, and predictable, it becomes more reliable, which helps to keep players engaged. However, because of the games lack of combat input and complexity, the players ability to be totally expressive is reduced. This means players are forced to focus on positioning rather than intense input actions. I believe having some limited manual abilities could improve the game feel by allowing for more player expression without working against the game's simplicity.

One key game feel aspect that *Vampire Survivors* excels in is the use of simulated space. The game starts of with a wide open environment allowing for lots of freedom and movement. As the game progresses, enemies continuously seek towards the player from all directions which turns the environment from an open space into something alot denser and more claustrophobic. According to Swink (2008), space gains meaning through movement and collision, and *Vampire Survivors* achieves that through the volume of enemies in a compact space rather than through a complex environment. Due to the constant pressure of enemies, there is more purpose of the games movement as players have to constantly move around and reposition to avoid being hit. Although the environment is simple, it works extremely well in this formula. The only suggestion to improve game feel could be to have some environmental features or variations to cause a bit more thought and enjoyment in the movement. This could be weather features, terrain issues such as holes or pits, or even some traps or areas not to walk.

The final area that *Vampire Survivors* excels in is its use of rules and feedback systems. These two ideas really help to improve game feel and strengthen the feelings of both power and progression for players. Surviving for longer and killing more enemies is rewarded with new weapons and weapon upgrades which creates a satisfying progression loop. As the player progresses and their weapons improve, enemies that were threatening at first become far easier to deal with. Further reinforcing the clear sense of power progression and growth of strength. This once again aligns with the ideas of Steve Swink (2008) who believes that rules give value to actions. This means that as the rules surrounding the weapons change, the value of killing enemies also changes. The games polish in areas of feedback also helps to support the idea of good game feel. VFX, damage numbers, coin drop, and sound cues provide detailed levels of feedback for almost every action in the game which helps to make the game feel more rewarding and engaging. However, too many feedback systems could cause confusion and a reduction in visual clarity, yet I feel that *Vampire Survivors* balances this well with no issues in that area. Overall, *Vampire Survivors* is clear proof that strong game feel can be achieved through well-tuned, polished mechanics with good feedback and clear rules without needing complex gameplay features.

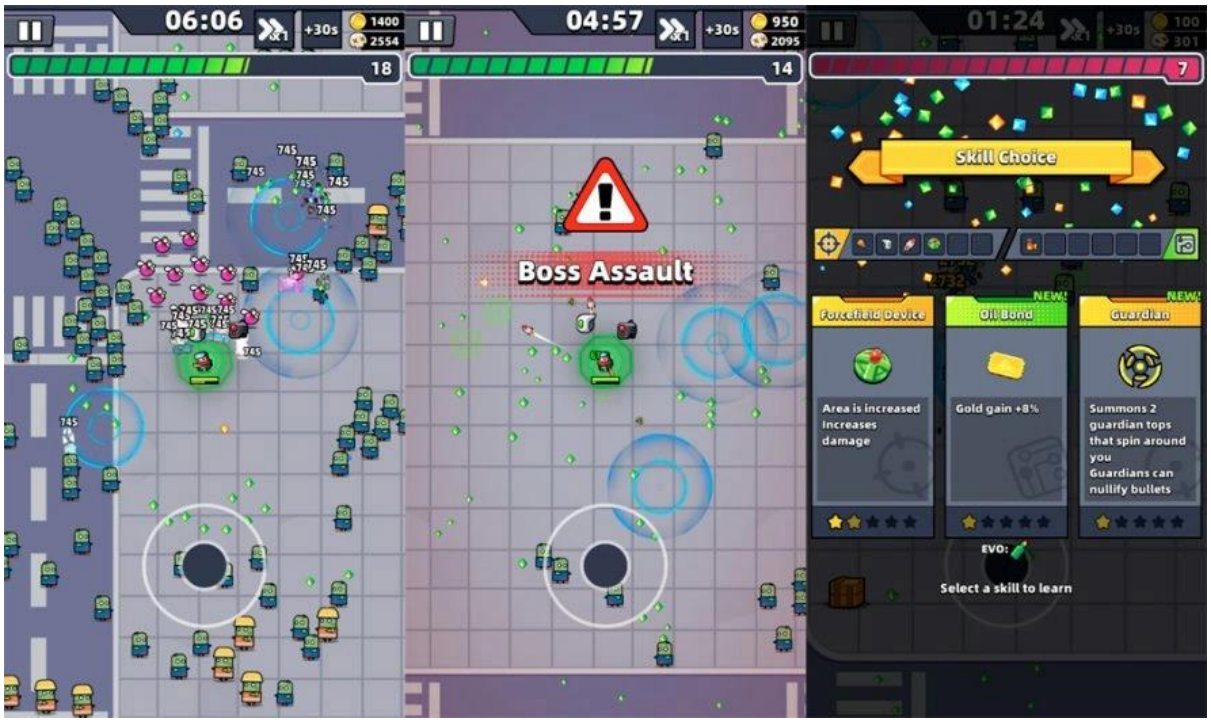
2.2 Survivor.io

Survivor.io is a game that is heavily inspired by *Vampire Survivors*, adopting a very similar structure of movement focused control with waves, levels, automated combat, and survival against waves of enemies that are increasing in difficulty. However, *Survivor.io* does this for a mobile platform, which creates clear differences in the apps game feel. Player input is much more limited as *Survivor.io* only has one joystick, creating a movement system that is far less precise than that of *Vampire Survivor's*. Although movement is less precise, the game has much slower enemy movement and much smaller player hitboxes, balancing out the controls with the difficulty. This style of movement aligns with mobile design expectations as well as helping to make it an accessible game, even though it may slightly reduce the feeling of reliable real time controls.

One way that *Survivor.io* does differs itself from other similar games is through the use of polish and feedback. *Survivor.io* makes good use of both visual and audio feedback to reinforce the power of the character and the games rules and mechanics. This strongly aligns with the ideas of Hicks et al. (2018) who states that "Juicy design refers to the idea that large amounts of audiovisual feedback contribute to a positive player experience." In *Survivor.io* enemy deaths have exaggerated particle effects, screen shakes, visuals with high contrasts, and coin drops, which make even the most minor enemy deaths feel powerful and like they matter. This aligns with the ideas of Ryan (1992) who states that by having strong feedback, simple player inputs can feel much more meaningful and satisfying. Compared to *Vampire Survivors, Survivor.io* puts much more emphasis on visual clarity to ensure that all feedback is visible on smaller screens, adding to the overall polish of the project. This creates a slightly less chaotic, but much more understandable and clear game feel instead.

Finally, in terms of rules and progression, *Survivor.io* is very similar to *Vampire Survivors* by rewarding both survival and enemy kills with new weapons and weapon upgrades being granted often. However, *Survivor.io* does introduce a slightly different run structure with collectables, mini

boss battles, as well as weapon and upgrade synergies which all help to improve player engagement and retention. Overall, *Survivor.io* shows how the same foundation of *Vampire Survivors* can be adapted to different platforms, whilst retaining and possibly improving on areas of game feel. It is clear that this game formula is one that contains lots of game feel and polish.



2.3 League of Legends

League of Legends provides a clear reference of game feel in abilities and projectiles in a top-down game. Unlike the previous two games analysed which used automated combat, *League of Legends* requires much clearer input, timing, choice, and player expression in the ability use system and with abilities being present in my game, this research is highly relevant. The abilities are the main way that players interact with *League of Legends* and they take multiple forms such as projectiles, AOE attacks, targeted spells, or defensive actions with each ability designed carefully to aim to provide solid game feel. This, once again, aligns with Swink's (2008) idea of real time control as abilities react immediately to players input whilst still required some prediction and spatial awareness. Aside from abilities, another feature that is present in both *League of Legends* and my project is the use of projectiles. Multiple of the abilities found in the game use projectiles which all have unique travel times and hit/collision systems, meaning each one requires correct positioning, timing, and use case in order to be effective, rather than just raw damage stats. Ryan (1992) states that expression comes from the relationship between effort and outcome. This can be clearly seen in the abilities present in *League of Legends* as landing difficulty projectile hits can feel much more rewarding to a player as the outcome is a direct result of the player skill and execution of the ability. This contrasts with the first two games where the player often accumulates power passively over time, rather than being earned through skill and input.

League of Legends also manages player expectations well. Abilities are easily communicated to the player with clear animations as well as other visual indicators and sound cues. This allows players to build trust in the abilities and that they will remain reliable and consistent. This helps to support engagement and mastery of the game as players are able to learn the mechanics and systems in detail, with only purposeful and occasional surprises happening while the rest of the game remains

readable. This supports feel and polish as it ensures that rules, context, and player expectations all remain as safe and reliable constants throughout the gameplay, helping to keep players engaged without causing confusion.

Finally, *League of Legends* also makes good use of sound and visual feedback to further reinforce the feel of abilities and projectiles within the game. Collins (2008) states that sound is extremely important in communication useful information. *League of Legends* uses sound information as well as visual and audio cues to signal multiple ability states such as success, failure, power, danger, and cooldowns without leaving the player confused. As these are consistent, the player is able to learn these cues and remain in a state of understanding and engagement the further they get into the game. Combining good sound design with detailed visual effects creates a clear sense of expressiveness and impact. Overall, by analysing *League of Legends,* I am able to gain clear insights into how abilities and projectiles could be designed to be able to feel rewarding and satisfying to use, creating a good sense of game feel and polish.

2.4 Risk of Rain 2

Risk of Rain 2 is a third-person roguelike shooter that has abilities, projectiles, and a 3D stage-based environment. Unlike *Vampire Survivors* and *Survivor.io*, which limits player input largely to just movement, *Risk of Rain 2* allows players to have direct control over combat with both shooting and ability activation down to the player. This allows players to be more expressive with how they move around in and interact with the game and its environment, whilst also allowing for in depth and fast paced gameplay. Once again, this aligns with Swink's (2008) idea of having real-time control as players inputs can result in immediate responses that is consistent and reliable throughout.

Projectile behaviour is a key role that shapes the feel of *Risk of Rain 2*. Multiple of the game's attacks feature projectiles that have visible travel times as well as differing collision and impact responses that needs the player to account for the enemy's movement and distance. As the game progresses, collected items can alter the projectile behaviour introducing things like bouncing projectiles, chaining projectiles, or ones that do AOE damage. This creates a clear sense of progression where not just the stats upgrade, but new behaviours and interactions are also added. According to Swink

(2008), perceived physicality in games is usually gained by how objects interact with the world space, and with *Risk of Rain 2* having these differing projectiles in large environments, this is definitely achieved.

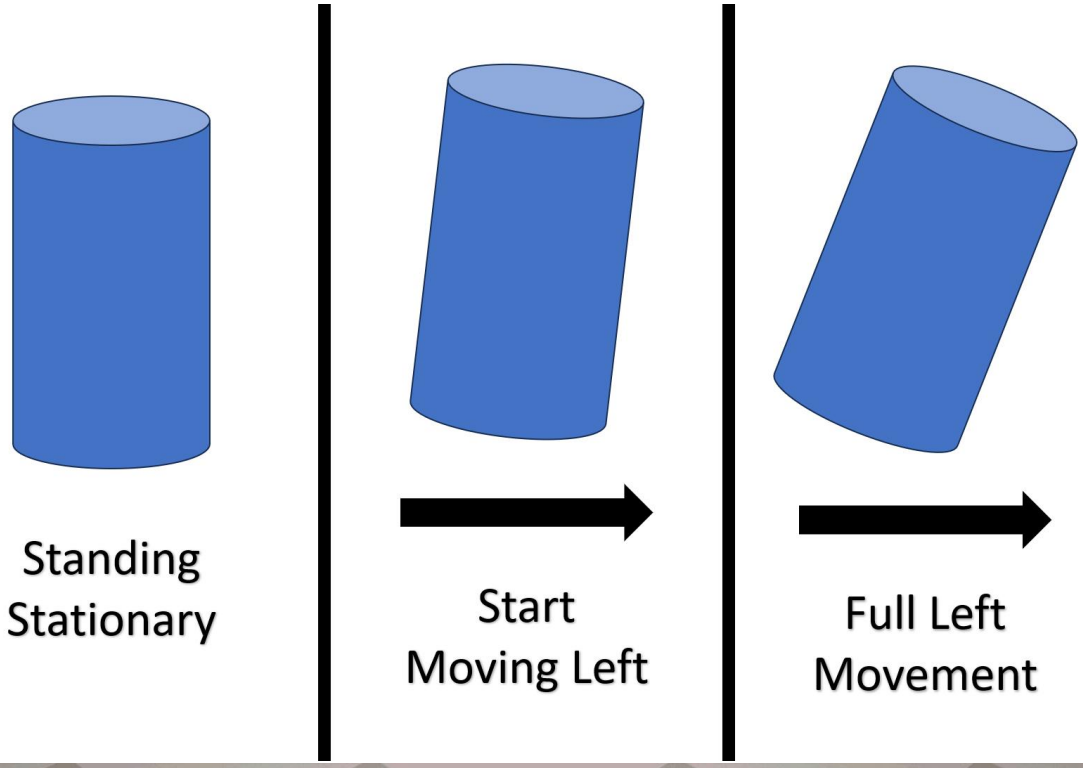
Risk of Rain 2 also has great sound design for the abilities and projectiles. Farnell (2010) states that event based sound design games, where short and responsive sounds are used to confirm a player's action, is extremely important, and *Risk of Rain 2* does this well. *Risk of Rain 2* uses clear audio cues for multiple different events including ability usage, projectile impacts, ability cooldowns, and enemy hits. This is done to ensure that a clear level of feedback is ensured throughout the game, adding the its feel.

Overall, *Risk of Rain 2* shows how ability, projectiles, and good sound design can be used to create game feel through allowing expressive control and meaningful interactions with the world space. All of this is very relevant to how game feel can be achieved in my project.

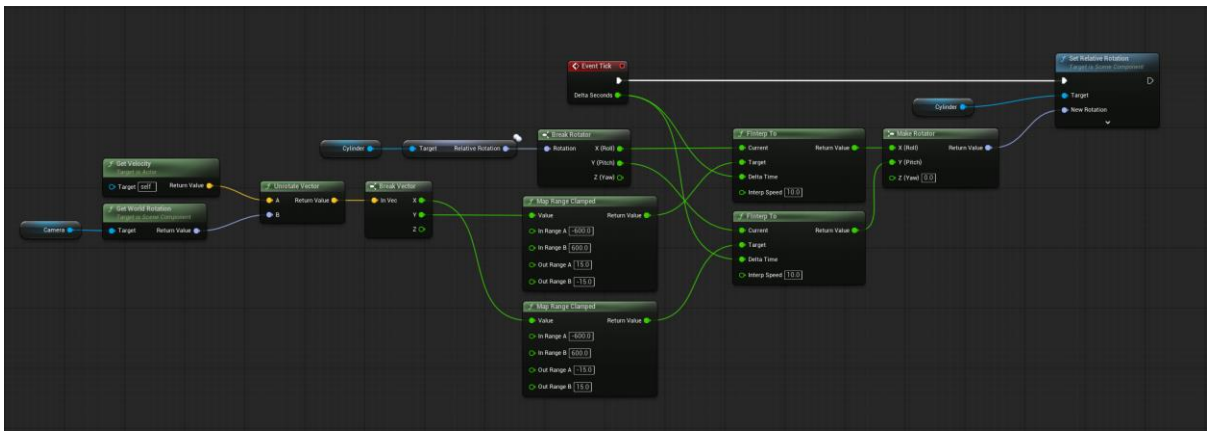
3. Design Justification

3.1 Movement

In terms of game feel, movement was one of the first issues I identified. All game characters initially felt completely static and weightless. Although they moved at believable speeds, the empty environment and lack of limbs for the characters made them seem very ‘floaty’. The lack of any secondary motion mean that the characters seemed to just glide across the environment which completely reduce their perceived physicality. To address this, I introduced momentum/velocity based leaning that tilts all characters in the direction of their movement. This detail helps give the characters a sense of weight, helping to make them feel more grounded in the game world and to give them more perceived physicality as Swink (2008) states that it stems from how objects respond to motion rather than realistic physics simulation. Furthermore, as the leaning is constant and purely visual (not effected the way the characters move), the movement remains predictable and reliable due to its real-time control, ensuring that player expectations are eased with consistent motion.

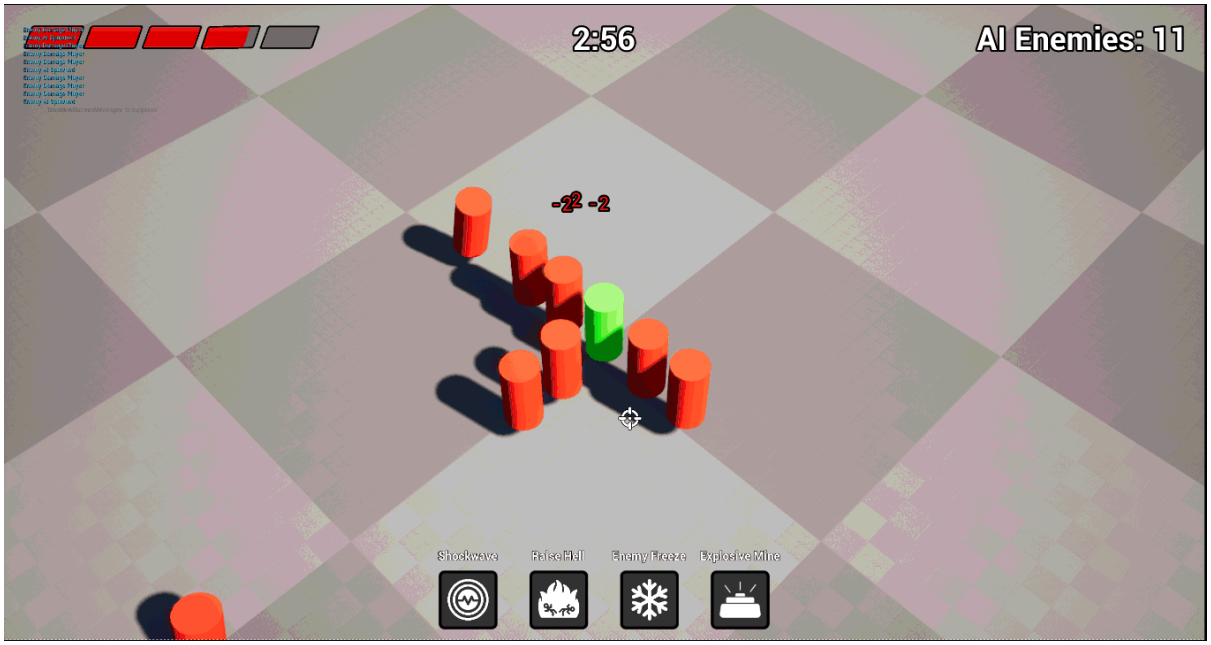

Standing
Stationary
Start
Moving Left
Full Left
Movement

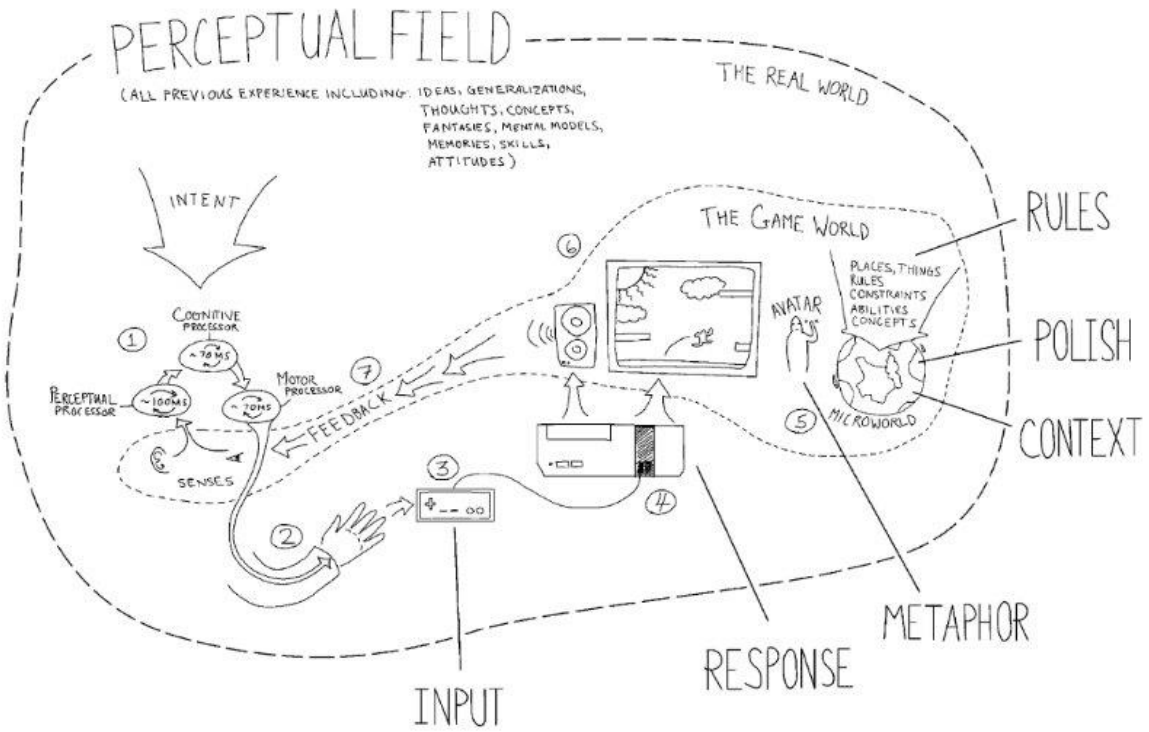

2:52
AI Enemies: 0
Shockwave
Raise Hell
Enemy Freeze
Explosive Mine



3.2 Abilities

Abilities were designed to be one of the main sources of player interaction and satisfaction in the game. There are four AOE abilities in the game being Shockwave, Raise Hell, Enemy Freeze, and Explosive Mine, each designed to affect a large group of enemies and create moments where the player feels very powerful. To ensure this, I made every ability use multiple feedback layers mainly being sound, UI animation, and VFX. Each ability has clear audiovisual elements that show when an ability has been activated, as well as when they can and can't be. This was done based on Hicks et al.'s (2018) description of juiciness in games that states that purposeful audiovisual feedback is key to enhancing player satisfaction. Each ability also includes distinctive differences, whether it be the sound, VFX, UI, or action such as Shockwave throwing back waves of enemies or Enemy Freeze stopping and freezing multiple enemies in place. This is done to ensure clarity and to make it easier to understand the functions of each ability. This is all done in line with Swink's (2008) work that describes polish as non-essential feedback to reinforce physicality, which I believe is achieved with each of these abilities as they all have their unique aspects without altering the core mechanics of the game. Furthermore, to avoid any sensory overloads or confusion within the abilities, each one is given its unique icons, VFX, sound, and style so that they will remain easily readable even when the game becomes chaotic. Overall, this is all done to give the player a greater sense of power ans satisfaction when playing the game.


2:56
AI Enemies: 11
-2 -2
Shockwave
Raise Hell
Enemy Freeze
Explosive Mine


PERCEPTUAL FIELD
(ALL PREVIOUS EXPERIENCE INCLUDING: IDEAS, GENERALIZATIONS, THOUGHTS, CONCEPTS, FANTASIES, MENTAL MODELS, MEMORIES, SKILLS, ATTITUDES)
THE REAL WORLD
INTENT
THE GAME WORLD
RULES
POLISH
CONTEXT
COGNITIVE PROCESSOR
~70MS
PERCEPTUAL PROCESSOR
~100MS
MOTOR PROCESSOR
~70MS
FEEDBACK
SENSES
AVATAR
PLACES, THINGS
RULES
CONSTRAINTS
ABILITIES
CONCEPTS
MICROWORLD
METAPHOR
RESPONSE
INPUT


Shockwave
Raise Hell
Enemy Freeze
Explosive Mine

3.3 Health

The health system was designed to be highly readable, obvious, and constantly present, as to the player, surviving is a core focus of the game. Because of this, I decided to make a modular, segmented health bar that breaks the health into chunks so that it is slightly different to attempt to attract the players attention. Each segment of the health bar has UI animations for when health decreases, as well as when a segment is fully depleted to communicate the damage and health value to the player clearly. In addition to the health bar, damage is further reinforced by layered feedback due to other implemented features such as damage pop ups, damage sounds and other audio cues, and screen effects. For example, when the player drops below 25% health, the remaining segments begin to wobble whilst a red damage glow appears around the screen whilst slowly fading in and out to warn the player, they are close to death. I did this as Hicks et al. (2018) states that explicit feedback and confirmation feedback are essential in improving player awareness which helps to strengthen game feel. Furthermore, Swink (2008) also states that feedback should be both predictable and consistent to help mainting clear feedback and player expectations to allow for informed decision making under pressure. Overall, I believe that this design ensures that health is always clear and readable for the player.

3.4 Combat and Projectiles

Combat and projectile behaviour was designed to reinforce both perceived physicality and spatial interaction. The projectiles fire at high speed which helps to create a sense of power and impact. When they collide, they quickly lose velocity and bounce with far less momentum until falling to the ground and fading out. This bouncing behaviour was intentionally chosen to improve the interaction within the space rather than just having the projectiles hit their target and disappear. This bouncing adds a sense of weight and power to the projectiles that they did not have before. This further links with Swink's (2008) idea that perceived physicality comes from how objects respond within a space, with the objects bouncing and feeling reactive, a real sense of force and weight is achieved. The player is able to better express themselves as they are able to aim using the mouse within a full 360 degree range, following ideas from Ryan (1992) that state that effort is tied to outcome. Power, force, and impact is further reinforced by multiple layers of feedback that include firing and hit sounds, damage numbers, as well as enemy knockback. The projectiles are given a bright emissive blue colour to ensure they are clearly visible even in chaotic moments. Combining all of this allows for an expressive and powerful combat system that still allows for other areas, such as the abilities, to fully shine.

3.5 UI

The user interface in this project was designed to support game feel but without distracting from the gameplay as it is a less important system than much of the gameplay. I added UI animations and sound cues to reinforce many player actions, particularly with regard to abilities and health. These small feedback responses align with Swink's (2008) idea of confirmation feedback. Furthermore, the use of sound in the UI follows the ideas of Collins (2008) who stated that audio in games should provide functional information as well as emotional reinforcement.

3.6 VFX

Visual effects are another key part of this prototype. They were added to help reinforce the ideas of player power, expression, satisfaction, and understanding during combat. After analysing games like *Vampire Survivors* and *Risk of Rain 2*, it was clear that strong enemy death feedback is needed to make killing enemies feel impactful. In my game, when the enemies die, they make a pop sound followed by a burst of red particles, creating an almost balloon popping effect that aims to give the player a clear and satisfying response to their combat skills. As Swink (2008) describes polish as extra feedback that strengthens physical interactions, the VFX in this project helps to sell the idea that abilities and projectiles are powerful and have real force without actually altering of the mechanics or gameplay systems. Furthermore, Hicks et al. (2018) believes that feedback confirmation is important to gain juicy game design, and I believe having VFX helps to achieve this. To avoid overwhelming players and clutter, the effects were kept simple and stylistically similar to the minimalistic direction of the project, making sure that the game remains easily understandable in chaotic moments. Some VFX are also necessary to convey context to the actions. For example, the shockwave VFX is needed to show exactly what is going on, without it, enemies just fly away from the player without much explanation, the addition of the VFX gives justification to what is happening. Overall, the VFX is a crucial element in this project in terms of adding game feel, and without it, the project would seem a lot more lacklustre.

3.7 Sound

Sound was added to this project as a way to reinforce and give feedback to different actions across the game. Combat, ability, UI, and other interactions were all given sound to provide clear layer of audio feedback within the game. Each ability has its own specific sound, along with UI sounds for activation, cooldown finished, and activation errors. Projectiles use two alternating firing sounds that are chosen at random to reduce repetition whilst both players and enemies have damage and death sounds. Collins (2008) states that game audio can be used for both functional and emotional reasons which is achieved in this project as sounds act as confirmation of the players input and combat outcomes. Furthermore, this project also aligns with ideas from Farnell (2010) by having event-based audio that is useful to confirm the players actions without overwhelming them. Overall, the sound design is necessary to adding extra game feel to this project as it helps to give additional feedback and player confirmation responses whilst also providing some satisfaction when paired with the games visual systems.

4. Game Evaluation

Due to time constraints with the project, I have been unable to carry out proper peer playtesting with multiple peers and a survey/questionnaire. However, I have been able to carry out some informal playtesting by getting verbal feedback from some peers as well as the fact that I am already aware of multiple areas in need of improvement that would strengthen the game feel.

One of the most suggested improvements for this game is the addition of some form of camera shake during different events. For both the shockwave and explosive mine events could have cameras shake to emphasise the power and physicality of the explosion. Furthermore, small screen shakes could be added when the player takes damage to reinforce the idea of danger. This would add more weight to the damage making it feel more impactful.

Another frequently suggested improvement is the idea of adding more enemy damage feedback. This could include making enemies flash a slightly brighter colour when they are hit or even adding more knockback to them to strengthen the idea that they are being damaged. Furthermore, this would also make the player feel more powerful due to the projectiles having more impact.

Adding assets and contextualising the game with 3d models and an environment could also help to give the game more perceived physicality and reality. As the game is all default assets without much colour, it can be difficulty to contextualise and perceive the environment. Objects are random and floaty, making them all seem weightless and less impactful. Having assets would help to fix this. Along with 3D assets, the addition of UI assets and art would also help to strengthen the context of the game.

5. References

Poncle (2021) Vampire Survivors [Video game]. Poncle. Available at: https://store.steampowered.com/app/1794680/Vampire_Survivors/ [Accessed: 9 January 2026].

Swink, S. (2008). Game Feel : A Game Designer's Guide to Virtual Sensation. In Game Feel.

HABBY PTE. LTD. (2022) Survivor.io [Video game]. Habby. Available at: https://store.habby.com/game/3 [Accessed: 9 January 2026].

Hicks, K., Dickinson, P., Holopainen, J., & Gerling, K. (2018). Good Game Feel: An Empirically Grounded Framework for Juicy Design. 11th Digital Games Research Association International Conference, DiGRA 2018. https://doi.org/10.26503/dl.v2018i1.936

Ryan, J., 1992. Effort and expression. In Proceedings of the International Computer Music Conference (pp. 414-414). INTERNATIONAL COMPUTER MUSIC ACCOCIATION.

Riot Games (2009) League of Legends [Video game]. Riot Games. Available at: https://www.leagueoflegends.com/en-gb/ [Accessed: 22 January 2026].

Collins, K.C., 2008. Game sound: an introduction to the history, theory, and practice of video game music and sound design. Mit Press.

Hopoo Games (2019) Risk of Rain 2 [Video Game]. Gearbox Publishing. Available at: https://store.steampowered.com/app/632360/Risk_of_Rain_2/ [Accessed: 25 January 2026].

Farnell, A., 2010. Designing sound. Mit Press.