Game Design Document (GDD)

## **High Concept**

Memory-based single-player combat game which relies on well timed touch input and is set in a Japanese-influenced dark fantasy world.

Crunchy Bits

slish slash enemies trash

Title: DYGHP?

# Project Scope

|  |  |  |
| --- | --- | --- |
| **Must haves** | **Should haves** | **Nice** |
| swiping combat mechanic | Particle Effects | Bosses |
| Enemies x3 | Adaptive UI | Enemies x15 |
| Player Character | Overworld | Level x10 |
| Animations | Score | Items |
| Level x1 | 3D environment stylized shaders | Achievements |
| SFX | Traditional Instrumentation (Koto) | Unlockables (Character Skins) |
|  | Unique Monster Sounds | Compendium |
|  | Collectible Enemy |  |

# Specs

|  |  |
| --- | --- |
| **Perspective** | 2(.5)D Side View |
| **Engine** | Unreal 5.2 |
| **Platform** | Android |
| **Genre** | Arcade Action Game |
|  |  |

# Player Experience Goals

|  |  |
| --- | --- |
| **Flow** | a well balanced learning curve |
| **Skill game** | Mastery/Challenge |
| **Audiovisual Apeal (Satisfying)** |  |
| **Responsive** | multi-sensory |
| **Timing** | Rythm |
| **Completion** | Score, Achievements, Unlockables |

# Project Goals

Focus on a single well refined mechanic

reach a higher level of overall polish

# Game References

Fruit ninja

Shadow Fight Storm

Darkest Dungeon

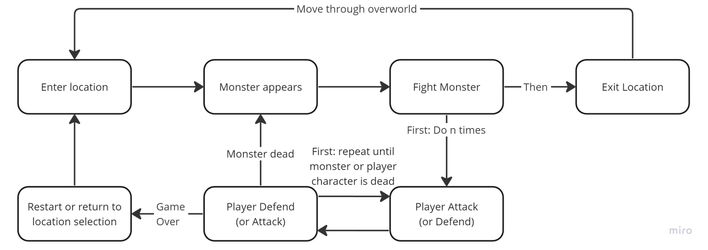
## PBS - Project Breakdown Sheet

A diagram of a company

Description automatically generated with medium confidence

### **Core Loop**

* The player visits different locations (levels in linear progression) and fights monsters there.
* The player character moves automatically through the location similar to a side-scroller
* Every location contains multiple battle stages where the player character stops to fight monsters.
* Which monsters appear and how many is set and unique to every battle stage.
* A monster can be in two general states: attack or defend.
* When a monster appears it will always be in the defend state.
* When the monster is in the defend state, the player has opportunity to attack, when it is in the attack state, the player must parry the monsters attack.
* Once the last monster of a battle stage dies, the player character will move on to the next battle stage. This repeats until the level is over.
* If the player has defeated all monsters in a location, they will be rewarded with points depending on their performance.
* If the player character dies, the level is lost and can be tried again from the beginning.



### **Player Experience Goals**

❤️‍🔥 Flow

 Timing

 Mastery

 Completion

 Audiovisual Appeal

 Responsiveness

# Features

**Fat**: Has own section

Underlined: In [Glossary](file:///C:\wiki\spaces\Design\pages\2326843\Glossary)

Red: Balancing variable

Cursive: Notable term

Green: Not decided on

Mark + Rightclick for Comments

**Player Character**

* The player character has 7 health points.
* It can enter locations via an overworld in a linear progression.
* When a location is entered, the player character moves through it from left to right automatically.
* When the player character dies in a fight, the **Location** (Level) is lost and the player can try again from the beginning of the level or return to the overworld.

**Locations** (Levels)

* Every location spawns a series of **Monsters** (Enemies) (see **Battle Stage**). The range of monster and their order are predefined and unique to every location.
* Every location works like a triptych, the player will move from one view of the scene to the next from left to right. In every view they will complete a **Battle Stage**.

**Level Select**

The level select is in the style of an overworld map just like in the old Super Mario games. The player can select the level they wish to play and can see their **Scores** and **Badges**.

**Monsters** (Enemies)

* Monsters have health points. When the health points hit 0, the monster dies. It can receive a small amount of damage when the player swipes an imperfect combo.
* Every monster has their own combo pattern which determines how the player can beat it. If the correct combo was achieved in one single attempt (perfect combo), the monster dies instantly and the next one appears or the **Player Character** moves on to the next **Battle Stage**.

More on that in the section for **Fight Phase**.

* A monster has two states: The attack state and the defend state. In the latter, the player attacks, in the former, the monster attacks.
* A defend state timer of 5 seconds starts whenever the monster enters the defend state. When it runs out, the monster will automatically go back into the attack state.
* When the player puts in a wrong swipe in their **Fight Phase**, the monster will also go into the attack state after 1 second.
* Every monster has between one and three different attacks. In its attack state, it will randomly play one attack animation. Each attack aims either high, mid or low and its animation will indicate that.

More on that in the section for **Parry Phase**.

* Monster attacks deal 1 damage to the **Player Character**.
* Defeating a monster will add a certain amount to the players final **Score**. The amount depends on the monster and if it is killed by a perfect combo or not.

**Battle Stage**

* Every **Locations** (Level) has 3 waves of **Monsters** (Enemies), called battle stages - every view of a location features one battle stage. The player will finish one battle stage at a time and then move on to the next view of the location.
* When all battle stages are passed, the **Locations** (Level) is won.

**Fight Phase**

The player can attack, when the **Monster** (Enemy) is in the defend state. We call this thefight phase.

* When the fight phase begins, the player is notified by the game via audiovisual feedback.
* They can now attempt a combo made up of four swipes (each has to be either up, down, left or right) with their right-hand finger.
* There are indicators which tell the player if their swipes correlate with the combo pattern of the monster.

More on that in the section for **Monsters** (Enemies).

* If they do a wrong swipe at any point of the process, the **Monster** (Enemy) receives a small amount of damage and immediately switches to attack state and the fight phase ends.
* If they do the right combo for the respective **Monster** (Enemy), it dies immediately. This is called a perfect combo and the game will reward the player with expressive audiovisual feedback when it happens.

**Parry Phase**

When in the attack state, the **Monster** (Enemy) attacks the player with one attack animation, chosen randomly by the game from the monsters range of attacks.

* Every attack animation aims at a certain height of the player: Either high, mid or low. The player has to read the animation correctly and parry accordingly.
* To parry, the player must swipe up for high, down for low or tap to parry mid.
* The parry must happen within a certain time frame which is displayed in the UI and/or readable in the enemies attack animation
* If the parry is not timed well or the incorrect swipe/tap was executed, the player takes 1 damage.

**Score**

The player can achieve points for certain feats in the game. At the end of every **Location** (Level) the score is displayed. The high score is saved and can be seen in the **Level Select**.

Points can be scored through the following:

* Killing a monster gives 100/150/200 points
* Every wrong input (Attack) gives -25 points
* Every hit taken gives -50 points
* Every location has a base time, if the level is finished faster, the player gets extra points, if they are slower they get minus points
* No damage taken gives you 500 points at the end
* No wrong inputs (attack) gives you 400 points as well
* The longest streak of perfect combos will be multiplied by 25 and translated into points

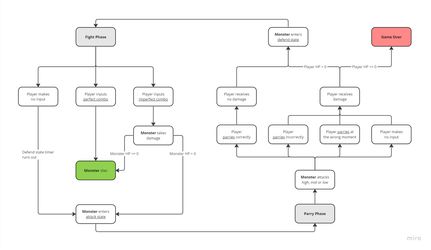
**Flame** (Badge)

In every **Location** (Level) the player can achieve badges for reaching certain point thresholds and for freeing the **Kitsune**. To unlock the next level, the player has to reach a certain amount of badges in the previous level.

**Kitsune** (Collectible)

Every location has one Kitsune spawning at some point of the level. It spawns in a wooden cage which the player has to destroy by putting in the right combo pattern. They only get one chance to do this, any wrong input will let it disappear for this attempt. Getting it right, will give the player one **Flame** (Badge).

## Game Loop: Fight



# Links

[**Glossary**](file:///C:\wiki\spaces\Design\pages\2326843\Glossary)  
[**Game Play Mock Up**](file:///C:\wiki\spaces\Design\pages\2458033\Game+Play+Mock+Up)

[**Balancing Variables**](file:///C:\wiki\spaces\Design\pages\10977323\Balancing+Variables)

Note: potions long press button

# Balancing Variables

### Gameplay Variables

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Variable Name** | **14.06.** |  |  |  |
| Character | Character Health Points | 7 |  |  |  |
|  | Character Imperfect Attack Damage | 1 |  |  |  |

### Game Feel Variables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Variable Name** | **14.06.** |  |  |
| Combat Design | Monster Defend State Timer | 5s |  |  |
|  | Parry Window | 0.25s |  |  |
|  | Parry Cooldown | 1s |  |  |
| Character | Player Walking Speed | 300 |  |  |
| Monsters | Back-To-Idle Timer | 0.5s |  |  |
|  | Imperfect Attack State Switch Delay | 1s |  |  |
|  | Change to Attack State Delay |  |  |  |

## Enemies

### Kasa Obake (Orange)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Variable Name** | **14.06.** | **14.08.** | **16.08.** |
|  | Health Points | 5 | 3 |  |
|  | Perfect Combo | ⯆ ⯇ ⯈ ⯅ | ⯅ ⯇ ⯈ ⯅ |  |
|  | Perfect Combo Length | 4 | 4 |  |
|  | Attack Ready-Up Time | 0.5s | 0.5s | 0.75s |
|  | Attack Pool | High | U |  |
|  | Attack Damage | 1 | 1 |  |
|  | Attack Amount | 1 | 1 |  |
|  | Score |  | 100 |  |

### Kasa Obake (Blue)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Variable Name** | **14.08.** | **16.08** |  |  |
|  | Health Points | 3 |  |  |  |
|  | Perfect Combo | ⯅ ⯈ ⯇ ⯅ |  |  |  |
|  | Perfect Combo Length | 4 |  |  |  |
|  | Attack Ready-Up Time | 0.5s | 0.75s |  |  |
|  | Attack Pool | Low |  |  |  |
|  | Attack Damage | 1 |  |  |  |
|  | Attack Amount | 1 |  |  |  |
|  | Score | 100 |  |  |  |

### Onibi

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Variable Name** | **14.08.** |  |  |  |
|  | Health Points | 3 |  |  |  |
|  | Perfect Combo | ⯅ ⯆ ⯅ ⯆ |  |  |  |
|  | Perfect Combo Length | 4 |  |  |  |
|  | Attack Ready-Up Time | 0.75s |  |  |  |
|  | Attack Pool | Center |  |  |  |
|  | Attack Damage | 1 |  |  |  |
|  | Attack Amount | 1 |  |  |  |
|  | Score | 100 |  |  |  |

### Akaname

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Variable Name** | **14.08.** |  |  |  |
|  | Health Points | 5 |  |  |  |
|  | Perfect Combo | ⯆ ⯇ ⯆ ⯈ |  |  |  |
|  | Perfect Combo Length | 4 |  |  |  |
|  | Attack Ready-Up Time | 0.75s |  |  |  |
|  | Attack Pool | Low, Center |  |  |  |
|  | Attack Damage | 1 |  |  |  |
|  | Attack Amount | 1 |  |  |  |
|  | Score | 100 |  |  |  |

### Kappa

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Variable Name** | **14.08.** | **16.08.** |  |  |
|  | Health Points | 5 |  |  |  |
|  | Perfect Combo | ⯅ ⯆ ⯈ ⯇ | ⯈ ⯅ ⯇ ⯆ |  |  |
|  | Perfect Combo Length | 4 |  |  |  |
|  | Attack Ready-Up Time | 0.75s |  |  |  |
|  | Attack Pool | Low, Center, High |  |  |  |
|  | Attack Damage | 1 |  |  |  |
|  | Attack Amount | 1 |  |  |  |
|  | Score | 150 |  |  |  |

## Locations

### Enemies Forest

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Variable Name** |  |  |  |  |
|  | Battle Stage 1 | Kasa (O), Kasa (O), Onibi, Kasa (O), Onibi |  |  |  |
|  | Battle Stage 2 | Kasa (O), Kasa (O), Onibi, Onibi, Onibi | Kitsune, Kasa (O), Onibi, Kasa (O), Kasa (O), Onibi |  |  |
|  | Battle Stage 3 | Kasa (O), Onibi, Kasa (O), Onibi, Kasa (O) | Kasa (O), Kasa (O), Onibi, Kasa (O), Onibi | Onibi, Kasa (O), Onibi, Onibi, Kasa (O), |  |
|  | Kitsune Combo |  |  |  |  |

### Fishing Village

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Variable Name** |  |  |  |  |
|  | Battle Stage 1 | Kasa (O), Kasa (O), Kasa (B), Kasa (O), Kasa (B) |  |  |  |
|  | Battle Stage 2 | Kasa (O), Kasa (B), Kappa, Kasa (B), Kasa (B), | Kitsune, Kappa, Kappa, Kappa, Kasa (O), Kappa |  |  |
|  | Battle Stage 3 | Kappa, Kasa (O), Kappa, Kasa (B), Kappa | Kasa (B), Kasa (O), Kappa, Kappa, Kasa (B) | Kasa (B), Kappa, Kasa (B), Kappa, Kasa (O) |  |
|  | Kitsune Combo |  |  |  |  |

### Haunted Mansion

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Variable Name** |  |  |  |  |
|  | Battle Stage 1 | Kasa (O), Kasa (O), Kappa, Akaname, Kasa (B) |  |  |  |
|  | Battle Stage 2 | Onibi, Akaname, Kasa (O), Onibi, Kasa (B) | Kitsune, Kappa, Onibi, Akaname, Kasa (O), Kappa |  |  |
|  | Battle Stage 3 | Akaname, Kasa (O), Kappa, Kasa (B), Onibi | Kasa (B), Kasa (O), Kappa, Kasa (B), Kappa | Kasa (O), Kappa, Kasa (B), Akaname, Kappa |  |
|  | Kitsune Combo |  |  |  |  |

# Tutorial

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Section** | **current** | **revisions (Waiyaki)** | **another iteration** |  |
| **intro** | Hello wanderer lets do some training. Tap to continue. | Hello wanderer, welcome to the world of yokai. Let’s start with the basics. | Hello wanderer, welcome to the world of yokai. Let’s start with the basics. |  |
| **missing fade in** | To strike swipe on the right side of the screen | First thing. the controls divide the screen into two parts the right side for attacks. | First thing: The controls divide the screen into two parts the right side for attacks. | First things First: The controls divide the screen into two Halves, the right side for attacks… |
|  |  | And the left for defence | And the left for defense. | … and the left for defense. |
|  |  | Let’s start with an attack. Swipe on the right side of the screen. | Let’s start with an attack. Swipe on the right side of the screen. | Let’s start with an attack. Swipe up on the right side of the screen. |
| **Attacks part 1** | Great! That was a perfect attack. Now be quick and strike again! | Great that was a perfect attack. Every attack also does a bit of damage. | Great! That was a perfect attack. Every attack also does a bit of damage. | Great! That was a perfect attack. |
|  |  | Let’s try another attack. This time swipe in any of the four directions. | Let’s try another attack. This time swipe in any of the four directions. |  |
| **Defense**  **(darken?)** | Too bad! That wasn’t a perfect attack the monster took damage but your combo was interrupted. get ready to defend yourself. Tap to continue. | Sadly, that wasn’t a perfect attack. Whenever you don’t get a perfect attack, the enemy will take their chance to strike back. This will also happen whenever you take too long to attack. | Sadly, that wasn’t a perfect attack. Whenever you don’t get a perfect attack, the enemy will take their chance to strike back. | Sadly, that wasn’t a perfect attack. Whenever you don’t get a perfect attack, your combo is interrupted and it is the yokai’s turn. |
|  |  |  |  | Although an imperfect combo will still deal a small amount of damage. |
| **darken** | Watch your enemy and parry its attack by swiping or tapping on the left side of the screen at the moment the attack lands. It’s the monsters turn to attack you now. Tap to continue. | Now let’s defend. Defending takes place on the left side of the screen. | Tip: This will also happen whenever you take too long to attack. |  |
|  |  | There are three attacks that can come from enemies (High, Mid, Low) and your defence swipe needs to match their attack. Let’s try it. | Now let’s defend. Defending takes place on the left side of the screen. |  |
|  |  |  | There are three attacks that can come from enemies (High, Mid, Low) and your defense swipe needs to match their attack. Let’s try it. |  |
| **Defence Fail** | You were too late. you should have swiped UP (left or right, down) on the left side of the screen. Tap to try again. | Timing is important. try again until you can defend from all three directions | Timing is important. try again until you can defend from all three directions |  |
| **Attack part 2**  **Darken** | Success. Tap to continue. | Great! Now its your turn to attack again. This time lets try to get a perfect combo. remembering combos of the enemies you encounter will serve you well | Good job! Now its your turn to attack again. This time lets try to get a perfect combo. |  |
|  |  |  | Tip: Remembering the individual combos of the enemies you encounter will serve you well. |  |
|  | Its your turn to attack again. Each monster has a perfect combo that will kill it instantly. Try to figure it out. Tap to continue. | Under the enemy health bar is the combo counter, it helps you to know which attacks where perfect and those that weren’t. go ahead and give it a shot. | Under the enemy health bar is the combo counter, it shows you which attacks were perfect and which were not. Go ahead and give it a shot. |  |
|  | That wasn’t it. Tip: the arrows under the enemy health bar show you if you made a correct input. Tap to try again. | try until you get it from start to end well reset the combo counter whenever you don't get a perfect attack. | Try until you get it from start to end. The combo counter resets whenever you don't get a perfect attack. |  |
| **Complete** | You still got it. Now let’s hunt some real monsters. Tap to continue | You got it! Whenever you get a perfect combo together it will also result in the enemy instantly dying | You got it! Whenever you get a perfect combo it will reduce the yokai's health to zero immediately. |  |
| **darken** |  | Now that you know your way get out there and vanquish some real yokai. | Now that you know your way get out there and vanquish some real yokai. |  |
|  |  | **Fade to black** |  |  |

# UX

# Sitemap

A screenshot of a computer screen

Description automatically generated

# Wireframes

# A screen shot of a computer Description automatically generated

Yellow areas are harder to reach in landscape mode. Good place for buttons that need to stay out of the way during gameplay to avoid accidental interactions

### HUD

A screenshot of a computer

Description automatically generated

<https://www.figma.com/file/cCKIW2PaUcgXr0Maghr9HR/UX-Wireframes-DYGHP?type=design&node-id=5%3A55&t=I3ytuhjMXyLw5usT-1>

### Main Menu

A screenshot of a computer

Description automatically generated

<https://www.figma.com/file/cCKIW2PaUcgXr0Maghr9HR/UX-Wireframes-DYGHP?type=design&node-id=5%3A39&t=I3ytuhjMXyLw5usT-1>

### Pause

A screenshot of a computer

Description automatically generated

<https://www.figma.com/file/cCKIW2PaUcgXr0Maghr9HR/UX-Wireframes-DYGHP?type=design&node-id=5%3A40&t=I3ytuhjMXyLw5usT-1>

### End Screen

A screenshot of a computer

Description automatically generated

<https://www.figma.com/file/cCKIW2PaUcgXr0Maghr9HR/UX-Wireframes-DYGHP?type=design&node-id=442-124&mode=design&t=rha3vNbhyBETxPjb-4>

# Glossary

|  |  |
| --- | --- |
| **Term** | **Definition** |
| attack state | The period of time in which a monster plays its attack animation |
| attack animation | The animation going with every unique attack of a monster (used synonymously with “monster attack”) |
| combo | The series of swipes, a player makes to attack a monster, is called a combo |
| combo pattern | The combination of swipes which a player would need to perform to score a finisher |
| defend state | The period of time in which the monster doesn’t attack and the player can perform their attack |
| defend state timer | The amount of time in which the monster is in the defend state |
| health points (HP) | The amount of hits a target can take before it destroyed |
| hit | A successful swipe at the right point within a combo scores a hit |
| imperfect combo | When the players swipes do not match the combo pattern of the monster they are attacking |
| parry | If the player swipes correctly within the time limit while being attacked by the monster, they don't loose a health point |
| perfect combo | When the players swipes match the combo pattern of the monster they are attacking perfectly |
| view | A view is the area of the location that is shown on screen at the moment |